NMDC LIMITED [BASED ON C&AG REPORT NO.5 OF 2019 RELATING TO OPERATIONAL PERFORMANCE OF NMDC Ltd.]

MINISTRY OF STEEL

COMMITTEE ON PUBLIC UNDERTAKINGS (2024-25)

FOURTH REPORT

(EIGHTEENTH LOK SABHA)



LOK SABHA SECRETARIAT

NEW DELHI

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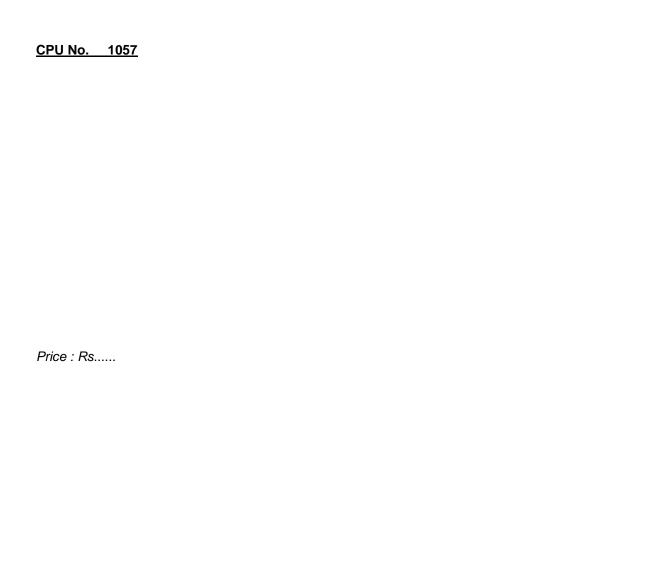
[Action taken by the Government on the Observations/Recommendations contained in the Eighteenth Report of the Committee on Public Undertakings (17th Lok Sabha) based on C&AG Report No.5 Of 2019 relating to operational performance of NMDC Ltd.]



Presented to Lok Sabha on 18 December, 2024 Laid in Rajya Sabha on 18 December, 2024

> LOK SABHA SECRETARIAT NEW DELHI

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COMPOSITION OF COMMITTEE ON PUBLIC UNDERTAKINGS (2024-25)

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- 3. Shri Sudip Bandyopadhyay
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- 2. Smt. Jyochnamayi Sinha Director
- Smt. Mriganka Achal Deputy Secretary
 Smt. Smita Khade Executive Officer

INTRODUCTION

I, the Chairperson, Committee on Public Undertakings (2024-25) having been authorized by the Committee to submit the Report on their behalf, present this Fourth Report on Action Taken by the Government on the Observations/Recommendations contained in the Eighteenth Report of the Committee on Public Undertakings (17th Lok Sabha) based on C&AG Report No. 5 of 2019 relating to Operational Performance of NMDC Ltd. related to NMDC Limited.

- 2. The Eighteenth Report of the Committee on Public Undertakings (17th Lok Sabha) was presented to Lok Sabha and laid on the Table of Rajya Sabha on 20 December, 2022. The Action taken Replies to all the 13 recommendations contained in the Report were received from the Ministry of Steel on 06 December, 2023.
- 3. The Committee considered and adopted the draft Report at their sitting held on 24 October, 2024. The Minutes of the sitting are given in Appendix-I.
- 4. An analysis of the action taken by the Government on the Observations/ Recommendations contained in the Eighteenth Report of the Committee (17th Lok Sabha) is given in Appendix -II.

New Delhi; 11 December, 2024 20 Agrahayana, 1946(S) Baijayant Panda Chairperson Committee on Public Undertakings

<u>REPORT</u>

CHAPTER I

This Report of the Committee deals with the action taken by the Government on the observations/recommendations contained in the Eighteenth Report (Seventeenth Lok Sabha) of the Committee on Public Undertakings (2022-23) on "NMDC Limited" [Based on C&AG Report No. 5 of 2019 relating to Operational Performance of NMDC Ltd.] which was presented to Parliament on 20 December, 2022. It contained thirteen observations/recommendations.

- 2. Action taken notes have been received from the Government in respect of all the thirteen observations/recommendations contained in the Report. These have been categorized as follows:
 - (i) Observations/Recommendations which have been accepted by the Government (Chapter II)
 SI. Nos. 1, 3, 4, 5, 6, 7, 9 and 10 (Total 08)
 - (ii) Observations/Recommendations which the Committee do not desire to pursue in view of the Government's replies (Chapter III)

NIL (Total 00)

(iii) Observations/Recommendations in respect of which replies of the Government have not been accepted by the Committee and which require reiteration

(Chapter IV)

Sl. Nos. 8, 11, 12 and 13

(Total 04)

(iv) Observations/Recommendations to which the Government have furnished interim replies and final replies are still awaited (Chapter V)

Sl. No. 2 (Total 01)

3. The Committee desire the Ministry of Steel to furnish Action Taken Notes/ Replies in respect of Observations/Recommendations contained in Chapter I of the Report. The Committee desire that the final replies in respect of Observations/Recommendations contained in Chapter V for which only interim replies have been given by Government, should be furnished to the Committee expeditiously.

4. The Committee will now deal with the Action Taken by the Government on some of the Observations/Recommendations of the Committee in succeeding paragraphs.

Recommendation (SI. No. 2)

{Fixing of Unrealistic target in Strategic Management Plant(SMP) - Vision 2025}

- 5. The Committee in their Eighteenth Report, had observed and recommended as follows:-
 - " The Committee observe that NMDC had a Corporate Plan upto the year 2009-10. Thereafter, no Corporate Plan was formulated till the year 2015-16. Instead, production and other targets were fixed annually. In a review meeting held on 27 October 2014, the Administrative Ministry had suggested for preparation of a vision document 'NMDC 2025' as the Company had intended to produce 75 million tons per annum (MTPA) by 2018-19 and 100 MTPA by 2021-22. Subsequently, in January 2015, a Consultant, namely, M/s Accenture was appointed for a fee of Rs. 0.57 Crore by NMDC to evaluate the intended production in the vision document. The Consultant, in May 2015, after assessing the existing customers in the domestic market, potential volume of exports and captive consumption, suggested that the intended objective of achievement of production of 75 MTPA and 100 MTPA would be difficult. Yet, NMDC in October 2015, ignored the advice of the consultant and fixed over-ambitious target of 75 MTPA by 2018-19 and 100 MTPA by 2021-22 in its Strategic Management Plan (SMP) Vision 2025. However, sensing the subdued market condition, fall in international iron ore prices, NMDC revisited its SMP-Vision 2025 in September 2016 and lowered the target of iron ore production to 50 MTPA for 2018-19 and 67 MTPA for 2021-22. The Committee find that even this lowered target was on the higher side and NMDC failed to achieve the target of iron ore production during the financial years 2018-19, 2019-20 and 2020-21 which remained at 32.36, 31.49 and 34.15 MTPA respectively. The Ministry of Steel reviewed the situation and further lowered the target of iron ore production to 47 MTPA for financial 2021-22. The Committee note that even at this stage, the reduced target of 47 MTPA could not be achieved by NMDC

and the Company could only produce 42.19 MTPA of iron ore during 2021-22. The Committee do not understand why NMDC ignored the suggestions of the consultant to whom it paid a fee of Rs. 0.57 crore which may be construed as wasteful, now appears to be thoughtless expenditure of public money. In the opinion of the Committee, the targets fixed by NMDC at different stages were over ambitious and irrational taking in view the unfavorable market condition, fall in international iron ore prices, unfinished projects related to doubling of various railway lines, inability in finding new potential customers, termination of long term agreements with some countries, delay in execution of various packages & enhancement facilities, etc. On an overall review of the position, the Committee note that against the initial target of 100 MTPA fixed by NMDC to be achieved by 2021-22, the Company could ultimately achieve only 42.19 MTPA of production. The Committee suggest that NMDC should seriously consider the professional advice given by consultants on time and undertake proper realistic assessment while fixing of various targets in future."

6. The Ministry, in their action taken reply, have stated as follows:-

"The Strategic Management Plan "Vision 2025" was prepared in 2015 considering various assumptions and was based on various conditions stipulated therein. The revised SMP stipulates an ambitious plan of producing 67 MTPA of iron ore by 2025 and 100 MTPA by 2030 by NMDC. The Vision document stressed a total of six strategies which included Business Strategy, Operations Strategy, Human Resources Strategy, IT Strategy, R&D Strategy, Sustainability Strategy.

NMDC has gradually transformed itself according to the stipulations made in the Vision document and the same can be seen by the continuous improvement in the production capacities. Evacuation was and continues to remain one of the important factors affecting the capacities. Due to the locational disadvantage, there are many constraints in increasing evacuation capacities. The doubling of KK line is one such aspect. By doubling of the line, the rail evacuation capacity will increase to 40MTPA from the existing 28 MTPA. This project is being executed by railways and NMDC is funding it. The same is expected to be completed by 2025 and will support in achieving the envisaged targets. The commissioning of Slurry pipeline will also add to the evacuation capacity which in turn will add to the production capacities.

During the last two financial years, NMDC has continuously crossed the 40 MTPA production and is poised to achieve 50 MT of production during FY 2023-24. During the first quarter of FY 2023-24, NMDC achieved its highest-ever production.

		Q1 OF 202	22-23	Q1 OF 202	23-24
IN	MILLION	PRODUCTION	SALES	PRODUCTION	SALES
TONNES		8.92	7.80	10.70	11.15*

Achievements of SMP Targets -

While the production decisions are based on demand and supply dynamics of the iron ore market and feasibility of evacuation, the NMDC has worked hard to repare itself for a higher volume of prouction. If market and other conditions are favourable, the company would be able to meet its revised goals on the basis of said developments. These are detailed below:-

	Strategies	and	Key	Achiev	vements
	Enablers				
1	Business Stra	tegy: Fro	om "sir	igle co	mmodity, geography" to "multiple commodities
	and globally d	iversifie	d"		
	Expansion to S New Geograpl		oducts,		Two Coal Blocks in Jharkhand and one Gold Block in Andhra Pradesh have been allocated and action is on hand for start of production activities. NMDC is a part of ICVL which acquired Operational Coal Mine in Mozambique. NMDC Exiting the Steel business by
					demerging NMDC Steel Limited to concentrate on Core activity of Mining

^{*}updated to 10.98 MT (for Q1 of 2023-24) as per extract of 557th meeting of the Board of Directors of NMDC Ltd. held on 11.08.2023.

2	spent along with developme	ent of	gmentation of existing mines to optimise capital new mines as JVs. Parallelly, investment in and deploy strategies to enter new markets.
	Iron ore Production Capacity to be enhanced from Existing Operating Mines & starting of New Mines		Capacity augmentation of existing mines is an ongoing process and is achieved by enhancing the capacities of the plants and mines. Moving close to the customers: Developed intermediary stockpile at strategic locations - First intermediate stockpile at Kumarmarenga near Jagdalpur is operational.
	Evacuation Infrastructure	•	Implementation of Rapid Wagon Loading System (RWLS) at Kirandul Complex Doubling of KK railway line is in its final stage
		•	Construction of railway line between Rowghat and Jagdalpur – Activities going on
		•	Construction of slurry pipeline in Bailadila region – First Phase from Bailadila to Nagarnar is in advanced stage
	Capital Projects Strategy	•	For managing the ongoing/ under construction Projects, a new vertical of HOP-Works has been created at Project level and HO
		•	Dedicated Project Management Cell (PMC) is created to monitor the ongoing Projects
		•	Procurement and Works Manuals have been prepared with latest guidelines and practices
			 Tender and Contract management processes have been made more effective by
			 Use of IT and project management Softwares
			 online tendering process & Pre bid discussions

		 Regular review meetings with top management and creation of Digital Record Depository Providing early completion Bonus to the contractors
	Enhanced Customer Orientation: Customer Relationship Management	8 8
3		From having core competencies in iron ore mining ng, metals, metallurgy and other businesses.
	Strengthen Performance Management System (PMS):	\mathcal{C}
	Leadership Development and Succession Planning to drive the expansion plan	
		• NMDC has identified competency-led Leadership Capability Development as a basi for Succession Planning, through which it is looking at development of its senior executives to occupy key positions based on their performance and potential. In working towards the same, NMDC has decided to carr out Assessment Centre (AC) as a development-focused intervention.
	Employee Training & Development:	 The executives are being provided professional development training in reputed institutes like IIM, ISB etc
		Corporate HRD Department is committed toward the development of its employees by imparting different types of Training and customized Learning interventions which are meticulous designed separately like Behavioral Interventions Technical Interventions, Psycho-Analytical Interventions etc and more precisely Customized Learning Interventions, Focused Learning Initiatives, Structured Initiatives (Small Groundstructure) etc. some of them are given below:
		 Assessment Development centre for succession planning

		 High Potential Executives (HIPO) programme
		 Knowledge Management System in line with Learning Management System to create a learning eco-system
		o General Management Programmes
		o Advance Management Programmes
		 Supervisory Development Programmes
		 Behavioral Based Safety Training Programmes
		 Learning Intervention on communication and Presentation Skills
		 Learning Intervention on Finance for Non-Finance Executives
		 Learning Intervention on Mentoring & Coaching
		o Assessment Centre Workshop
		 Performance Appraisal System through trained Internal Resource Persons
		 Employees satisfaction and Organization culture survey
	New Initiatives	 IKIGAI – A Happy Workforce
		Strengthening of Quality Circles
4	IT Strategy: Enhance pro operations.	oductivity through automation and digitization of
	Develop an IT / digital blueprint for "NMDC of Future" considering emerging IT and digital concepts and Best Practices including:	NMDC has implemented Enterprise Resource Planning (ERP) on SAP S/4 HANA platform which covers entire value chain of mining,
		 ERP Modules such as Production Planning, Plant Maintenance, Quality Management, Sales & Distribution, Materials Management, Human Capital Management, Environment

	Health & Safety, and Finance & Costing etc. have been successfully implemented.
	 Subsequently NMDC has launched Management Dashboards for providing information and insights on Production, Sales, Material Management, Quality Management, HCM, EHS, CSR, etc. in real time
Implementation of ERP (Project Kalpataru)	 Implementation of SAP S/4 HANA – First Indian PSU to achieve this
	 NMDC has also started initiatives for the Phase II and Phase III of its digital roadmap
	 The Phase II solutions includes IT / OT Integration in the following aspects
	 Automated Data Capturing from OCSL Plant to ERP
	 Integration of Field and Plant Operations with ERP
	 Fleet Management System
	 Back Office Automation
	 Linear Asset Management
	• The Phase III solutions includes Intelligent Mines in the following aspects
	 Advanced Analytics
	 Artificial Intelligence
	 Condition based Maintenance
	 Integrated Command & Control Center
Mine Transport & Surveillance System (MTSS)	 Implementation of MTSS (Mine Transport Surveillance System) – already implemented & operational at Donimalai Complex and in process for Bailadila region
	 Implementation of FMS (Fleet Management System) in NMDC mines is in final stage
	 Action on hand for implementation of Automatic Sampling and analysis System

5			y technologies for beneficiation of lean ores to
			ds zero waste mining Confidential
	Value addition to iron ore	•	Pellet Plant at Donimalai has been commissioned to utilize the low grade ore
		•	Beneficiation plant (as part of the Slurry Pipeline System) is under construction at Bailadila
	Evacuation of iron ore from mines	•	Study for transportation through slurry pipeline
	Tailing disposal	•	Beneficiation of tailing and sale of slimes
		•	Improving screening efficiency of secondary screens in screening plants of Kirandul Complex
		•	Modification in transfer chutes to reduce jamming at Kirandul Complex
		•	Installation of Online moisture analysers in Kirandul, Bacheli and Donimalai complex
		•	Utilization of ultra-fine iron ore (-75micron) in iron ore sintering process
		•	Utilization of sub-grade iron resources and lean grade iron resources (BHJ/BHQ)
		•	Focus on Dry Beneficiation
		•	Development of research equipment under Aatma Nirbhar Bharat
		•	Developments of Indigenous vendor base for sourcing wear resistance liners under Aatma Nirbhar Bharat
		•	Developments of process for reduction roasting of goethitic iron ore using microwave assisted heating furnace:
		•	NMDC Innovation & Incubation Centre (NICE)
	Collaborative approach	•	R&D Centre NMDC Ltd and RDCIS -SAIL has signed MOU in the year Jan 2019 to support each other in meeting individual organization goal. MOU is in force till January 2024 (Five years)

		•	IMMT Bhubaneswar - Modeling & Optimization of High Concentration Iron ore concentrate slurry Pipelines for Indian Iron Ore Processing Industries
		•	<i>IMMT Bhubaneswar</i> — Evaluation of Nano iron powder for high end application like batteries and sensors
		•	CSIRO Australia
		•	<i>IIT Bhubaneswar</i> — Optimization of silos, bins and hoppers designs through modeling, primarily intended for iron ore storage
		•	<i>CSIR-CIMFR-Dhanbad</i> — Development of vision enhancement system for foggy weather
		•	IMMT Bhubaneswar - Dry Beneficiation tests of coal and iron ore with Air classification equipment named "VSK Separator".
		•	IMMT Bhubaneswar – Feasibility Studies for Preparation of Fused Magnesia from Kimberlite Tailings
6		-	ironmentally safe and scientific mining practices
	and integrate sustainability in	all ou	
	Design and deploy "License	•	Operational
	to Operate" office (LTO)		
	Design and deploy Enterprise	•	Operational
	Risk Management capability		

7. The vetting comments of the Office of C&AG on the aforesaid reply of the Government are as follows:-

"As stated by the Ministry, the achievement of targets envisaged in the Strategic Management Plan "Vision 2025" is dependent on the timely completion of evacuation facilities commensurate with the production facilities. As doubling of Kirandul Kothavalasa Railway Line and commissioning of Slurry Pipeline are still under execution, Audit is not in a position to comment as to whether the revised targets could be achieved by NMDC by 2025 and subsequent targets by 2030. Hence, Audit has no comments to offer for the present."

8. The Committee noted that NMDC did not formulate Corporate Plan from 2010-11 to 2015-16 and instead fixed production and other targets annually. At the behest of Administrative Ministry (October, 2014), a vision document 'NMDC 2025' was prepared by NMDC that intended to produce 75 MTPA by 2018-19 and 100 MTPA by 2021-22. Thereafter, a Consultant was appointed (January, 2015) to evaluate the intended production in the vision document, who opined (May, 2015) that the intended objective set by NMDC for production targets would be impractical to achieve. Yet, ignoring the Consultant's advice NMDC persisted in setting them, leading to significant underperformance. The Company first lowered its target for production of iron ore to 50 MTPA for the year 2018-19 and 67 MTPA for the year 2021-22 and afterwards the target was further lowered by the Ministry of Steel to 47 MTPA for 2021-22. The Committee, in its Original Report highlighting NMDC's failure to achieve its overambitious production targets set in its SMP Vision 2025 opined that against the initial target of 100 MTPA fixed by NMDC, the Company could ultimately achieve 42.19 MTPA of production in 2021-22. The Committee expressing their concern had recommended that NMDC should give serious consideration to the professional advice provided by the Consultant and ensure a realistic assessment when setting future targets. The Ministry in their submission while acknowledging the Company's performance regarding missed production target, has submitted that post SMP 'Vision 2025', NMDC has gradually aligned itself as per the stipulations. The ongoing efforts to improve production capacities, particularly through projects like doubling the Kirandul Kothavalasa (KK) Railway Line and commissioning a Slurry Pipeline should add to achieve production capacities of NMDC. However, Ministry in their reply is silent about the reasons for not adhering to professional advice as given by the Consultant hired for the purpose. Since the success of revised targets now depends on the successful completion of the projects and considering the ongoing challenges and uncertainties surrounding the completion of crucial infrastructure projects affecting production capacities, the Committee recommend that NMDC should prioritize realistic goal-setting based on thorough assessment of market conditions and infrastructure capabilities. They could emphasize the importance of heeding professional advice and maintaining flexibility in strategic planning to adapt to evolving circumstances. Additionally, the Ministry may keep a close eye on monitoring of the progress of infrastructure projects to ensure timely completion and also aligning the production targets accordingly.

Recommendation (SI. No. 8)

{Delay in obtaining of Environmental Clearance for Screening Plant-II of Kumaraswamy Iron Ore Project (KIOP)}

9. The Committee in their Eighteenth Report had observed and recommended as follows:-"The Committee note that in order to identify additional reserves in Donimalai Iron Ore Project (DIOP), NMDC decided for construction of a second Screening Plant (SP-II) at Kumaraswamy Iron Ore Project (KIOP). The Company applied for Environmental Clearance (EC) for the Screening Plant II in March 2014. However, the EC was received after more than 03 years of application made by the Company. The inordinate delay was attributable on the part of State Pollution Control Board (PCB) in conducting Gram Sabha coupled with failure on the part of NMDC in taking prompt action for applying for revised Terms of Reference (ToR) and delay in submitting the required information to the Ministry of Environment & Forests & Climatic Change (MoEF&CC). Similarly the Forest Clearance (FC) for the SP-II (Stage-I) which NMDC applied in December 2014, could not be received even after 7 years. The FC was held up due to delay in submission of Differential Global Positioning System (DGPS) map to Forest Department and resubmission of application for revision of ToR. During the course of evidence, the Ministry of Steel admitted the delay and submitted that these were priority items for them and work is now being monitored on real time basis. The Committee are, however, perturbed with the lackadaisical approach on the part of the management of the Company that failed in timely submission of documents to the concerned authorities and pursue various clearances. The Committee feel that had some concrete monitoring mechanism been in place to keep track of the progress of work in various stages, the delay of so many years could have been avoided. The Committee, therefore, recommend that all-out efforts be made to obtain all the necessary statutory clearances to complete the Screening Plant II without any further delay to enable identification of additional reserves in Donimalai Iron Ore Project (DIOP) and enhancement of its capacity."

10. The Ministry, in their action taken reply, have stated as follows:-

"Stage-2 Forest clearance order was obtained on 10th July, 2023. The compliance of the condition set out therein has also been furnished on 24th July, 2023 to the Government of Karnataka for issue of Final Forest clearance orders.

Environmental clearance: The proposal was recommended by Expert Appraisal Committee, MOEFCC during the meeting held on 8th June, 2017 subject to obtaining Stage-1 Forest clearance. As per MOEFCC requirements, the updated EIA/EMP report with fresh baseline data collected from March to May, 2023 has been submitted to MOEFCC on 15th July, 2023 for obtaining Environmental clearance. EAC is scheduled to consider the same on 2nd August, 2023."

11. The vetting comments of the Office of C&AG on the aforesaid reply of the Government are as follows:-

"The Environmental Clearance shall be followed by obtaining of Consent for Establishment from the concerned State Pollution Control Board before initiating work at site for the proposed Screening Plant – II at Kumaraswamy Iron Ore Project. This shall further be followed by Consent for Operations before the commencement of operations of Screening Plant after the same is commissioned. Hence, as such, since NMDC is yet to obtain the Environmental Clearance, Audit has no comments to offer for the present."

12. The Committee in their Original Report highlighted the significant delay in obtaining Clearances *viz.*, Environmental Clearance (EC) and Forest Clearance (FC) for the construction of Screening Plant II (SP II) at the Kumaraswamy Iron Ore Project (KIOP). The Administrative Ministry had admitted to the delay and submitted that the same had been taken up on priority and work was being monitored by them on real time basis. The Committee, while expressing concern on the issue, felt the need for having a concrete monitoring mechanism to keep track of the progress of work in various stages and recommended that all-out efforts may be made to obtain all the necessary statutory clearances to complete the Screening Plant II without any further delay to enable identification of additional reserves in Donimalai Iron Ore Project (DIOP) and

enhancement of its capacity. The Ministry, in their action taken reply has submitted that they have furnished compliance on the condition set out to Government of Karnataka in July, 2023 for issue of Final FC. Further, the updated EIA/EMP report with fresh baseline data has been submitted to MOEFCC in July, 2023 for obtaining EC which was due for consideration by Expert Appraisal Committee (EAC) in August, 2023. Since the Final Forest Clearance and Environmental Clearance is yet to be obtained and in view of C&AG observation, the Committee recommend NMDC to expedite the process of obtaining these clearances, particularly the Environmental Clearance, as it is crucial for initiating work at the site. The Committee further stress on the importance of closely monitoring the progress of clearance procedures and ensuring timely submission of required documents to regulatory authorities. The Committee once again reiterate and implore that both the Ministry and NMDC should invariably have a robust monitoring mechanism in place to monitor the progress and take immediate action on real time basis so as to prevent such inordinate delays in the future. This could facilitate timely completion of projects.

Recommendation (Sl. No. 11)

{Setting up of Integrated Steel Plant at Nagarnar, Chhattisgarh}

13. The Committee in their Eighteenth Report had recommended as follows:-

"The Committee note that in line with the National Steel Policy 2005, the Government in March 2008 decided that NMDC may set up a Steel Plant on its own in view that the Company had adequate cash reserves and easy access to the primary raw material i.e. iron ore. The Board of NMDC in July 2008 appointed MECON Limited as a Consultant for preparation of Techno Economic Feasibility Report (TEFR) for the project which was submitted by MECON in December 2008. After carrying out due diligence, the Board of NMDC in January 2010 accorded approval for setting up the Nagarnar Integrated Steel Plant (NISP) in Chhattisgarh with an estimated cost of Rs. 15,525 crore. NISP was scheduled to be completed and commissioned by March 2014. The Committee, however are perturbed to note that the project was delayed as the work for the project was awarded on the basis of a tentative TEFR instead of a Detailed Project Report (DPR) which is more elaborate and accurate. The decision to depend on TEFR lead to revision of technical

specifications, modification of tenders, time overruns and upward revision of estimated cost of the project from Rs. 15,525 crore to Rs. 22,196 crore. NMDC contended that preparation of DPRs has lost its relevance as its preparation is time consuming which further leads to increase in project time schedule and increase in cost of project, and also that many private players and steel companies in the past have executed their expansion projects/ new projects based on TEFR. The Committee, however, are not in agreement with the view of NMDC as even after proceeding with TEFR, the NISP project has been delayed for more than 8 years and the project is still incomplete. The Committee believe that TEFR lead to change in technical specifications in works and contracts particularly in 03 major works namely (i) Raw Material Handling System, (ii) By-Product Plant, and (iii) Line & Dolomite Calcined Plant leading to termination and re-awarding contracts to new contractors. Further, the cost of the NISP project escalated from 15, 525 crore to Rs. 22,196 crore and even after regular monitoring at Company and Ministry level, the NISP project is scheduled to be completed by March 2024 after an estimated delay of 9 years. The Committee are of the opinion that NMDC willingly erred in deciding not to prepare DPR in such a huge ambitious project although it was new in the field of establishment of steel plants and instead heavily depended on tentative TEFR that resulted in additional burden of Rs. 6671 crore on the public exchequer and time overrun of 9 years. The Committee are also apprehensive of cost overrun and time overruns in the project that has lead the Government to decide on the disinvestment/ demerger of NISP which is also simultaneously under process. The Committee only hope that with the constant monitoring by the Ministry of Steel, the project would be completed as per the revised schedule without any further cost and time overrun."

14. The Ministry, in their action taken reply, have stated as follows:-

"NMDC decision to proceed the project with TEFR submitted by M/s MECON, was taken after due diligence of TEFR by Price Waterhouse Coopers. Feasibility reports covering techno-economic portions for various SAIL plants (BSP, RSP, DSP) were also prepared by their Consultant MECON. As such the procedure of approval of projects based on TEFR is in practice and the same was followed in NMDC. NMDC was not having requisite experience in construction and commissioning of steel plant, hence MECON was appointed as PMC/EPCM consultant for construction and commissioning of NISP Steel plant. For such type of large project, there is always a possibility and requirement of

change in technical specifications in works which cannot be predicted at the start of the project.

Major reasons for Delay are:

- Contract award could not be done in sequential manner due to poor response from bidders in tenders floated
- 2. Improper assessment/estimate of quantities/jobs by contractors before quoting for tenders.
- 3. Abnormal increase in labour price.
- 4. Inordinate delay in completing the engineering.
- 5. Delay in getting forest clearance for doing intake well in river Sabari at Tiriya.
- Change of name of Package Contractors in Steel Melting Shop, Turbo blower and Sinter plant and Oxygen plant which have changed the name of their company due to mergers and acquisition and it resulted in delays of the project. This affected the supplies by the contractors.
- 7. Delays due to financial crunch of Contractors. The financial health of major contractors like M/s. Shapoorji, M/s. SEW, M/s. SEPC, M/s. NCC, M/s. TPL, M/s BEC, M/s Primetals etc. have been deteriorated due to external reasons beyond control. This has resulted in inadequate resource deployment.
- 8. Difficulty in availability of skilled manpower locally due to remote geographical location and lack of an ecosystem of steel making nearby.
- 9. Commercial issues raised by various contractors like M/s Primetals, M/s BEC, M/s SPCPL, M/s Danieli, M/s Linde etc. which resulted in slow down of supplies and execution of work at site.
- 10. Mismatch in shell manufacturing by the contractor with respect to approved design in Blast Furnace Package resulted in a considerable delay because of time taken in finalizing the modification of shell.
- 11. Inter consortium disputes in multiple packages has resulted in delay in supply and execution of work.
- 12. Non sequential supply of structure and equipment's by contractors.
- 13. Poor performance of contractors in RMHS, BPP & LDCP etc resulted in delay in commissioning of plant in an integrated manner.
- 14. Covid-19 has also severely impacted the progress and commissioning plant as work was entirely stopped during this period and after effects of covid which resulted in delay in deputation of foreign experts and supply of imported items.
- 15. Refurbishment of equipment due to idling/delay etc.

The reasons which are mentioned above clearly indicate that the progress of plant was hampered due to reasons beyond the control of NMDC which has also resulted in cost overrun. Even through the management has taken concrete step with support of MECON for planning, monitoring and execution so as to ensure that works are completed in earliest possible duration, many unforeseen issues cropped up during execution of NISP project, and all efforts were made by management to resolve the issues, which has brought plant upto the present level of progress.

The present progress of plant where in physical works are broadly completed and commissioning activities are in full swing. Raw Material Handling system is functioning in line with the requirements of overall plant. Coal, Coke, Sinter route are operational, rest other routes are also ready and will be operated as per commissioning sequence of packages. By-Product Plant is operational since 27th Oct'22 and is under process of stabilization. Lime Dolomite Calcination Plant (LDCP) balance work has been awarded in Jan'23 to new contractor M/s Offshore and consortium and work is in progress. However, completion of LDCP is not a prerequisite for the commissioning of overall steel plant as the requirement of Lime & Dolo will be met through the purchased calcined lime and Calcined Dolo from the market, and necessary arrangements has been done for storing and handling of calcined lime and Dolo.

Brief status of commissioning activities are as follows:

- Coke Oven Battery-1 and By-Product Plant commenced Operations from 27th Oct
 '22
- Coke Oven Battery-2 commenced Operations from 24th April '23
- Sinter Plant and Oxygen Plant (ASU-2) commenced operation on 19.04.2023.
- Steam Turbo Generators (STG) -1 & 2 is synchronised and started power generation.
 All 3 boilers are ready and 2 are operational. Turbo Blowers (3 No's) hot trial for cold blast generation taken & hooking up with blast furnace completed.
- Blast Furnace all 3 stoves heating under progress.
- All auxiliary units/services department like MRS, PPDS, PBS, Water Depts. CAS, DG Station, Central Stores are operational.
- Trial production with purchased plate started in Hot Strip mill and first coil rolled on 30.06.2023

Prerequisite activities for Hot Metal from Blast Furnace and Liquid Steel production from Steel Melting Shop are in progress and will be ready by end of July'23."

15. The vetting comments of the Office of C&AG on the aforesaid reply of the Government are as follows:-

"The Integrated Steel Plant has been operational since August 2023 and is currently in stabilization stage. Hence, Audit has no further remarks to offer."

16. The Committee in their Original Report had thoroughly reviewed NMDC's decision to proceed with the Nagarnar Integrated Steel Plant (NISP) project based on a tentative Techno Economic Feasibility Report (TEFR) prepared by the Consultant, MECON Limited. The Company, a naïve in the field of setting-up of Steel Plant, going ahead with the trend adopted by reputed Steel companies to reply on TEFR in-place of Detailed Project Report

(DPR) ultimately lead NMDC to significant delays (from March 2014 to estimated completion by March 2024), cost overruns (additional burden of Rs.6671 crore), and technical specification changes. The Committee had expressed concern over the lack of preparation of a Detailed Project Report (DPR) and emphasized the need for better project management to avoid such issues in the future. The Ministry in their reply has submitted that TEFR submitted by M/s MECON was taken after due diligence of the same by Price Waterhouse Coopers. NMDC's decision to go ahead with TEFR was based on standard procedures, however unforeseen challenges marred timely execution of project. The Ministry further outlined various reasons for the project delays and cost overruns, including contractor issues, supply chain disruptions, and the impact of COVID-19. The Ministry also provided an update on the current status of the project, stating that physical works are largely completed, and commissioning activities are underway as also highlighting the operational status of different components of the plant and progress towards full commissioning. The C&AG now confirmed that the Integrated Steel Plant has been operational since August 2023 and is in the stabilization stage. Given the current operational status of the plant, the Committee recommend NMDC to focus on stabilizing operations, optimizing production processes, and ensuring efficient maintenance practices to maximize the plant's performance. The Committee are hopeful on the implementing lessons learned from the project's challenges to improve future project planning and execution within NMDC. Further, the Committee reemphasize the importance of continued monitoring and evaluation to address any lingering issues and ensure the long-term success of the Nagarnar Integrated Steel Plant.

Recommendation (SI. No. 12)

{Sponge Iron Unit at Paloncha, Telangana}

- 17. The Committee in their Eighteenth Report, had recommended as follows:-
 - "The Committee note that NMDC at the instance of Ministry of Steel, in July 2010, acquired a loss-making Sponge Iron India Limited (SIIL) at Paloncha, Telangana. The sponge iron production turned unviable due to higher cost of production and the losses of SIIL accumulated to Rs. 194.77 crore in 2017 which further grew to Rs. 273.69 crore as on 31 March 2021. The Committee are disappointed to note that the turnaround plans of the sick Sponge Iron Unit, initially with the construction of a Super Critical Thermal

Power Plant and then with a Cold Rolled Coil Unit have been shelved for different reasons by NMDC. As a measure of turnaround plan, the Company had intended to utilize the available land of 428 acres for setting up of Thermal and Solar Power Plants. The Committee are unhappy to note that although the Government had tried to sell the SIIL Unit by issuing expression of interest, there was no response. The Committee also find it surprising on the Government insisting to acquire a sick & loss-making Sponge Iron Unit in July 2010 and would like to know the reasons therefor. The Committee are not aware of the turnaround plan of the Company to set up a Solar Power Plant to bring the Company out of losses. Since the loss of the Company are accumulating year after year and that there are no prospective buyers of the Unit, the Committee recommend that a concrete turnaround plan be drawn and implemented to bring SIIL Unit of Paloncha out of losses."

18. The Ministry, in their action taken reply, have stated as follows:-

"

- NMDC is having free land bank of around 350 Acres (290 acres of free land bank and 60 acres of non-operational plant) at Paloncha.
- NMDC has prepared a detailed report for setting up of a 4.5 MW ground-mounted, grid-connected Solar Power Plant at SIU, Paloncha.
- The proposal is under finalization and has an implementation timeline of 12 months.
- A part of the land area (as shown below) is being currently utilized for the Solar Power Plant. For the remaining land area, NMDC is looking for other business opportunities including expansion of the Solar Power Plant."
- 19. The vetting comments of the Office of C&AG on the aforesaid reply of the Government are as follows:-

"The progress made in setting up of Solar Power Plant will have to watched. Hence, Audit has no comments to offer for the present."

20. While expressing their concern over NMDC's acquisition of the loss-making Sponge Iron India Limited (SIIL) at Paloncha, Telangana, in July 2010, at the insistence of Ministry of Steel which only resulted in accumulating losses for the Company. The Committee highlighted the failure of turnaround plans, including proposals for a Super Critical Thermal Power Plant and a Cold Rolled Coil Unit. Despite attempts to sell the unit,

there were no prospective buyers. The Committee in addition to being inquisitive to know the reasons for insistence to acquire sick and loss making SIIL Unit had urged for development of a concrete turnaround plan to bring SIIL out of losses. The Ministry's response outlined NMDC's plan to set up a 4.5 MW ground-mounted, grid-connected Solar Power Plant at SIU, Paloncha, utilizing available land. Further, the ongoing efforts to finalize the proposal, with a 12-month implementation timeline and use of remaining land area by NMDC for other business opportunities should help the Company as way forward. The Committee further expressing their concern on non-submission by the Ministry for reasons of acquiring a sick and loss-making Sponge Iron Unit, therefore, reiterate to know the reasons for the same. Given the current status, the Committee further recommend closely monitoring the implementation of the Solar Power Plant project at Paloncha. The Committee further emphasise the importance of ensuring that the project progresses according to the proposed timeline and that any potential hurdles are addressed promptly. In addition to the above, the Committee desire that NMDC should explore appointment and seeking professional advice on evaluation and cost benefit analysis for utilising the investment opportunities on other businesses for the remaining land effectively, potentially including further expansion of renewable energy projects or alternative industrial ventures. Furthermore, the Committee stress the need for NMDC to continue seeking sustainable solutions to mitigate losses and optimize the utilization of resources at the Paloncha site.

Recommendations (SI. No. 13) {Investment by NMDC in non-profitable Joint Ventures}

21. The Committee in their Eighteenth Report, had recommended as follows:-

"The Committee note that with the objective of sourcing Metallurgical Coking Coal and Thermal Coal supplies from overseas, a Special Purpose Vehicle (SPV) namely International Coal Ventures Limited (ICVL) was formed in May 2009. In July 2014, ICVL decided to acquire the ownership of coal mine and coal assets located in Mozambique. NMDC had invested Rs. 376.36 crore in ICVL. However, NMDC further remitted an equity contribution of over Rs. 2.50 crore to ICVL's to meet expenditure budget and also to clear the ICVL's outstanding liabilities. The Committee note that the NMDC has so far invested

Rs. 590.51 crore in ICVL despite an adverse report of the consultant and the investment not yielded any returns so far. Similarly, NMDC in May 2011 acquired 50 percent shares in Legacy Iron Ore Limited (LIOL), Australia to secure management control on the mining tenements that would be acquired by LIOL. NMDC made a total investment of Rs. 168.53 crore in LIOL despite the fact that the consultant appointed for conducting the evaluation study had opined that it was a negative Net Present Value (NPV) project and was a marginal asset in the short to medium term. Further, due to erosion of the share value of LIOL, the value of investment made by NMDC declined from Rs. 168.53 crore to Rs. 17.13 crore. The Committee are disheartened to note that in both the cases, the investments were made by NMDC despite a negative opinion tendered by the Consultants and would like to know the reasons therefor. The Committee are of the view that NMDC should have given due cognizance to the opinion tendered by the project consultants before making any investment overseas. From the experience gained, the Committee expect NMDC to be more careful in making strategic investments in Joint Ventures in future."

- 22. The Ministry, in their action taken reply, have stated as follows:-
 - " ICVL Total investment made by NMDC till date is Rs 378.9 crores and the present valuation of NMDC shareholding in ICVL is Rs 616.81 crores (31.03.2022). With the scale of operations being upgraded and new mines opened at Mozambique, the valuation of NMDC investment is likely to increase in future. These projects are long gestation ones.

It is to inform that NMDC shareholding in ICVL is 25.94 % whereas the shareholding of SAIL is 47.83%. The Coal produced at Mozambique is imported and being used by SAIL and RINL.

Legacy Iron Ore Limited – To progress Mt Bevan iron ore project, Legacy (60% stake) along with its partner Hawthorn Resources(40% stake) had signed a non-binding term sheet with M/s Hancock Magnetite Holdings Pty Ltd and as per the terms, M/s Hancock will acquire 51% stake in Mt Bevan iron ore project (only at project level and not at company level) in two phases for an investment of A\$16mn (A\$4.8mn to Legacy, A\$3.2mn to Hawthorn and the rest A\$8mn into the new JV). They will complete PFS studies on Mt Bevan within two years from the date of signing the JV agreement. Pursuant to this arrangement, Legacy will have 29.4% stake in Mt Bevan JV(Joint Venture) whereas NMDC continues to hold 90.05% stake in Legacy Iron Ore Ltd.

M/s Hancock Prospecting Ltd which is 100% owner of M/s Hancock Magnetite Holdings Pty Ltd is already producing Mt~70Mtpa iron ore in Australia. This partnership with a strong partnership with local experience provides a great opportunity to progress Mt Bevan and share the costs. Hancock will also progress this project up to the PFS stage which removes most of the uncertainties in the project and then NMDC/Legacy can take a call on further participation in the project based on the outcome of the studies. This investment would help Legacy to increase its resource base and increase exploration activities.

Further, in continuation to the above agreement (which was for iron ore only), Legacy has again signed a tripartite JV agreement with M/s Hancock for the Exploration of Other minerals (lithium and other minerals) against which M/s Hancock will invest a max of A\$22mn towards the exploration of other minerals.

With the JV agreement, the share values of Legacy have improved substantially increasing the value of NMDC investment in Legacy.

Legacy is progressing its Mt Celia gold tenements and by this calendar year itself, production of Gold will be started.."

23. The vetting comments of the Office of C&AG on the aforesaid reply of the Government are as follows:-

"As these projects have long gestation periods, the benefit derived by NMDC from its investment in ICVL needs to be watched over a period of time. Hence, Audit has no remarks to offer for the present. As the studies relating to Mount Bevan Iron Ore Project are yet to be conducted and the proposed benefits from the Joint Venture are yet to accrue, Audit is not in a position to comment on the prudence of the investment made in Legacy Iron Ore Limited. Hence, Audit has no comments to offer for the present."

24. The Committee had in its Original Report critically examined NMDC's investments in non-profitable joint ventures, particularly in International Coal Ventures Limited (ICVL) and Legacy Iron Ore Limited (LIOL), despite negative evaluations by the Consultants. The Committee desired to know the exact reasons for Company's decision on deviating from the Consultants advice and urged NMDC to be more cautious in its overseas investments and pay heed to the Consultant opinions. The Ministry in their reply has stated that ICVL's

present valuation of NMDC shareholding stands at Rs.616.81 crore as against a total investment of Rs.378.9 crore. The Ministry has further informed that in partnership with M/s Hancock Magnetite Holdings Pvt. Ltd. including investments towards exploration of other minerals, the share values of Legacy have improved substantially thereby increasing the value of NMDC investment in LIOL. The Committee are in agreement with the Audit's observation that monitoring the benefits derived from NMDC's investment in ICVL over time due to long gestation periods and coming to reality of the forecasted benefits for LIOL until studies on the Mount Bevan Iron Ore Project are conducted. Given the current status, the Committee recommend continued monitoring of the investments in ICVL and LIOL to assess their long-term benefits accurately. Keeping in mind the Company's interest, the Committee stress on the importance of periodic evaluations to ensure that these investments align with NMDC's strategic goals and contribute positively to its financial performance. Additionally, the Committee are of the strong opinion that NMDC must have learned from past experiences and shall exercise greater caution and due diligence in future investments, particularly in joint ventures, to mitigate risks and maximize returns for shareholders.

- 25. Further, the Committee on perusal of majority of the replies furnished by the Ministry of Steel find that varied timelines have been fixed for completion/execution of intended objective by the Company. Majority of these replies although being accepted by the Committee, albeit needs mention as they shall determine the heading for the course of progress by NMDC to achieve in near future. The Committee's recommendation on:-
 - (a) 'Fixing of unrealistic target in revised 'SMP Vision 2025' (Recommendation No. 2) wherein the Ministry are hopeful of NMDC to achieve 50 MTPA by March, 2024 should subsequently help the Company in achieving the envisaged targets the targets set for 2030 i.e. 100 MTPA. The Committee while wishing for targets to be met desire that the Ministry of Steel may keep a close eye on timely completion of evacuation facilities including doubling of KK Railway Line and commissioning of Slurry pipeline and timely intervene to make possible the targets achievable;

- (b) 'Delay in execution of Packages for development of Deposit 11B mine' (Recommendation No.3) wherein despite the constraints highlighted, full production from 11B mine is expected from 2024-25. The Committee while accepting this revised timeline fixed in the Ministry's reply, are hopeful that this would be achieved without any extension simultaneously working on making the 11B facility fully operational and prompt completion of key activities;
- (c) Likewise, on 'Delay in Execution of Packages for development and production through KIOP' (Recommendation No. 4) the tendering part of the said project been initiated and likely completion of the Screening Plant II at Donimalai expected in March 2026, the Committee are hopeful of no further reasons for delay in meeting the decided timeline of March 2026 and should not come in way of fully commission of production facilities at KIOP;
- (d) As regards 'Increasing Customer base to meet increased production' (Recommendation No. 5), all out efforts including involving local help and support should be adopted by NMDC in eliminating citied hindrances for completion of the balance work of doubling 44 km Railway line stretch from Dantewada to Kirandul by January, 2025; and
- (e) On the issue of 'Delay in Kirandul project due to denial of permission for blasting' (Recommendation No. 10), the Committee hope that the Ministry's submission that the project's scheduled fully completion by August 2024 has been statistically practical given only 38 per cent work being completed on Screening Plant-III project at Kirandul.

After carefully examining each of the Ministry's submissions, the Committee expect that both the Ministry and the Company have learned from past experiences and will move forward with better preparedness in the future. The Committee also hopes that the administrative Ministry and NMDC will be able to achieve the set targets on time.

CHAPTER II

OBSERVATIONS/RECOMMENDATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

NMDC - OVERVIEW

Recommendation (SI. No. 1)

1. NMDC Limited is a Navaratna CPSU under the Ministry of Steel. It is the single largest producer of iron ore in India. It was incorporated in November 1958 with the main objective of exploring the mineral resources in the Country. The Company is considered to be one of the low-cost producers of iron ore in the world. It produces Iron ore through its highly mechanized open cast mines located at Kirandul (3 mines), Bacheli (2 mines) in Bailadila sector of Dantewada district in Chhattisgarh and through Donimalai (2 mines) in Bellari district of Karnataka. The production of the Company during 2021-22 was 42.19 million tons per annum (MTPA). Apart from the production of iron ore, the Company has taken several business diversification initiatives such as setting up of a Steel Plant and a captive power plant at Nagarnar, Chhattisgarh; acquisition of a Sponge Iron Unit at Paloncha, Telangana; establishment of a pellet plant at Donimalai, Karnataka, etc. The Company has also made investments in Joint Ventures with Central / State Government Undertakings and private companies in India and abroad for establishment of Steel Plants and development of Coal and Iron ore mines. NMDC also operates the only mechanized diamond mine in India at Panna, Madhya Pradesh. The Performance Audit Report No. 5 of 2019 of C&AG on 'Operational performance of NMDC Limited' deals with the production, evacuation and sale of iron ore, business diversification activities and investment in Joint Ventures by NMDC Limited during the period from 2012-13 to 2016-17. The findings of C&AG mostly relate to NMDC (i) not giving due weightage to the professional advice

tendered by consultants in various projects resulting in avoidable delay, time and cost overruns in those projects, (ii) not carrying out due diligence beforehand resulting delay in execution of various work packages, (iii) non-addition of new marketing strategies and customers to match its production, (iv) avoidable delay in obtaining Environmental

Clearance and Forest Clearance in various projects, (v) grave errors in documents going unnoticed by NMDC resulting in delay of important projects, (vi) relying heavily on Techno Economic Feasibility Report (TEFR) instead of Detailed project Report (DPR) while conceiving

of projects leading to cost escalation and time overruns in commissioning of project, (vii) investments made in non-profitable Joint Ventures resulting in extra-financial burden on the Company, etc. The Committee on Public Undertakings examined the C&AG report and its observations are in consonance with the findings of the C&AG that are elaborated in succeeding paragraphs.

Delay in execution of Packages for development of Deposit-11B mine

Recommendation (SI. No. 3)

2. The Committee note that Deposit 11B mine of Bailadila sector is located in Kirandual, Chhattisgarh. In July 2005, NMDC awarded Engineering, Contract Procurement Services & Project Management and Construction Management Services (EPCM) contract to MECON Limited to execute packages for development of Deposit 11B mine within 35 months i.e. by June 2008 in order to meet production of 7 MPTA of iron ore from the mine. The Committee find it shocking to note that the development of the mine remained incomplete even by March 2022 resulting in Deposit 11B mine only producing 2.20 MTPA during 2018-19, 3.99 MTPA during 2019-20 and 4.49 MTPA of iron ore during 2020-21 against the expected production target of 7 MPTA to be achieved by June 2008. Further, the Screening Plant III that was a part of the package was yet to be constructed and commissioned without which the full production of 7 MTPA could not be possible in Deposit 11B mine. NMDC attributed the delay to change in technology from soil nailing technique to grouted nailing technique in package III (Earth Works) and to the site conditions, change in design, approval of drawings, local disturbances, inadequate deployment of men and material by contractors, etc. Surprisingly, NMDC although stated to have levied liquidated Damage (LD) / penalty for the delay, did not furnish any details of package-wise LD/ penalty imposed on the contractor/ consultant in some of the packages to the Audit party during examination. NMDC also did not furnish the action taken on its employees who were responsible for the delays to the Audit party. The Committee find that the incidents of grave lapse on the technical wing of the Company such as failing to foresee averse circumstances or carry out due diligence before handing over the packages to the contractors resulted in delay of more than 14 years adversely impacted the performance of the Company. The Committee feel that had proper due diligence been carried out and punitive action taken against the officers responsible for untimely submission of drawings, erring contractors/ consultants, the delay of so many years and the adverse impact on the production of the

Company could have been avoided. The Committee hope that NMDC would make all out efforts to complete the work of Screening Plant III without any further delay and the targeted production of 7 MTPA from Deposit 11B mine would be achieved.

Reply of the Government

Work for the Screening Plant at -III at Kirandul is in progress. Presently 38% work is completed and the work is scheduled to be completed by Aug-2024. Meanwhile, efforts are being made to operate the plant partwise before the above schedule. i.e., to complete the RWLS package by Sep-2023 so that loading can be made through RWLS (Rapid Wagon loading system). Further efforts are also being made to complete the Fine ore handling area equipment by Feb-2024 so that storage and loading can be done from there.

The Delays in 11B package is mainly due to the following: -

- Problems faced in executing the projects in remote areas with typical site conditions,
- Poor mobilization of men and material, slow pace of work by package contractors
- Frequent Naxal disturbances & bandhs,
- Threatening of employees and damage of equipment by extremists.
- Fire incident caused by insurgents (Photographs attached)
- Non-availability of skilled and unskilled labourers and sub-contractors in remote area.
- Impact of the extremist's activities in the region led to restricted working hours as the contractors are not in a position to work during the dark hours.
- Contract labours leaving the site due to fear psychosis (attacks on CISF Personnel by extremists)

In view of the above constraints in which the project was implemented, there was no inaction on the part of NMDC. However, whenever there was a specific delay on the part of the Contractor/Consultant, action as per the contractual provision was taken.

LD was imposed on contractors and the details were provided earlier. The updated status in this regard is as under:-

Package/Contractor	Contract Price	LD Imposed
Crushing Plant Package - Pkg I	Rs.117.82 Cr	Rs.11.78 Cr
M/s TRF Limited		LD amount recovered.

		Amicable settlement done with the contractor and release of payment deferred by NMDC due to pending risk & cost issue of another contract.
- Pkg II M/s Sandvik Asia Private Limited	Cr	 Rs.12.05 Cr. LD amount recovered. Amicable Settlement failed and package contractor invoked Arbitration. Hon'ble Sole Arbitrator awarded in favor of contractor. Later out of court settlement done with the contractor.
5B- Service Centre Facilities M/s BCC Infracon Pvt Ltd EPCM Consultant M/s Mecon Ltd	Rs.17.65 Cr Rs. 9.95 Cr	 Rs. 1.76 Cr LD amount recovered. Later Amicable settlement done with the contractor. Rs. 0.995 Cr LD amount recovered.

The status of Deposit 11B mine is as under:-

The works of all the packages were completed except erection of 01 Nos. Electric Overhead Travelling (EOT) Crane in Service centre facilities. Same is expected to complete by October 2023. However, the non-completion of above work did not have any bearing on the operation of the 11B mine. Full production from Deposit 11B is expected from 2024-25.

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 31.07.2023)

Vetting Remarks of the Office of C&AG

"The constraints mentioned by the Ministry were already considered by Audit and only the delays on the part of Contractor/ Consultant were pointed out in the Report. However, as the Deposit 11B facilities are yet to be fully operational and Ministry has mentioned revised timelines for

completion of key activities which are yet to be achieved, Audit has no comments to offer for the present.".

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 06.12.2023)

Comments of the Committee (Please see para 25(b) of Chapter I of the Report)

<u>Delay in Execution of Packages for development and production through</u> Kumaraswamy Iron Ore Project (KIOP)

Recommendation (Sl. No. 4)

3. The Kumaraswamy Iron Ore Project (KIOP) is located in Bellari District of Karnataka and was envisaged to produce 7 MTPA of iron ore by 2018-19. As per audit findings, the revised schedule for completion of KIOP was March 2012 but the project remained incomplete even till March 2018. The Committee observe that although some of the packages were commissioned, some crucial packages like approach road works were still incomplete and due to non-existence of Screening Plant II and the Loading Plant with Railway Yard, NMDC had to resort to outsourcing of mining which was not a environment friendly step. The Company had produced 3.82 MTPA through outsourcing and 3.18 MTPA through Departmental Production during 2020-21 while the entire 7 MTPA or iron ore production should have been met through Departmental Production. The Committee are unhappy over the incorrect reply furnished to the C&AG and the Committee that no show cause notice was issued by the State Pollution Control Board (SPCB) to the Company. The Ministry of Steel agreed that the transportation of iron ore through outsourcing contractors by tippers was not an environment friendly step and the Screening Plant II was still incomplete as statutory clearances had not been received due to which KIOP could not take off as envisaged. The Committee recommend that extraordinary efforts be made by NMDC to obtain the statutory clearances so that Screening Plant II which has been delayed for more than 14 years can start and KIOP can begin Departmental production in-full instead of outsourcing of their activities.

Reply of the Government

The packages of KIOP have been completed and operational. Regarding the Screening Plant-II at Donimalai the clearances are in progress. Presently the clearances are being monitored through PMG portals and reviewed at Ministry level. Stage-2 Forest clearance has been received

on 10.07.2023. Follow up action regarding tree enumeration, tree felling, handing over of land have been initiated. The Environment clearance proposal with updated EIA/EMP report has already been submitted which will be considered in the next EAC meeting to be held on 02.08.2023. NMDC has also prepared the tender documents for two contract packages for Screening Plant-II, Donimalai and pretender meeting with prospective bidders has been held. After consideration of suggestions received, both the tender will be floated in the 1st week of August,2023. Likely schedule for completion of screening Plant-II at Donimalai is March -2026.

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 31.07.2023)

Vetting Remarks of the Office of C&AG

"Though the production facilities at Kumaraswamy Iron Ore Project are commissioned, the commensurate evacuation facilities also should be completed. In case of Screening Plant-II, as the works are still at the stage of preparation of tender documents and commissioning is expected to be completed in March 2026, Audit has no comments to offer for the present.".

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 06.12.2023)

Comments of the Committee (Please see para 25(c) of Chapter I of the Report)

<u>Delay of the work related to the doubling of Kirandul-Kothavalasa (KK) Railway Lines</u> <u>between Jagdalpur to Kirandul and between Jagdalpur to Ambagaon</u>

Recommendation (SI. No. 5)

4. The Committee note that in order to enhance the evacuation facility for meeting the envisaged higher production targets, NMDC undertook two projects viz. (i) doubling of 150.45 km of the Jagdalpur to Kirandul section of the KK Railway line, and, (ii) doubling of 25 km Railway line section between Jagdalpur and Ambagaon. In the first project, NMDC entered into Memorandum of Understanding (MoU) with the Ministry of Railways in December 2012 with an estimated cost of Rs. 826.57 crore in 2011-12 that was subsequently revised in December 2015 to Rs. 1160.83 crore to execute and complete the doubling of the railway line by August 2018. However, the doubling work could not be completed by the scheduled date and as a result the enhancement in evacuation facility could not be done. As per the information furnished during

December 2021 to the Committee, out of the 150 km of the Jagdalpur – Kirandul section, approximately 85 km doubling works was already commissioned and works in the remaining 65 km was under progress. In the second project, doubling of railway line section of 25 km between Jagdalpur and Ambagaon was taken up by NMDC with the Ministry of Railways in August 2016. The project was intended to meet the requirement of handling the anticipated two fold increase in the volume of traffic on account of the upcoming Integrated Steel Plant at Nagarnar (NISP). As per the agreement, the project was to be completed by January 2019.

The Committee are dismayed to note that only 50 percent physical progress has been made so far in this project. NMDC attributed the delay in completion of the projects to extremists problems in remote locations of work, issues in land diversions, delay in forest clearances, etc. The Committee find that the delay in the first project has cost the public exchequer an avoidable expenditure of Rs. 334.26 crore due to cost escalations in the project. The Committee are, however, happy to note that apart from the regular monitoring done by the Ministry of Railways, the two projects are now also being monitored by the Prime Minister Office (PMO) every month through 'PRAGATI' portal. The Committee only hope that the doubling works of KK Railway line projects are completed without any further delay and the evacuation facilities envisaged for achieving higher production by the Company are met.

Reply of the Government

The total doubling work from Jagdalpur to Kirandul (150.462 km) is divided into 03 sections. The details of work progress are as follows:

Sections	% of work	Status of Work
	Progress	
Section-I: Jagdalpur- Silakjhori:	100%	Commissioned on 17.06.2017
45.50 km		
Section-II: Gidam- Kirandul: 52.228 km (Bacheli - Kirandul: 9.50 km revised target completion is Oct'23) (Dantewada- Kamlur: 12.36 km revised target completion is Nov'23) (Kamlur-Bhansi-Bacheli: 21.98 km revised target completion is Jan'25)		 Tree cutting by Forest Dept. is in progress in Kamlur-Bhansi-Bacheli Sections. Due to burning of excavator by extremists on 23.03.2023 between Kirandul- Bacheli, subsequent denial of work granting permission by Dist. Police Authorities citing security threat, all works stopped in Bacheli- Kirandul section for some time and now P-way linking works

				to Dantewada) commissioned and 44 km (Dantewada to Kirandul) is balance.
Overall Prog	ress		85%	Out of 150 km, 106 km (from Jagdalpur
Section-III: 52.734 km	Silakjhori-	Gidam:	100 %	Commissioned on 13.09.2022
				 Bacheli- Bhansi section. P-way material shifting to reaches in progress in Dantewada -Kamlur section
				started in Bacheli - Kirandul Section. • Earth work, Bridge works started in

The work is done on deposit work basis by East Coast Railways. Details of contribution of NMDC towards the construction is as follows:

Maximum fund to be deposited by NMDC	₹ 1500 Cr.
Amount Deposited by NMDC till date	₹ 1263 Cr.
Expenditure incurred by Railways	₹ 1219.54 Cr.
Balance fund available with Railways	₹ 43.46 Cr.

Doubling of 25 km between Jagdalpur to Ambagaon was commissioned by Railways on 19.03.2019.

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 31.07.2023)

Vetting Remarks of the Office of the C&AG

"Until the entire stretch of Kirandul – Kothavalasa Railway Line is complete, the evacuation capacity of NMDC will not be enhanced to match the production capacities of mines in Bailadila Sector. However, as the Railway Line is expected to be fully operational only by January 2025, Audit has no comments to offer for the present."

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 06.12.2023)

Comments of the Committee (Please see para 25(d) of Chapter I of the Report)

Increasing Customer base to meet increased production

Recommendation (SI. Nos. 6 and 7)

5. The Committee observe that NMDC sells iron ore produced from its two sectors namely (i) Bailadila sector, and; (ii) Donimalai sector. In Bailadila sector, the Company sells its iron ore to end-use plants primarily through Long Term Agreement (LTA) with the end-use plants in the sector. NMDC at present has LTAs with about 85 iron & steel plants which comprises Integrated Steel Plants, Secondary Steel Producers, pellets & Sponge manufacturers for the sale of iron ore from the Bailadila sector. NMDC in December 2021 informed that presently there was a registered demand of iron ore of about 40 to 50 MTPA from Bailadila sector and it is expected to achieve the target of 67 MTPA sale of iron ore by the year 2024-25. However, on analysis of data on the quantity of total iron ore allotted and the total quantity of iron ore lifted during a period of 03 years i.e. from 2018-19 to 2020-21, the Committee find that the lifted quantity of iron ore was always 10 to 11 MTPA less than the allotted quantity implying that there was no commensurate demand of iron ore from the customers. The Committee further note that the export of iron ore to Japan and South Korean Steel Mills has stopped as the LTAs with these countries were not renewed beyond the financial year 2020-21. This has further adversely impacted the market of NMDC. NMDC contended that once the Nagarnar Integrated Steel Plant (ISP) would start its operation, additional demand of 4-5 MPTA would narrow the gap between the iron ore allotted and lifted. Yet, even after considering the expected demand of 4-5 MPTA from the Nagarnar Integrated Steel Plant and with the termination of LTAs with Japan & South Korea, the Committee feel that the gap between the allotted and lifted quantity of iron ore has further widened. Ironically, in such a scenario, the Company has not met the long standing demand of iron ore from the Chhattisgarh Sponge Iron Associations which could have narrowed the gap between the quantity allotted and the quantity lifted. The Committee feel that unless the existing customer base is expanded, new long term customers inducted and LTAs with foreign customers renewed, the target of 67 MTPA by 2024-25 cannot be achieved. The Committee, therefore, desire that the demand of iron ore from Chhattisgarh based Sponge Iron producers be immediately met. Further, immediate expansion of customer base along with empanelment of new long term customers, renewing of LTAs with Japan, South Korea and other countries, need to be pursued vigorously if the target sale of 67 MPTA is to be achieved by 2024-25.

6. In the Donimalai sector, there are no Long Term Agreements(LTA) and iron ore is sold through e-auction mode only, conducted by Monitoring Committee as per the directives of Hon'ble Supreme Court. The sale in this sector is dependent on the auction performance for the

corresponding period. NMDC has stated that they have been able to liquidate its production from the Donimalai complex over the years and with the existing customer base, the Company can sell its entire production from its Donimalai Complex. The Committee, however note that even in this sector, the lifted quantity was always 3 to 5 MTPA less than the allotted quantity during 2018-19 to 2020-21 implying that demand of iron ore from the customers was not commensurate. The Committee understand that introduction of the auction rule has increased the risks of NMDC as its major customers like JSW Steel Limited and AM-NS India have acquired captive mines in mineral-rich States and have already started production from the newly acquired mines & planned to increase it further in near future. The new tranches of auction are likely to add further capacity of iron ore to steel players as well as other merchant players in near future which is likely to adversely impact the market for NMDC over the long term. The Committee desire NMDC to take advantage of the increased demand for steel from developed economies in post pandemic period and the continuous rise in price of steel in international market which is expected to increase the demand of domestic iron ore. Further, NMDC needs to actively tackle private players, induct new customers and adopt robust marketing strategies if it has to remain and excel in the market.

Reply of the Government

1. It may be noted that, iron ore production and sales for the three financial years- FY 19 to FY 21 are at par with each other.

Particulars	FY 18-19	FY 19-20	FY 20-21
Production (in million ton)	32.36	31.5	34.15
Sales (in million ton)	32.36	31.5	33.25

- Even in the recent years, NMDC has been producing over 40 MTPA iron ore for past two Financial Years, FY 22 and FY 23, The sales are also keeping the pace and are hovering in the range of 38-40 MTPA in the same period. Therefore, most of the production is being sold.
- NMDC has been adding customers every year and has empanelled 11 new customers in
 past two financial years. In an endeavour to improve the number of customers, NMDC is
 in the process of floating an EoI and inviting interested parties for empanelment as LongTerm Customers.

- 4. The allocation of iron ore is a quantity that is reserved for off-take by a long-term customer during a particular Financial Year. The allocation is done by NMDC to its Long-Term Customers annually based on the following parameters:
 - a. Envisaged Production for the year and available stocks.
 - b. Indicated demand of iron ore by long term customers.
 - c. Past year's off-take of the customers.
- 5. As far as the observation regarding the gap in allocation and sales is concerned, in order to ensure maximum sales, the sales commitments by NMDC are usually pegged higher than the envisaged production as due to the volatility and change in market dynamics, the procurement by customers is short of their projections.
- 6. NMDC has always accorded priority to iron ore demand of Chhattisgarh based customers. 75% of DRCLO production and 100% production of sized ore (10-20mm), which is a ready to use product for sponge iron industry, is reserved for Chhattisgarh based customers.
- 7. As Bailadila region has a logistical disadvantage compared to other mining belts like Odisha and Maharashtra that are relatively closer to the end users based in Raipur, Raigarh, Durg, Bhilai and Bilaspur, the logistic costs are relatively higher.
- NMDC appreciates that there should be an alternative market for iron ore apart from Domestic market and hence we are also exploring options to commence export of iron ore.
- 9. During the said period of FY 19 to FY 21, in Donimalai sector, the entire quantity of iron ore is sold through e-auctions conducted by Monitoring Committee, hence no allocation was being done. The Monitoring Committee in Karnataka has been withdrawn since May'22 and NMDC would be entering into long term agreement with interested customers shortly.
- 10. The increase in captive mines is to mitigate any disruption in the supplies of iron ore. However, Since the auction of Captive mines since 2020, NMDC's sales have been increasing on account of availability of quality, consistency and reliability as a supplier of iron ore. All the major steel makers have expansion plans which would translate to incremental demand in the coming decade.

11. Market development and empanelment of customers is an continual process which requires devising a robust and agile policy framework coupled with adequate evacuation facilities. The initiatives like doubling of KK line is likely to be completed in the current financial year, adding an incremental 12 MTPA evacuation capacity, The rapid wagon loading system at Kirandul Complex will improve the dispatch from Kirandul Complex and reduce the rake turnaround time. The 15 MTPA slurry pipeline that is likely to be commissioned by 2025 will reduce dependency on conventional modes of transport (rail and road) and is also expected to be economical in terms of cost of transportation. This would open new avenues for NMDC and help expand its customer base.

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 31.07.2023)

Vetting Remarks of the Office of the C&AG

"As the increase in production capacities and commensurate evacuation facilities are proposed for completion in future, their impact on the customer base cannot be evaluated at this stage. As such, Audit has no comments to offer for the present."

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 06.12.2023)

<u>Avoidable delay in obtaining of Consent for Establishment (CFE) for Screening Plant-III</u> <u>at Kirandul Complex</u>

Recommendation (Sl. No. 9)

7. The Committee note that the Environmental Clearance (EC) for the Screening Plant - III at Kirandul Complex was received by NMDC in November 2013. However, in the EC, the land area mentioned was 65,936 hectares instead of 74,236 hectares as applied for by the Company. The Committee find it shocking that this anomaly was not noticed by NMDC before October 2016 until it was pointed out by the Chhattisgarh Environment Conservation Board (CECB) to whom it applied for issue of Consent for Establishment (CEF). NMDC in December 2016 requested the Ministry of Environment, Forest and Climate Change (MoEF&CC) for issue of a revised EC which was received in March 2017. Eventually, the CEF was granted by CECB in July 2017 resulted in an avoidable delay of 38 months. The Committee deplore the way such grave error on crucial

document went unnoticed by the NMDC Management for 3 years until it was pointed out by CECB. The Committee desire that a detailed administrative exercise be carried out to find out the causes for such grave lapse, fix responsibility and take punitive action on those found guilty. Simultaneously, a concrete fool-proof mechanism be developed to monitor timelines fixed for various work and detection of such errors at early stages so that unnecessary delays are avoided.

Reply of the Government

- The proposed Screening Plant-III and associated loading infrastructure facilities were proposed to be located adjacent to existing Deposit-14 NMZ Mining Lease. The existing Screening Plant-I and II are in Bailadila Deposit-14 NMZ lease area.
- The area identified outside Deposit-14 NMZ ML area is 65.936 Ha which is revenue forest land requiring Forest clearance under FC Act, 1980.
- In addition to above, the TEFR prepared for SP-III also identified an area of 8.30 Ha in Deposit-14 NMZ lease area (506.742 Ha lease area) which was forest land and already under possession of NMDC for which Forest clearance approval was accorded.
- The EIA/EMP report prepared for obtaining Environmental clearance for augmentation of Screening Plant and associated facilities at Bailadila Deposit-14/11C, 11B Project, Kirandul of NMDC specifically mentioned the requirement of 65.936 Ha Forest land outside Deposit-14 NMZ lease area and 8.30 Ha land which was in NMDC's possession under lease area.
- The extract of PPT presented before public hearing on 5/10/2009 is enclosed wherein it was clearly mentioned about the total land requirement. (Copy enclosed).
- The Final EIA/EMP report (upgraded after PUBLIC HEARING) submitted to MOEFCC in December 2009 for obtaining EC. The chapter-2, Table No: 2.2, the area requirement of 65.936 Ha and 8.30 Ha was also mentioned. (Copy enclosed).
- The questionnaire submitted to MOEFCC in December 2009 also contains area requirements of 65.936 Ha and 8.30 Ha at s.no; 2. (Copy enclosed).
- The PPT presented before the Expert Appraisal Committee, MoEFCC on 22/1/2010 has also presented the above land requirement details. (Copy enclosed).
- However, while issuing EC by MOEFCC on 5/11/2013 (after obtaining stage-1 Forest clearance for 65.936 Ha Forest land on 17/01/2012), they have mentioned only 65.936 Ha of forest land which was acquired under FC Act, 1980.
- NMDC was of the opinion that since 8.30 Ha of land in the lease area of Deposit-14 NMZ was already under possession, the same was not mentioned by MOEFCC in the Environmental clearance letter dated 5/11/2013.
- However, during the presentation before CECB, Raipur for obtaining Consent to Establish, the requirement of total land of 74.236 Ha was mentioned (application was also

submitted for 74.236 Ha) and given break up details. At that time, NMDC officials have made all efforts to convince the CECB officials by showing the above facts. However, CECB has advised NMDC to get corrigendum to EC mentioning the area of 8.30 Ha also to avoid any legal complications in future.

- Since NMDC has included the requirement of 8.30 Ha (which is already in possession of NMDC) in documents of public hearing presentation, Final EIA/EMP report, questionnaire and made presentation before EAC, MOEFCC, due to which MOEFCC has issued corrigendum on 28/3/2017 without any adverse remarks on NMDC.
- Thereafter, the CTE was issued by CECB, Raipur on 28/7/2017.

Conclusion

• From the above-mentioned facts, it has been clearly indicated that NMDC has mentioned complete land requirement and its break up.

Action Taken

- NMDC is examining all statutory clearances once received from MOEF&CC whether they
 are in accordance with the application submitted in terms of production capacity and area
 requirement.
- The Top Management is conducting review meeting once in a month in which all the time lines fixed for various works are being monitored to avoid any delays.

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 31.07.2023)

Vetting Remarks of the Office of the C&AG

"The effectiveness of the review meetings taken by the Top Management and their follow up needs to be watched over a period of time to comment upon. Hence, Audit has no further remarks to offer for the present."

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 06.12.2023)

Delay in Kirandul project due to denial of permission for blasting

Recommendation (Sl. No. 10)

8. The Committee are informed that the work for the Screening Plant III Project, Kirandul is being executed through eight packages and as per the revised schedule, the project is to be completed by August 2024. The Committee however note that work in 2 packages is yet to be awarded. NMDC clarified that during execution of the site development & construction package, the Company could not do the blasting of hard rocks as Chhattisgarh Government Authorities

did not permit them for blasting in view of the sensitiveness of the area. So the Company had to consider other means like using expansive cement mortar for breaking of the hard rock in place of blasting which resulted in a time-consuming process. The Committee do not understand how the Company failed to take stock of the ill consequences of carrying out blasting in a ecologically sensitive area. The Committee feel that proper due diligence was not done by NMDC at the time of conceiving the project, carrying out survey of the area, preparing the DPRs, etc otherwise such critical aspects could have been noticed beforehand and delay in the project would have been avoided. The Committee express their strong displeasure and desire NMDC to be more cautious in future.

Reply of the Government

District Administration had denied permission for blasting due to the strong presence of Extremists in the area, not due to being an ecologically sensitive area.

Now the construction work for the Dry circuit package and MRSS etc. is in progress at the site. The project work is 38 % completed and is scheduled for completion by Aug-2024. All efforts are being made to complete the project within the scheduled time period.

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 31.07.2023)

Vetting Remarks of the Office of the C&AG

"Since the Screening Plant – III is now scheduled for completion only by August 2024, Audit has no comments to offer for the present."

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 06.12.2023)

Comments of the Committee (Please see para 25(e) of Chapter I of the Report)

CHAPTER III

OBSERVATIONS/RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE GOVERNMENT'S REPLIES

- Nil -

CHAPTER IV

OBSERVATIONS/RECOMMENDATIONS IN RESPECT OF WHICH REPLIES OF THE GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE AND WHICH REQUIRE REITERATION

<u>Delay in obtaining of Environmental Clearance for Screening Plant-II of Kumaraswamy</u> <u>Iron Ore Project (KIOP)</u>

Recommendation (SI. No. 8)

1. The Committee note that in order to identify additional reserves in Donimalai Iron Ore Project (DIOP), NMDC decided for construction of a second Screening Plant (SP-II) at Kumaraswamy Iron Ore Project (KIOP). The Company applied for Environmental Clearance (EC) for the Screening Plant II in March 2014. However, the EC was received after more than 03 years of application made by the Company. The inordinate delay was attributable on the part of State Pollution Control Board (PCB) in conducting Gram Sabha coupled with failure on the part of NMDC in taking prompt action for applying for revised Terms of Reference (ToR) and delay in submitting the required information to the Ministry of Environment & Forests & Climatic Change (MoEF&CC). Similarly the Forest Clearance (FC) for the SP-II (Stage-I) which NMDC applied in December 2014, could not be received even after 7 years. The FC was held up due to delay in submission of Differential Global Positioning System (DGPS) map to Forest Department and resubmission of application for revision of ToR. During the course of evidence, the Ministry of Steel admitted the delay and submitted that these were priority items for them and work is now being monitored on real time basis. The Committee are, however, perturbed with the lackadaisical approach on the part of the management of the Company that failed in timely submission of documents to the concerned authorities and pursue various clearances. The Committee feel that had some concrete monitoring mechanism been in place to keep track of the progress of work in various stages, the delay of so many years could have been avoided. The Committee, therefore, recommend that all-out efforts be made to obtain all the necessary statutory clearances to complete the Screening Plant II without any further delay to enable identification of additional reserves in Donimalai Iron Ore Project (DIOP) and enhancement of its capacity.

Reply of the Government

Stage-2 Forest clearance order was obtained on 10th July, 2023. The compliance of the condition set out therein has also been furnished on 24th July, 2023 to the Government of Karnataka for issue of Final Forest clearance orders.

Environmental clearance: The proposal was recommended by Expert Appraisal Committee, MOEFCC during the meeting held on 8th June, 2017 subject to obtaining Stage-1 Forest clearance. As per MOEFCC requirements, the updated EIA/EMP report with fresh baseline data collected from March to May, 2023 has been submitted to MOEFCC on 15th July, 2023 for obtaining Environmental clearance. EAC is scheduled to consider the same on 2nd August, 2023.

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 31.07.2023)

Vetting Remarks of the Office of C&AG

"The Environmental Clearance shall be followed by obtaining of Consent for Establishment from the concerned State Pollution Control Board before initiating work at site for the proposed Screening Plant – II at Kumaraswamy Iron Ore Project. This shall further be followed by Consent for Operations before the commencement of operations of Screening Plant after the same is commissioned. Hence, as such, since NMDC is yet to obtain the Environmental Clearance, Audit has no comments to offer for the present."

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 06.12.2023)

Comments of the Committee (Please see para 12 of Chapter I of the Report)

Setting up of Integrated Steel Plant at Nagarnar, Chhattisgarh

Recommendation (Sl. No. 11)

2. The Committee note that in line with the National Steel Policy 2005, the Government in March 2008 decided that NMDC may set up a Steel Plant on its own in view that the Company had adequate cash reserves and easy access to the primary raw material i.e. iron ore. The Board of NMDC in July 2008 appointed MECON Limited as a Consultant for preparation of Techno Economic Feasibility Report (TEFR) for the project which was submitted by MECON in December 2008. After carrying out due diligence, the Board of NMDC in January 2010 accorded approval for setting up the Nagarnar Integrated Steel Plant (NISP) in Chhattisgarh with an

estimated cost of Rs. 15,525 crore. NISP was scheduled to be completed and commissioned by March 2014. The Committee, however are perturbed to note that the project was delayed as the work for the project was awarded on the basis of a tentative TEFR instead of a Detailed Project Report (DPR) which is more elaborate and accurate. The decision to depend on TEFR lead to revision of technical specifications, modification of tenders, time overruns and upward revision of estimated cost of the project from Rs. 15,525 crore to Rs. 22,196 crore. NMDC contended that preparation of DPRs has lost its relevance as its preparation is time consuming which further leads to increase in project time schedule and increase in cost of project, and also that many private players and steel companies in the past have executed their expansion projects/ new projects based on TEFR. The Committee, however, are not in agreement with the view of NMDC as even after proceeding with TEFR, the NISP project has been delayed for more than 8 years and the project is still incomplete. The Committee believe that TEFR lead to change in technical specifications in works and contracts particularly in 03 major works namely (i) Raw Material Handling System, (ii) By-Product Plant, and (iii) Line & Dolomite Calcined Plant leading to termination and re-awarding contracts to new contractors. Further, the cost of the NISP project escalated from 15, 525 crore to Rs. 22,196 crore and even after regular monitoring at Company and Ministry level, the NISP project is scheduled to be completed by March 2024 after an estimated delay of 9 years. The Committee are of the opinion that NMDC willingly erred in deciding not to prepare DPR in such a huge ambitious project although it was new in the field of establishment of steel plants and instead heavily depended on tentative TEFR that resulted in additional burden of Rs. 6671 crore on the public exchequer and time overrun of 9 years. The Committee are also apprehensive of cost overrun and time overruns in the project that has lead the Government to decide on the disinvestment/ demerger of NISP which is also simultaneously under process. The Committee only hope that with the constant monitoring by the Ministry of Steel, the project would be completed as per the revised schedule without any further cost and time overrun.

Reply of the Government

NMDC decision to proceed the project with TEFR submitted by M/s MECON, was taken after due diligence of TEFR by Price Waterhouse Coopers. Feasibility reports covering technoeconomic portions for various SAIL plants (BSP, RSP, DSP) were also prepared by their Consultant MECON. As such the procedure of approval of projects based on TEFR is in practice and the same was followed in NMDC. NMDC was not having requisite experience in construction and commissioning of steel plant, hence MECON was appointed as PMC/EPCM consultant for

construction and commissioning of NISP Steel plant. For such type of large project, there is always a possibility and requirement of change in technical specifications in works which cannot be predicted at the start of the project.

Major reasons for Delay are:

- Contract award could not be done in sequential manner due to poor response from bidders in tenders floated.
- 2. Improper assessment/estimate of quantities/jobs by contractors before quoting for tenders.
- 3. Abnormal increase in labour price.
- 4. Inordinate delay in completing the engineering.
- 5. Delay in getting forest clearance for doing intake well in river Sabari at Tiriya.
- Change of name of Package Contractors in Steel Melting Shop, Turbo blower and Sinter
 plant and Oxygen plant which have changed the name of their company due to mergers
 and acquisition and it resulted in delays of the project. This affected the supplies by the
 contractors.
- 7. Delays due to financial crunch of Contractors. The financial health of major contractors like M/s. Shapoorji, M/s. SEW, M/s. SEPC, M/s. NCC, M/s. TPL, M/s BEC, M/s Primetals etc. have been deteriorated due to external reasons beyond control. This has resulted in inadequate resource deployment.
- 8. Difficulty in availability of skilled manpower locally due to remote geographical location and lack of an ecosystem of steel making nearby.
- 9. Commercial issues raised by various contractors like M/s Primetals, M/s BEC, M/s SPCPL, M/s Danieli, M/s Linde etc. which resulted in slow down of supplies and execution of work at site.
- 10. Mismatch in shell manufacturing by the contractor with respect to approved design in Blast Furnace Package resulted in a considerable delay because of time taken in finalizing the modification of shell.
- 12. Inter consortium disputes in multiple packages has resulted in delay in supply and execution of work.
- 13. Non sequential supply of structure and equipment's by contractors.
- 14. Poor performance of contractors in RMHS, BPP & LDCP etc resulted in delay in commissioning of plant in an integrated manner.
- 15. Covid-19 has also severely impacted the progress and commissioning plant as work was entirely stopped during this period and after effects of covid which resulted in delay in deputation of foreign experts and supply of imported items.
- 16. Refurbishment of equipment due to idling/delay etc.

The reasons which are mentioned above clearly indicate that the progress of plant was hampered due to reasons beyond the control of NMDC which has also resulted in cost overrun. Even through the management has taken concrete step with support of MECON for planning, monitoring and execution so as to ensure that works are completed in earliest possible duration, many unforeseen issues cropped up during execution of NISP project, and all efforts were made by management to resolve the issues, which has brought plant upto the present level of progress.

The present progress of plant where in physical works are broadly completed and commissioning activities are in full swing. Raw Material Handling system is functioning in line with the requirements of overall plant. Coal, Coke, Sinter route are operational, rest other routes are also ready and will be operated as per commissioning sequence of packages. By-Product Plant is operational since 27th Oct'22 and is under process of stabilization. Lime Dolomite Calcination Plant (LDCP) balance work has been awarded in Jan'23 to new contractor M/s Offshore and consortium and work is in progress. However, completion of LDCP is not a prerequisite for the commissioning of overall steel plant as the requirement of Lime & Dolo will be met through the purchased calcined lime and Calcined Dolo from the market, and necessary arrangements has been done for storing and handling of calcined lime and Dolo.

Brief status of commissioning activities are as follows:

- Coke Oven Battery-1 and By-Product Plant commenced Operations from 27th Oct '22
- Coke Oven Battery-2 commenced Operations from 24th April '23
- Sinter Plant and Oxygen Plant (ASU-2) commenced operation on 19.04.2023.
- Steam Turbo Generators (STG) -1 & 2 is synchronised and started power generation.
 All 3 boilers are ready and 2 are operational. Turbo Blowers (3 No's) hot trial for cold blast generation taken & hooking up with blast furnace completed.
- Blast Furnace all 3 stoves heating under progress.
- All auxiliary units/services department like MRS, PPDS, PBS, Water Depts. CAS, DG Station, Central Stores are operational.
- Trial production with purchased plate started in Hot Strip mill and first coil rolled on 30.06.2023

Prerequisite activities for Hot Metal from Blast Furnace and Liquid Steel production from Steel Melting Shop are in progress and will be ready by end of July'23.

[Ministry of Steel(NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 31.07.2023)

Vetting Remarks of the Office of the C&AG

"The Integrated Steel Plant has been operational since August 2023 and is currently in stabilization stage. Hence, Audit has no further remarks to offer."

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 06.12.2023)

Comments of the Committee (Please see para 16 of Chapter I of the Report)

Sponge Iron Unit at Paloncha, Telengana

Recommendation (Sl. No. 12)

3. The Committee note that NMDC at the instance of Ministry of Steel, in July 2010, acquired a loss making Sponge Iron India Limited (SIIL) at Paloncha, Telangana. The sponge iron production turned unviable due to higher cost of production and the losses of SIIL accumulated to Rs. 194.77 crore in 2017 which further grew to Rs. 273.69 crore as on 31 March 2021. The Committee are disappointed to note that the turnaround plans of the sick Sponge Iron Unit, initially with the construction of a Super Critical Thermal Power Plant and then with a Cold Rolled Coil Unit have been shelved for different reasons by NMDC. As a measure of turnaround plan, the Company had intended to utilize the available land of 428 acres for setting up of Thermal and Solar Power Plants. The Committee are unhappy to note that although the Government had tried to sell the SIIL Unit by issuing expression of interest, there was no response. The Committee also find it surprising on the Government insisting to acquire a sick & loss making Sponge Iron Unit in July 2010 and would like to know the reasons therefor. The Committee are not aware of the turnaround plan of the Company to set up a Solar Power Plant to bring the Company out of losses. Since the loss of the Company are accumulating year after year and that there are no prospective buyers of the Unit, the Committee recommend that a concrete turnaround plan be drawn and implemented to bring SIIL Unit of Paloncha out of losses.

Reply of the Government

- NMDC is having free land bank of around 350 Acres (290 acres of free land bank and 60 acres of non-operational plant) at Paloncha.
- NMDC has prepared a detailed report for setting up of a 4.5 MW ground-mounted, gridconnected Solar Power Plant at SIU, Paloncha.
- The proposal is under finalization and has an implementation timeline of 12 months.
- A part of the land area (as shown below) is being currently utilized for the Solar Power Plant. For the remaining land area, NMDC is looking for other business opportunities including expansion of the Solar Power Plant.

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 31.07.2023)

Vetting Remarks of the Office of the C&AG

"The progress made in setting up of Solar Power Plant will have to watched. Hence, Audit has no comments to offer for the present."

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 06.12.2023)

Comments of the Committee (Please see para 20 of Chapter I of the Report)

Investment by NMDC in non-profitable Joint Ventures

Recommendation (SI. No. 13)

4. The Committee note that with the objective of sourcing Metallurgical Coking Coal and Thermal Coal supplies from overseas, a Special Purpose Vehicle (SPV) namely International Coal Ventures Limited (ICVL) was formed in May 2009. In July 2014, ICVL decided to acquire the ownership of coal mine and coal assets located in Mozambique. NMDC had invested Rs. 376.36 crore in ICVL. However, NMDC further remitted an equity contribution of over Rs. 2.50 crore to ICVL's to meet expenditure budget and also to clear the ICVL's outstanding liabilities. The Committee note that the NMDC has so far invested Rs. 590.51 crore in ICVL despite an adverse report of the consultant and the investment not yielded any returns so far. Similarly,

NMDC in May 2011 acquired 50 percent shares in Legacy Iron Ore Limited (LIOL), Australia to secure management control on the mining tenements that would be acquired by LIOL. NMDC made a total investment of Rs. 168.53 crore in LIOL despite the fact that the consultant appointed for conducting the evaluation study had opined that it was a negative Net Present Value (NPV) project and was a marginal asset in the short to medium term. Further, due to erosion of the share value of LIOL, the value of investment made by NMDC declined from Rs. 168.53 crore to Rs. 17.13 crore. The Committee are disheartened to note that in both the cases, the investments were made by NMDC despite a negative opinion tendered by the Consultants and would like to know the reasons therefor. The Committee are of the view that NMDC should have given due cognizance to the opinion tendered by the project consultants before making any investment overseas. From the experience gained, the Committee expect NMDC to be more careful in making strategic investments in Joint Ventures in future.

Reply of the Government

ICVL – Total investment made by NMDC till date is Rs 378.9 crores and the present valuation of NMDC shareholding in ICVL is Rs 616.81 crores (31.03.2022). With the scale of operations being upgraded and new mines opened at Mozambique, the valuation of NMDC investment is likely to increase in future. These projects are long gestation ones.

It is to inform that NMDC shareholding in ICVL is 25.94 % whereas the shareholding of SAIL is 47.83%. The Coal produced at Mozambique is imported and being used by SAIL and RINL.

Legacy Iron Ore Limited – To progress Mt Bevan iron ore project, Legacy (60% stake) along with its partner Hawthorn Resources(40% stake) had signed a non-binding term sheet with M/s Hancock Magnetite Holdings Pty Ltd and as per the terms, M/s Hancock will acquire 51% stake in Mt Bevan iron ore project (only at project level and not at company level) in two phases for an investment of A\$16mn (A\$4.8mn to Legacy, A\$3.2mn to Hawthorn and the rest A\$8mn into the new JV). They will complete PFS studies on Mt Bevan within two years from the date of signing the JV agreement. Pursuant to this arrangement, Legacy will have 29.4% stake in Mt Bevan JV(Joint Venture) whereas NMDC continues to hold 90.05% stake in Legacy Iron Ore Ltd.

M/s Hancock Prospecting Ltd which is 100% owner of M/s Hancock Magnetite Holdings Pty Ltd is already producing Mt~70Mtpa iron ore in Australia. This partnership with a strong partnership with local experience provides a great opportunity to progress Mt Bevan and share the

costs. Hancock will also progress this project up to the PFS stage which removes most of the uncertainties in the project and then NMDC/Legacy can take a call on further participation in the project based on the outcome of the studies. This investment would help Legacy to increase its resource base and increase exploration activities.

Further, in continuation to the above agreement (which was for iron ore only), Legacy has again signed a tripartite JV agreement with M/s Hancock for the Exploration of Other minerals (lithium and other minerals) against which M/s Hancock will invest a max of A\$22mn towards the exploration of other minerals.

With the JV agreement, the share values of Legacy have improved substantially increasing the value of NMDC investment in Legacy.

Legacy is progressing its Mt Celia gold tenements and by this calendar year itself, production of Gold will be started.

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 31.07.2023)

Vetting Remarks of the Office of the C&AG

"As these projects have long gestation periods, the benefit derived by NMDC from its investment in ICVL needs to be watched over a period of time. Hence, Audit has no remarks to offer for the present. As the studies relating to Mount Bevan Iron Ore Project are yet to be conducted and the proposed benefits from the Joint Venture are yet to accrue, Audit is not in a position to comment on the prudence of the investment made in Legacy Iron Ore Limited. Hence, Audit has no comments to offer for the present."

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 06.12.2023)

Comments of the Committee (Please see para 24 of Chapter I of the Report)

CHAPTER V

OBSERVATIONS/RECOMMENDATIONS TO WHICH THE GOVERNMENT HAS FURNISHED INTERIM REPLIES AND REPLIES ARE STILL AWAITED

Fixing of Unrealistic target in Strategic Management Plant(SMP) -Vision 2025

Recommendation (SI. No. 2)

1. The Committee observe that NMDC had a Corporate Plan upto the year 2009-10. Thereafter, no Corporate Plan was formulated till the year 2015-16. Instead, production and other targets were fixed annually. In a review meeting held on 27 October 2014, the Administrative Ministry had suggested for preparation of a vision document 'NMDC 2025' as the Company had intended to produce 75 million tons per annum (MTPA) by 2018-19 and 100 MTPA by 2021-22. Subsequently, in January 2015, a Consultant, namely, M/s Accenture was appointed for a fee of Rs. 0.57 Crore by NMDC to evaluate the intended production in the vision document. The Consultant, in May 2015, after assessing the existing customers in the domestic market, potential volume of exports and captive consumption, suggested that the intended objective of achievement of production of 75 MTPA and 100 MTPA would be difficult. Yet, NMDC in October 2015, ignored the advice of the consultant and fixed over-ambitious target of 75 MTPA by 2018-19 and 100 MTPA by 2021-22 in its Strategic Management Plan (SMP) Vision 2025. However, sensing the subdued market condition, fall in international iron ore prices, NMDC revisited its SMPVision 2025 in September 2016 and lowered the target of iron ore production to 50 MTPA for 2018-19 and 67 MTPA for 2021-22. The Committee find that even this lowered target was on the higher side and NMDC failed to achieve the target of iron ore production during the financial years 2018-19, 2019-20 and 2020-21 which remained at 32.36, 31.49 and 34.15 MTPA respectively. The Ministry of Steel reviewed the situation and further lowered the target of iron ore production to 47 MTPA for financial 2021-22. The Committee note that even at this stage, the reduced target of 47 MTPA could not be achieved by NMDC and the Company could only produce 42.19 MTPA of iron ore during 2021-22. The Committee do not understand why NMDC ignored the suggestions of the consultant to whom it paid a fee of Rs. 0.57 crore which

may be construed as wasteful, now appears to be thoughtless expenditure of public money. In the opinion of the Committee, the targets fixed by NMDC at different stages were over ambitious and irrational taking in view the unfavorable market condition, fall in international iron ore prices, unfinished projects related to doubling of various railway lines, inability in finding new potential customers, termination of long term agreements with some countries, delay in execution of various packages & enhancement facilities, etc. On an overall review of the position, the Committee note that against the initial target of 100 MTPA fixed by NMDC to be achieved by 2021-22, the Company could ultimately achieve only 42.19 MTPA of production. The Committee suggest that NMDC should seriously consider the professional advice given by consultants on time and undertake proper realistic assessment while fixing of various targets in future.

Reply of the Government

"The Strategic Management Plan "Vision 2025" was prepared in 2015 considering various assumptions and was based on various conditions stipulated therein. The revised SMP stipulates an ambitious plan of producing 67 MTPA of iron ore by 2025 and 100 MTPA by 2030 by NMDC. The Vision document stressed a total of six strategies which included Business Strategy, Operations Strategy, Human Resources Strategy, IT Strategy, R&D Strategy, Sustainability Strategy.

NMDC has gradually transformed itself according to the stipulations made in the Vision document and the same can be seen by the continuous improvement in the production capacities. Evacuation was and continues to remain one of the important factors affecting the capacities. Due to the locational disadvantage, there are many constraints in increasing evacuation capacities. The doubling of KK line is one such aspect. By doubling of the line, the rail evacuation capacity will increase to 40MTPA from the existing 28 MTPA. This project is being executed by railways and NMDC is funding it. The same is expected to be completed by 2025 and will support in achieving the envisaged targets. The commissioning of Slurry pipeline will also add to the evacuation capacity which in turn will add to the production capacities.

During the last two financial years, NMDC has continuously crossed the 40 MTPA production and is poised to achieve 50 MT of production during FY 2023-24. During the first quarter of FY 2023-24, NMDC achieved its highest-ever production.

		Q1 OF 2022	-23	Q1 OF 2023-	-24
IN	MILLION	PRODUCTION	SALES	PRODUCTION	SALES
TONNES		8.92	7.80	10.70	11.15*

<u>Achievements of SMP Targets –</u>

While the production decisions are based on demand and supply dynamics of the iron ore market and feasibility of evacuation, the NMDC has worked hard to repare itself for a higher volume of prouction. If market and other conditions are favourable, the company would be able to meet its revised goals on the basis of said developments. These are detailed below:-

	Strategies Enablers	and	Key	Achievements
1	Business S commodities			m "single commodity, geography" to "multiple liversified"
	Expansion Products, Geographies		New New	

^{*}updated to 10.98 MT (for Q1 of 2023-24) as per extract of 557th meeting of the Board of Directors of NMDC Ltd. held on 11.08.2023.

2	1 .	•	augmentation of existing mines to optimise
			opment of new mines as JVs. Parallelly,
		infrast	tructure. Develop and deploy strategies to
	enter new markets.	T	
	Iron ore Production		Capacity augmentation of existing mines
	Capacity to be enhanced		is an ongoing process and is achieved by
	from Existing Operating		enhancing the capacities of the plants and mines.
	Mines & starting of New Mines		mines.
	Will 103	•	Moving close to the customers:
			Developed intermediary stockpile at
			strategic locations - First intermediate
			stockpile at Kumarmarenga near
			Jagdalpur is operational.
	Evacuation Infrastructure	•	Implementation of Rapid Wagon Loading
			System (RWLS) at Kirandul Complex
		•	Doubling of KK railway line is in its final stage
			Construction of railway line between
			Rowghat and Jagdalpur – Activities going
			on
			Construction of slurry pipeline in Bailadila
		-	region – First Phase from Bailadila to
			Nagarnar is in advanced stage
	Capital Projects Strategy	•	For managing the ongoing/ under
	, , ,		construction Projects, a new vertical of
			HOP-Works has been created at
			Project level and HO
			Dedicated Project Management Cell
			(PMC) is created to monitor the ongoing
			Projects
			Procurement and Works Manuals have
			been prepared with latest guidelines and
			practices
			Tender and Contract management
			processes have been made more
			effective by
			 Use of IT and project management
			Softwares
			 online tendering process & Pre bid
			discussions

		 Regular review meetings with top management and creation of Digital Record Depository Providing early completion Bonus to the contractors
	Enhanced Customer Orientation: Customer Relationship Management	Aligning Product mix with the requirements of customers, e.g. 10-20 mm sized ore for the Sponge Iron customers – already producing
		 Development of a dedicated Customer Portal
3		egy: From having core competencies in iron ore encies in mining, metals, metallurgy and other
	Strengthen Performance Management System (PMS):	 The Performance Management System has been revised and Integrated with ERP
	Leadership Development and Succession Planning to drive the expansion plan	
		• NMDC has identified competency-led Leadership Capability Development as a basis for Succession Planning, through which it is looking at development of its senior executives to occupy key positions based on their performance and potential. In working towards the same, NMDC has decided to carry out Assessment Centre (AC) as a development-focused intervention.
	Employee Training & Development:	 The executives are being provided professional development training in reputed institutes like IIM, ISB etc
		Corporate HRD Department is committed towards the development of its employees by imparting different types of Training and customized Learning interventions which are meticulously designed separately like Behavioral Interventions, Technical Interventions, Psycho-Analytical Interventions etc and more precisely Customized Learning Interventions, Focused Learning Initiatives, Structured Initiatives (Small Group Activities) etc. some of them are given below:

			0	Assessment Development centre for succession planning
			0	High Potential Executives (HIPO) programme
			0	Knowledge Management System in line with Learning Management System to create a learning ecosystem
			0	General Management Programmes
			0	Advance Management Programmes
			0	Supervisory Development Programmes
			0	Behavioral Based Safety Training Programmes
			0	Learning Intervention on communication and Presentation Skills
			0	Learning Intervention on Finance for Non-Finance Executives
			0	Learning Intervention on Mentoring & Coaching
			0	Assessment Centre Workshop
			0	Performance Appraisal System through trained Internal Resource Persons
			0	Employees satisfaction and Organization culture survey
	New Initiatives	•	IKIGA	I – A Happy Workforce
		•	Streng	othening of Quality Circles
4	IT Strategy: Enhance properations.	ductiv	vity thro	ough automation and digitization of
	Develop an IT / digital	•	As a fi	irst step towards Digital Journey,
	blueprint for "NMDC of Future" considering			C has implemented Enterprise urce Planning (ERP) on SAP S/4
	emerging IT and digital			platform which covers entire value
	concepts and Best			of mining, starting from Exploration
	Practices including:		mine o	e development & Production to closure with a complete visibility Pit to Port.

	 ERP Modules such as Production Planning, Plant Maintenance, Quality Management, Sales & Distribution, Materials Management, Human Capital Management, Environment Health & Safety, and Finance & Costing etc. have been successfully implemented.
	 Subsequently NMDC has launched Management Dashboards for providing information and insights on Production, Sales, Material Management, Quality Management, HCM, EHS, CSR, etc. in real time
Implementation of ERP (Project Kalpataru)	 Implementation of SAP S/4 HANA – First Indian PSU to achieve this
	 NMDC has also started initiatives for the Phase II and Phase III of its digital roadmap
	 The Phase II solutions includes IT / OT Integration in the following aspects
	 Automated Data Capturing from OCSL Plant to ERP
	 Integration of Field and Plant Operations with ERP
	 Fleet Management System
	 Back Office Automation
	 Linear Asset Management
	 The Phase III solutions includes Intelligent Mines in the following aspects
	 Advanced Analytics
	 Artificial Intelligence
	 Condition based Maintenance
	 Integrated Command & Control Center
Mine Transport & Surveillance System (MTSS)	· · · · · · · · · · · · · · · · · · ·

		•	Implementation of FMS (Fleet Management System) in NMDC mines is in final stage
		•	Action on hand for implementation of Automatic Sampling and analysis System
5			eploy technologies for beneficiation of lean
	ores to extend life of mine a Value addition to iron ore	and m ■	ove towards zero waste mining Confidential Pellet Plant at Donimalai has been commissioned to utilize the low grade ore
		•	Beneficiation plant (as part of the Slurry Pipeline System) is under construction at Bailadila
	Evacuation of iron ore from mines	•	Study for transportation through slurry pipeline
	Tailing disposal	•	Beneficiation of tailing and sale of slimes
		•	Improving screening efficiency of secondary screens in screening plants of Kirandul Complex
		•	Modification in transfer chutes to reduce jamming at Kirandul Complex
		•	Installation of Online moisture analysers in Kirandul, Bacheli and Donimalai complex
		•	Utilization of ultra-fine iron ore (-75micron) in iron ore sintering process
		•	Utilization of sub-grade iron resources and lean grade iron resources (BHJ/BHQ)
		•	Focus on Dry Beneficiation
		•	Development of research equipment under Aatma Nirbhar Bharat
		•	Developments of Indigenous vendor base for sourcing wear resistance liners under Aatma Nirbhar Bharat
		•	Developments of process for reduction roasting of goethitic iron ore using microwave assisted heating furnace:
		•	NMDC Innovation & Incubation Centre (NICE)
	Collaborative approach	•	R&D Centre NMDC Ltd and RDCIS -SAIL has signed MOU in the year Jan 2019 to support each other in meeting individual

			organization goal. MOU is in force till January 2024 (Five years)
		•	IMMT Bhubaneswar - Modeling & Optimization of High Concentration Iron ore concentrate slurry Pipelines for Indian Iron Ore Processing Industries
		•	IMMT Bhubaneswar — Evaluation of Nano iron powder for high end application like batteries and sensors
		-	CSIRO Australia
		-	<i>IIT Bhubaneswar</i> – Optimization of silos, bins and hoppers designs through modeling, primarily intended for iron ore storage
		•	CSIR-CIMFR-Dhanbad — Development of vision enhancement system for foggy weather
		•	IMMT Bhubaneswar - Dry Beneficiation tests of coal and iron ore with Air classification equipment named "VSK Separator".
		-	IMMT <i>Bhubaneswar</i> – Feasibility Studies for Preparation of Fused Magnesia from Kimberlite Tailings
6			environmentally safe and scientific mining
	practices and integrate sus		·
	Design and deploy "License to Operate" office (LTO)		Operational
	Design and deploy Enterprise Risk Management capability		Operational

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 31.07.2023)

Vetting Comments of the Office of C&AG

"As stated by the Ministry, the achievement of targets envisaged in the Strategic Management Plan "Vision 2025" is dependent on the timely completion of evacuation facilities commensurate with the production facilities. As doubling of Kirandul Kothavalasa Railway Line and commissioning of Slurry Pipeline are still under execution, Audit is not in a position to comment

as to whether the revised targets could be achieved by NMDC by 2025 and subsequent targets by 2030. Hence, Audit has no comments to offer for the present."

[Ministry of Steel (NMDC Division)] (F. No.S-28011/17/2021-NMDC Dated 06.12.2023)

Comments of the Committee (Please see paras 8 and 25(a)of Chapter I of the Report)

New Delhi; 11 December, 2024 20 Agrahayana, 1946(S) Baijayant Panda Chairperson Committee on Public Undertakings

APPENDIX I

COMMITTEE ON PUBLIC UNDERTAKINGS (2024-25)

MINUTES OF THE NINTH SITTING OF THE COMMITTEE

The Committee sat on Wednesday, the 24th October, 2024 from 1330 hrs. to 1340 hrs. in Committee Room No. '1', Ground Floor, Extension to Parliament House Annexe, New Delhi.

PRESENT

Shri Baijayant Panda - Chairperson

MEMBERS

Lok Sabha

- 2. Shri Tariq Anwar
- 3. Shri R.K. Chaudhary
- 4. Shri Kaushalendra Kumar
- 5. Shri B.Y Raghavendra
- 6. Shri Mukesh Rajput

Rajya Sabha

- 7. Shri Narain Dass Gupta
- 8. Dr. Bhagwat Karad
- 9. Shri Debashish Samantaray
- 10. Shri Arun Singh

SECRETARIAT

- 1. Shri Neeraj Semwal Joint Secretary
- 2. Smt. Jyochnamayi Sinha Director
- 3. Smt. Mriganka Achal Deputy Secretary
- 2. After the Committee reassembled for the afternoon session, Hon'ble Chairperson chaired the Second agenda item of the day. The Chairperson briefly apprised the Members on the two draft Reports and requested to consider as part of unfinished work of the Committee (2023-24). The Committee then considered and adopted the following two draft reports, without any changes/modifications, on the following two selected subjects: -

- i. 'Para No. 2.1 of Report No.14 of 2021 related to "Undue enrichment through Recovery of Turnover Tax from consumer" relating to Indian Oil Corporation Limited (IOCL) (Based on Audit Examination); and
- ii. Action Taken by the Government on the Observation/Recommendations of the Committee contained in the Eighteenth Report of the Committee on Public Undertakings on Operational Performance of NMDC Ltd. relating to NMDC Limited (Based on C&AG Report No. 5 of 2019)
- 3. The Committee authorized the Chairperson to finalize the draft Reports on the basis of factual verification as suggested by C&AG and concerned Ministry/Department and presenting the Reports during the next session of Parliament.

The Committee, then, adjourned to take-up next agenda item of the afternoon sittings.

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APPENDIX II

ANALYSIS OF THE ACTION TAKEN BY GOVERNMENT ON THE
OBSERVATIONS/RECOMMENDATIONS CONTAINED IN THE EIGHTEENTH REPORT
(SEVENTEENTH LOK SABHA) OF THE COMMITTEE ON PUBLIC UNDERTAKINGS
(2022-23) ON "NMDC LIMITED" [BASED ON C&AG REPORT NO. 5 OF 2019 RELATING TO
OPERATIONAL PERFORMANCE OF NMDC LTD.]

I	Total number of recommendations:	13
II	Observations/Recommendations that have been accepted by the Government SI. Nos. 1,3,4,5,6,7,9, and 10	Total- 08 Percentage- 61.53
III	Observations/Recommendations which the Committee do not desire to pursue in view of Government's replies: NIL	Total- NIL Percentage- NA
IV	Observations/Recommendations in respect of which replies of the Government have not been accepted by the Committee and need reiteration: SI. Nos. 8, 11, 12 and 13	Total- 04 Percentage- 30.76
V	Observations/Recommendations to which the Government has furnished interim replies: SI. No. 2	Total- 01 Percentage- 07.69