

Audit Report of the Comptroller and Auditor General of India

Performance Audit of Systems and Controls in Assessment and Collection of Revenue from Major Minerals for the year ended March 2022





Government of Odisha

Report No.6 of the year 2024

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PREFACE

This Report of the Comptroller and Auditor General of India for the year ended 31 March 2022 has been prepared for submission to the Governor of the State of Odisha under Article 151 of the Constitution of India and under CAG's DPC Act 1971.

This Report contains results of a Performance Audit of Systems and Controls in Assessment and Collection of Revenue from Major Minerals which was conducted with the objectives to assess whether grant and extension of mining leases for extraction of minerals, were in accordance with applicable laws, rules and policies; reporting of mineral despatch and sales by lease holders, was checked for correctness, by authorities concerned; mining activities were being regulated in compliance with statutory and other applicable provisions; assessment and collection of mining revenues was being done in accordance with applicable laws and rules; and internal controls and monitoring mechanisms were functioning effectively, to prevent illegal mining and leakage of mining revenues.

The Performance Audit covered five selected Mining Circles of Steel and Mines Department and Directorate of Mines.

Audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Description of Technical Terms

A number of technical terms have been used in this Audit Report. Description of those technical terms have been compiled relating to major minerals and specified minor minerals.

Technical terms relating to Major and Specified Minor Minerals

(A) Additional amount is the amount payable (product of bid percentage quoted during auction and the value of mineral despatched) by a successful bidder becoming the lease holder after grant of lease.

Authorized Officer is the Director of Mines or Director of Geology or any officer of the Directorate of Mines or Directorate of Geology duly authorized by the Government in writing for the purpose.

Average Sale Price is compiled and published monthly (State-wise and mineral wise) by the Indian Bureau of Mines (IBM) on the basis of *exmines* price reported by the lessees.

(B) Beneficiation is processing of minerals or ores for the purpose of regulating the size of a desired produce, removing unwanted constituents and improving quality, purity or assay grade of desired product.

Bid Percentage - During auction of mineral blocks the qualified bidders submit their final price offer which shall be a *percentage* of value of mineral despatched and greater than the floor price.

(C) Calibrated Lump Ores are sized ores, produced after processing (crushing and screening) of run of mines (ROM) ores with different sizes like 5-18 mm, 10-30 mm etc.

Captive use is the usage of entire quantity of minerals extracted from the mining lease in a mineral processing unit or mineral beneficiation unit owned by the lessee excluding the mineral of substandard quality or mineral rejects.

Competent Authority is the concerned Department of Government mentioned in columns (3) and (4) of Schedule IV of OMMC (Amendment) Rules, 2017, for the purpose and jurisdiction specified against each of them in Columns (2) and (1) respectively thereof.

Consent to Establish/ Consent to Operate is the consent required from State Pollution Control Board under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 to establish any industry, operation or process.

Controlling Authority are the officers mentioned in the column (2) of Schedule III of the OMMC (Amendment) Rules 2017 for the purpose and jurisdiction specified against each of them in column (1) thereof. (The Controlling Authority is the Collector of the District as mentioned under Schedule III).

Crushed Fines are finely crushed or powdered mineral of Iron ore fragments.

(D) **Dead Rent** is a rent that the holder of a mining lease shall pay every year, at such rate specified in the Third Schedule of MMDR Act 1957 for all the areas included in the instrument of lease.

Decorative stones include all types of granites and any other rock suitable for decorative or export purpose including dimension stone.

DGPS Survey is based on Differential Global Positioning System (DGPS), an enhancement to the Global Positioning System (GPS), which provides improved location accuracy.

Despatch is the removal of minerals or mineral products from the leased area. It also includes the consumption of minerals and mineral products within such leased area.

District Mineral Foundation Trust is a Trust notified by the State Government under Section 9B of MMDR Amendment Act, 2015 with the objective to work for the interest and benefit of persons, and areas affected by mining related operations in such manner as may be prescribed by the State Government.

- (E) Ex-mines Price is the sale price of the mineral at mine head reported by the lessee to IBM and State Government.
- (F) Floor Price is the highest initial price offer amongst the technically qualified bidders in the first round of auction for the second round of online electronic auction of mineral blocks.
- (G) G4 (Reconnaissance) includes Remote sensing, airborne geophysical survey, mapping, grab/chip sampling of rocks, ground geophysical survey, trenching/pitting/drilling, determination of principal rock types, mineral assemblage, identification of minerals of interest and synthesis of all available data/concepts.

Gochar Land is the land reserved for grazing of cattle.

GPS Survey is a quick and accurate way of mapping and modelling the physical world, from mountainous landscapes to city skylines.

- (H) High Level Committee was constituted by notification of 22 June 2015 under the chairmanship of Development Commissioner cum Addl. Chief Secretary with representatives from Steel & Mines Department, Industry Department, ORSAC & OMC to streamline the auction of major mineral concessions in Odisha.
- (I) i3MS is a computerised system called Integrated Mines and Mineral Management System (i3MS) adopted by the Steel and Mines Department with the objective of capturing all transactions and regulating activities of mining lessees and licensees.

The Indian Bureau of Mines (IBM) established under Ministry of Mines, is engaged in promotion of conservation, scientific development of mineral resources and protection of environment in mines other than coal, petroleum & natural gas, atomic minerals and

minor minerals. The functions of IBM include promoting conservation of mineral resources by way of inspection of mines, geological studies, scrutiny and approval of mining plans and mining schemes, conducting environmental studies and environment related activities, evolving technologies for upgradation of low grade ores and identifying avenues for their utilisation, preparation of feasibility reports for mining and beneficiation projects, preparation of minerals maps and National Mineral Inventory of minerals resources; providing technical consultancy services to mineral industry and functioning as a data bank for mines and minerals, and preparing of technical and statistical publications.

Immovable Property, as per Section 2(6) of Registration Act, 1908, include land, buildings, hereditary allowances, rights to ways, lights, ferries, fisheries or any other benefit to arise out of land, and things attached to the earth, or permanently fastened to anything which is attached to the earth, but not standing timber, growing crops nor grass. List of immovable properties is issued by the Sub-Collector (Revenue Authority).

Initial Price Offer is an offer which shall be a *percentage* of value of mineral despatched quoted by the bidders during first round of auction of mineral blocks.

Inter Departmental Committee was constituted by notification of 19 March 2015 under the chairmanship of the Development Commissioner cum Addl. Chief Secretary and representatives from Steel & Mines Department, Forest & Environment Department, Revenue & Disaster Management Department, Law Department to scrutinize the proposals for extension of mining leases and to streamline the process of such extension.

- (K) Kissam means variety or classification of land like Gochar (grazing land), Jalasya (water body) etc.
- (L) Lease area is the area specified in the mining lease within which mining operations can be undertaken, includes the non-mineralised area required and approved for the activities falling under the definition of mine.

Letter of intent is a letter issued by the State Government to the applicant who had applied for grant of a mining lease. It specifies the willingness of State Government to grant the lease subject to fulfilment of certain terms and conditions by the applicant.

Lumps are the part of the ROM ore produced from mine with size exceeding 40mm.

(M) MMDR Act is an Act [Mines and Minerals (Development and Regulation) Act, 1957 as amended] of Government of India to provide for the development and regulation of mines and minerals under the control of the Union.

Major Minerals are the minerals like Bauxite, Chromite, Coal, Iron, Manganese *etc.*, as specified in Second Schedule appended with the MMDR Act.

Mine closure involves the steps taken for reclamation, rehabilitation measures taken in respect of a mine or part thereof commencing from cessation of mining or processing operations in a mine or part thereof.

Mine Development and Production Agreement is an agreement signed by the successful bidder with the State Government upon obtaining all consents, approvals, permits, no-objections and the like as may be required under applicable laws for commencement of mining operations.

Mineral includes all major minerals and such of the minor minerals as may be specified by the Government.

Mineral concession is a reconnaissance permit, prospecting licence, mining lease, composite licence.

Mineral reserve is the economically mineable part of a measured and indicated mineral resource.

Mining lease (Major Minerals) is the lease granted for the purpose of undertaking mining operations, and includes a sub-lease granted for such purpose as defined under MMDR Act, 1957.

Mining operation is the operation undertaken for the purpose of mining any mineral.

Mining Plan (Major Minerals) is a document prepared under Section 5 of the MMDR Act and Rules made thereunder. It is to be submitted by the lessee prior to grant of lease after obtaining approval from the Indian Bureau of Mines (IBM).

Mining Plan (Specified Minor Minerals) is a mining plan prepared under the Granite Conservation and Development Rules, 1999 and in relation to all other minor minerals means a mining plan prepared under these rules (OMMC Rules).

Minor minerals are the building stones, gravel, ordinary clay, ordinary sand other than sand used for prescribed purposes, and any other mineral which the Central Government may, by notification in the Official Gazette, declare to be a minor mineral.

(N) National Mineral Exploration Trust is a trust established by the Central Government, with the objective of using the funds for the purposes of regional and detailed exploration, as a non-profit body, wherein the holder of a mining lease or a prospecting licence-cummining lease shall pay to the Trust a sum equivalent to two per cent of the royalty paid.

Notified Minerals are specified in fourth Schedule of MMDR Act (as amended in 2015) viz., Bauxite, Iron ore, Limestone and Manganese ore.

(O) OMMC Rules are the rules (Odisha Minor Mineral Concession Rules 2016) made by the Odisha Government in exercise of the powers

conferred by sub-section (1) of Section 15 of the MMDR Act, 1957 for regulating the grant of mineral concessions in respect of minor minerals.

(P) Production is the winning or raising of minerals within the leased area for the purpose of processing or despatch.

Prospecting licence-cum-mining lease is a two-stage concession granted for the purpose of undertaking prospecting operations followed by mining operations.

- (Q) Quarry lease is a lease granted on tenure basis for extraction, collection and/or removal of minor minerals other than specified minor minerals over a compact area.
- (R) Revisionary Authority is the authority of Central Government which is empowered to revise any order of the State Government, in respect of major minerals. The revisionary powers of the Central Government are delegated to Joint Secretary/Director/Deputy Secretary of the Ministry of Mines and the designated officers act as the Revisionary Authority to dispose off the revision applications under Rule 54 of MCR 1960.

Royalty is the amount that the holder of a mining lease shall pay in respect of any mineral removed or consumed by him at the rates as specified in the second schedule of the MMDR Act.

Run of Mines is the unprocessed mined material which consists of the soil, overburden and impurities.

(S) Screening Committee was constituted by notification of 06 May 2016 and re-constituted on 01 August 2016 under the chairmanship of the Director of Mines with members from Regional Controller of Mines, IBM, Deputy Director General, GSI to scrutinize the mining lease application received for grant of mine lease under Section 10A(2)(b) and 10A(2)(c) of the MMDR Act.

Specified minor minerals are the minerals including decorative stones other than the minor minerals, as notified by the Government of India and administered by the Steel & Mines Department.

Surface Rent is the rent to be paid by lessee at the prescribed rate for the surface area used by him for the purposes of mining operations.

(T) Tahasildar is the officer so appointed by the Government for local administration in a tahasil and includes the Additional Tahasildar.

Trading license is a license of any category, issued by the Competent Authority to any person, who wishes to possess, sell, trade in, transport, store or otherwise deal with any mineral.

Transit Pass is a printed and machine numbered form in the Government Press and supplied by the competent authority on payment of the cost thereof as fixed by the Director of Mines with the approval of the State Government (Rule 58(2) of OMMC Rules, 2016) to be issued by the competent authority permitting the despatch of minerals.

(U) Umpire Sample is a part of the sample drawn by the mining authority in presence of lessee prior to issue of permission for despatch of

mineral from mine. It is kept with the Mining Officer or Deputy Director of Mines, as the case may be, under joint seal and signature of mine owner. In case of dispute over the result of chemical analysis report of the 1st part of the sample, it is analysed in Government Laboratory in presence of mine owner for confirmation of the grade of the mineral.

EXECUTIVE SUMMARY

Receipts from mining of major and minor minerals form a major source of non-tax revenue of the State. The Steel & Mines Department (for major minerals and specified minor minerals), and the Revenue & Disaster Management Department (for minor minerals) are responsible for regulation of the mining sector in the State. The regulation of mines, and assessment and collection of mining revenues, is governed primarily by the Mines and Minerals (Development and Regulation) Act, 1957 and Odisha Minor Mineral Concession Rules, 2016.

The MMDR Amendment Act, 2015, which came into force on 12 January 2015, has replaced the erstwhile first-come-first-served/ application mechanism, for grant of mineral resources, with a competitive auction process. The e-auction process for grant of mineral blocks has been laid down in the Mineral (Auction) Rules, 2015. The auction regime allows States to obtain an enhanced share of the value of mineral resources in the form of additional amount (or premium), charges towards District Mineral Foundation (DMF) at the rate of 10 *per cent* of royalty and National Mineral Exploration Trust (NMET) at the rate of two *per cent* of royalty, in addition to the royalty receivable. Provisions were also included for extension of existing mining concessions upto March 2030 for captive mines and upto March 2020 for other than captive mines.

The Performance Audit of "Systems and Controls in Assessment and Collection of Revenue from Major Minerals" was conducted between August 2021 and September 2022. The audit covered the period 2015-22, with a focus on examining issues relating to: grant and extension of mining leases/ permits/ licences for extraction of minerals; reporting of mineral despatch and sales by leaseholders; regulation of mining activities in compliance with statutory and other provisions; assessment and collection of mining revenues; and effectiveness of internal controls and monitoring mechanisms.

Major issues noticed during the course of this audit due to implementation of the policy and monitoring mechanism by the State Government are summarised below. Money value involved in the audit observations is approximately ₹ 22,392.51 crore.

1. Grant/Extension of Mining Leases

There were a number of cases of irregular grant of leases and extensions of tenures of existing leases, in contravention of statutory provisions and rules. This also resulted in non-settlement of these mines through auction and deprived the State Government of the additional revenue in the form of premium/ additional amount during this period.

2. Reporting of Mineral Despatch and Sales

The royalty and the premium payable by the leaseholder, on the various grades of iron-ore lumps and fines despatched from the lease area, is worked out as a fixed percentage of the notified average sale prices for the respective grades, sizes and category. Thus, it is crucial for the State Government to monitor the ex-mine prices, grades, and classifications of iron-ores as lumps and fines, reported by leaseholders, in order to safeguard the mining revenues of the Government.

2.1 Decline of Reported Grade of Iron-Ore

It was observed after auction that in case of selected mines, there was an abrupt and abnormal decline in the grade of iron-ore and its classification reported by the new lessees. Though more than 83 *per cent* production was reported in the grade of 62-65% Fe in the pre-auction period, the same came down to approximately 16 *per cent* in the two years after auction (2020-2022). Similarly, share of grades 60% Fe and below went up from approximately 11 *per cent* of total production to more than 60 *per cent* of total production in the two years after auction (2020-2022). A similar trend was also noticed in the case of production of fines. To elaborate, in case of one iron-ore mine under the Joda Circle, the average production of lumps of grades above 60% Fe was about 77 *per cent* before auction, which drastically reduced to a mere 9.88 *per cent* within one year, in FY 2020-21 and further reduced to zero *per cent* during FY 2021-22 after new lessee started operating the mine.

It is highly improbable that the grades of mineral reserves, produced from the auctioned mines, would witness an abrupt decline within a short period of one or two years. Such a significant and sharp decline in the grade of iron-ore indicated a significant risk that the new lessees were misreporting the grade of iron-ore produced, in order to avoid higher royalty and premium payable on higher grades.

For the six test-checked mines, changes in reported grades of production of lumps and fines after auction, as compared to the consistent pattern in the grade of production, as reported by the older lessees, have consequently resulted in a revenue implication of approximately ₹4,162.77 crore for the years 2020-21 and 2021-22 in the form of lesser royalty and premium (post auction).

2.2 Reporting of Iron-Ore Fines as Screened Fines

As per a State Government order issued in 2010, crushed fines are also to be charged at the rates applicable to lumps. After this notification, the mining circles had charged higher royalty for "crushed fines" equivalent to lumps, but charged lower royalty for "screened fines" equivalent to fines. In this context, Audit noticed abnormal increase in the reported production of screened fines (having lower royalty) and declining trend in reported production of crushed fines from the year 2010-2011, which indicated a significant risk of misreporting of the "crushed fines", produced from processing of ROM ores/lumps in crusher machines, leading to avoidance in payment of higher royalty and premium.

Out of the 14 mines for which production data for the period prior to 2010 was available, seven mines had not reported any production of screened fines,

whereas three mines had reported the same as being less than seven *per cent*, one mine as 12 *per cent*, and only three mines as between 23-42 *per cent*. However, the proportion of screened fines, produced from the same mines as reported by the lessees, increased from FY 2010-11 onwards, which is the year when the order of the State Government was issued. By FY 2021-22, out of the 12 active mines, the reported proportion of screened fines ranged from 60 *per cent* to as high as 82 *per cent* in the case of 10 mines, 44 *per cent*, for one mine; and 27 *per cent*, for another mine. For instance, in one mine under Joda Circle, the percentage of production of screened fines increased from 7 *per cent* during 2007-10 to upto 86 *per cent* during 2010-21.

Thus post the State Government order of 2010, there was a significant decrease in reporting of crushed fines from the production pattern of crushed and screened fines as prevalent before the order, leading to revenue implication of ₹ 10,294.24 crore for the 20 test checked mines consisting of royalty of approximately ₹ 5,841.80 crores and premium of approximately ₹ 4,452.44 crores (for four auctioned mines).

2.3 Decline in Reported Proportion of Lumps vis-a-vis Fines

ASP and consequently the royalty and premium payable on lumps is much higher than that on fines. Scrutiny of data of eight auctioned mines showed that, in case of five of these mines, there was a sharp decline in the proportion of lumps and increase in the proportion of fines, as reported by the new lessees, in comparison to the old lessees. During the period 2014-20, the proportion of lumps produced in different mines, was reported by the old lessees, to be in the range of 23 per cent to 50 per cent. It declined abruptly in FY 2020-21, to between 10 per cent and 29 per cent, while the proportion of fines showed a concomitant increase.

2.4 Reporting of Ex-Mine Prices

Wide variations in the Ex-Mines Prices (EMPs) were reported by the same lessees, as well as different lessees, for the same grade of iron-ore lumps and fines. As the EMPs reported by lessees were the determinant for calculation of the Average Sale Price (ASP) by IBM, the reporting of low EMPs, by the lessees, had the effect of lowering the ASP of iron-ore, as published by IBM, and, consequently, the amount of royalty and premium payable by the lessees along with charges towards DMF and NMET.

These abnormal variations in ex-mine prices, across different grades, should have been a sufficient red flag. However, these variations were not analysed or taken up for examination/ investigation, and no action was initiated, at the level of the DDMs, Directorate or Government.

3. Assessment and Collection of Mineral Receipts

The royalty payable by mining lease holders is to be assessed on a quarterly basis, by the DDMs/ MOs of the concerned mining circles. Upon receipt of the monthly returns, along with particulars of the royalty paid by leaseholders, the DDMs/ MOs are required to undertake quarterly verification of the said returns and also inspect the accounts, as well as other relevant documents maintained by the leaseholders, in respect of the minerals consumed/ removed from the mining lease areas.

3.1 Non-verification of sales turnover

There was a difference in the total sales turnover, reported by seven lessees, to the Commercial Tax (CT) department, as against the sales reported to the mining circles. This indicated a significant rise of lessees underreporting their sales turnover, in order to reduce their liability towards payment of royalty. The short-assessment of royalty, for these seven lessees, worked out approximately to ₹905.66 crore; with District Mineral Fund (DMF) of approximately ₹271.70 crore (30 per cent) and National Mineral Exploration Trust (NMET) of approximately ₹18.11 crore (2 per cent) also being leviable. Due to the extent of variation between the reported sales turnover between GST returns and annual returns in i3MS, Audit could not draw an assurance that the annual returns in i3MS contained declaration of correct and complete sales turnover by the lessees.

4. Regulation of mining activities

Regulation of mining activities, relating to major minerals and specified, minor minerals in accordance with the provisions of laws, rules, notifications, and in terms of the conditions prescribed in the approved mining plans and statutory clearances, is the responsibility of the Steel & Mines department.

4.1 Violation of provisions of environment protection

Mining activities beyond limits of environmental clearances can have very severe and far-reaching adverse impacts on the environment. Production of minerals, in excess of the limits stipulated in the Environment Clearance (EC) was noticed in cases of two iron-ore mines and one coal mine. Deviation from the production limits prescribed in EC constituted unlawful mining and hence is liable to attract levy and realization of price of the mineral so produced, amounting to ₹ 1,699.05 crore.

There had also been unauthorized extraction of mineral from forest land, without due approval from the Ministry of Environment, Forest and Climate Change (MoEFCC), in the case of one chromite mine, which is liable for levy and realization of price of the minerals so raised, amounting to ₹150.10 crore.

In addition, these cases are also liable for penal action under concerned provisions of the Environment Protection Act and the Forest Conservation Act respectively.

4.2 Production in excess of the approved Mining Plan

In regard to regulation of mining activities, it was observed that there had been production of minerals in excess of the limits stipulated in the approved mining plans, in case of eight iron ore mines, attracting levy and realization of price of the minerals so raised, amounting to ₹3,618.50 crore.

Carrying out mining activities in violation of relevant environment protection provisions and also crossing the limits of mining plan also bound to have adverse effects on the environment of the impacted areas.

5. Monitoring and internal controls

A robust system of internal controls is vital for monitoring the mining activities of leaseholders and safeguarding the interest of the Government.

5.1 Functioning of Government Laboratories

There were significant issues relating to the functioning of government laboratories for chemical testing to ascertain the grades of mineral ores. Out of a total of 31,677 samples, for which chemical analysis of chromite had been carried out during the years 2015-22, 31,340 samples had been analysed without sufficient stock of essential chemicals. Similarly, the stocks of chemicals, required for analysis of iron-ore samples, had been exhausted on 10 occasions and there had been gaps of 9 to 82 days in receiving new stocks, during which these samples were shown as analysed. Analysis of samples, without the required chemicals being in stock, posed serious questions over the validity of the analysis reports and there was a risk that the analysis reports had been issued without the actual testing of samples.

Further, the results of samples were different for the same samples analysed in different Government Laboratories/ same Laboratories, at different periods of time. This indicated lack of robustness in the system of testing and analysis of samples and raised serious questions in regard to the accuracy and reliability of the analysis reports issued by the Government laboratories.

5.2 Functioning of check gates

Major issues were observed in regard to issuance of transit passes and their checking at check gates/ weighbridges. Out of a total of 1,18,44,864 e-passes, generated for Mineral Carrying Vehicles (MCVs), routed through the 10 sample check gates during 2017-22, it was found that there were no records in i3ms with regard to the 16,79,220 e-passes. Non-checking of the 16,79,220 e-passes generated for MCVs resulted in absence of end-to-end tracking of transportation of a minimum of 1.48 crore MT of iron ore valuing atleast ₹ 1473.26 crore. In the absence of end-to-end tracking of these e passes, the risk of excess extraction and transportation of minerals in violation of existing regulatory framework could not be completely ruled out.

Moreover, there was shortage of manpower, lack of internet connectivity and essential items like bar code scanners at check gates. Weigh bridges were also found to be non-functional. In such a scenario, practice of transportation of excess minerals in these areas could not be ruled out.

5.3 Issuance of e-Passes to non - mineral carrying vehicles

Audit noticed that 3,697 vehicles for which e-Passes were generated were registered as motorcycles, cars, three wheelers *etc.* and have been shown to have transported 67,271.82 MT of minerals during the audit period. These vehicles were also not registered on i3MS. This clearly indicates lack of monitoring of unregistered vehicles for carrying minerals and therefore the possibility of illegal transportation of unaccounted minerals cannot be ruled out.

5.4 Inspections and raids

Only 265 inspections/ raids had been conducted by State Level Enforcement Squad (SLES), during 2015-22, against the target of 2,520 to 2,940

inspections / raids. Thus, the achievement was only 9.01 to 10.52 *per cent* of the prescribed target. Audit also found shortfalls in the inspection of working and non-working mines by Deputy Directors of Mines (DDMs), in five test-checked mining circles, during the period 2015-22, ranging from 73.96 to 100 *per cent*. Thus, the department was not exercising adequate monitoring, to protect mineral resources from unauthorised activities.

Recommendations:

Government should:

- 1. fix responsibility on the concerned officers who recommended extension of the lease period despite objections were raised by multiple departments on irregularities committed by the lessee.
- 2. carry out a complete and timely investigation across all auctioned mines into the sudden reporting of lower grades of iron-ore as found in test check by Audit, to ascertain willful or deliberate misreporting in order to avoid payment of higher royalty and premium.
- 3. put in place a policy/ mechanism for preventing leakage of revenue due to the significant risk of misreporting of category and sizes of iron-ore when reported as fines and the rapid increase of screened fines on which the royalty and premium are lower.
- 4. re-verify the grade-wise mineral production of all the mines, in coordination with IBM, to ascertain the actual grades and sizes of iron ore and mix of lumps, crushed fines and screen fines in order to arrive at the range for each mine and also to realise appropriate royalty and premium. This range should be integrated in i3ms to ensure system-based control over reporting of grade, size and mix of minerals by the respective lessee.
- 5. investigate the reporting of low ex-mines prices by lessees, to ascertain whether this was being done deliberately in order to reduce the average sale price and, consequently, the royalty and premium payable.
- 6. fix responsibility on the concerned officers for lack of adequate monitoring and inspection regarding exercising quality checks (grade, category and size) in production of minerals.
- 7. investigate the under reporting of sales turnover by lessees on i3MS.
- 8. ensure robust integration of i3MS with GSTN in order to facilitate cross-validation of information, and accuracy in assessment of the royalty receivable. Further, the Government may also explore the possibility of integrating turnover reported in GST returns in the assessment system of royalty, in coordination with Ministry of Mines.
- 9. take up the matter of reviewing the existing grading classification for chromite with IBM, to devise more appropriate grading brackets for publication of average sale prices of ores having different Cr₂O₃ content, so that the royalty leviable is reflective of the actual market prices.
- 10. take timely action under Section 21(5) of MMDR Act against the violators of Environment Clearance granted for mining and consider taking penal action under relevant provisions of the Environment Protection Act, 1986 and the Forest (Conservation) Act, 1980.

- 11. develop a robust mechanism to ensure regular checks on quantity extracted by the lease holders *vis-à-vis* the quantity authorised under various statutory clearances.
- 12. fix responsibility for not taking action against lessees for violations of conditions stipulated in various regulations.
- 13. investigate the cases of unchecked e-passes generated for the MCVs and revamp the existing mechanism to ensure control over unchecked passes for end to end monitoring of movement of mineral resources.
- 14. ensure deployment of adequate personnel at the check-gates, weighbridges and laboratories, as also availability of the required equipment for smooth functioning of the check gates/ weighbridges and Government laboratories.
- 15. ensure carrying out required quantum of inspections/ raids by the SLES, as well as inspection of mines by the DDsM, for adequate monitoring of mining activities and for protecting its mineral resources from unauthorised activities.