

September, 2021

The specific measures of systemic improvements adopted by the Department of Atomic Energy (DAE) to curb the illegal mining activities in India:

1. In the year 2015, the Govt. of India has brought amendment in MMDR Act, 1957 and a number of new rules were introduced. Under Section 11B of the MMDR Act, the Atomic Minerals Concession Rules, 2016 [AMCR, 2016] was notified. The concept of "Threshold Value" for Atomic Minerals was introduced in the AMCR. In the said notification the threshold value for BSM was 0.75% of monazite in total heavy minerals with a view that monazite-rich deposits remain under the control of Department of Atomic Energy (DAE).
2. All beach sand minerals including Garnet and Sillimanite were notified as 'atomic minerals' under Part B of First Schedule of MMDR Act, 1957 in 2016.
3. The revised Mineral Conservation Development Rules, 2017 designates Director, Atomic Minerals Directorate for Exploration and Research (AMD) as competent authority for Atomic Minerals above the threshold values specified in AMCR, 2016.
4. Monazite Test Certification (MTC) by AMD has been reintroduced for every export consignments of beach sand minerals as per the Standard Operating Procedures (SOP) for Canalization.
5. As the mining of beach sand minerals by private parties has been terminated, AERB has also not been renewing the license for operation of mineral separation plants by these private parties under Atomic Energy (Radiation Protection) Rules, 2004 from radiological safety considerations.
6. In view of stockpiled monazite enriched tailings with private BSM operators, AERB has been renewing the approval of Radiological Safety Officer (RSO) in these facilities so as to ensure the radiation surveillance of the plant premises and submission of reports of radiation monitoring to Atomic Energy Regulatory Board (AERB).

7. For licensing of Beach Sand Minerals processing facilities which are not involved in direct mining but procure the raw material from IREL or other countries, AERB issues license from radiation safety considerations only after the facility been licensed by DAE under Atomic Energy (Working of Mines, Minerals and handling of Prescribed Substance) Rules, 1984 for handling of monazite tailings.
8. Rule 45 of the Mineral Conservation and Development Rules, (MCDR) 2017 makes it mandatory for all miners, traders, stockiest, exporters and end-users of minerals to register and report on the production, trade and utilization of minerals to the State Government(s) and Indian Bureau of Mines. It facilitates end-to end national-scale accounting of all minerals produced in the country from pithead to its end-use, reducing the scope for illegal mining, royalty evasion, etc.
9. Penalty for illegal mining was made more stringent by amendment of the MMDR Act. The penalties have been increased from Rs. 25 thousand per hectare to Rs. 5 Lakh per hectare and the term of imprisonment has been increased from 2 years to 5 years for contravention of Section 4 (1) and 4 (1A) of the Act. Further, any rule made under the Act may provide that any contravention thereof shall be punishable with imprisonment for a term which may extend to two years or with fine which may extend to five lakh rupees, or with both, and in the case of a continuing contravention, with additional fine which may extend to fifty thousand rupees for everyday during which such contravention continues after conviction for the first such contravention. Section 30B of the Act provide for constitution of Special courts and 30C of the Act provides that such Special Courts shall be deemed to be a Court of Session.
10. State Governments were requested to set up Task Forces at State and District Level to control illegal mining. Subsequently, 22 States including Tamil Nadu have set up Task Forces to control illegal mining and review the action taken by member departments for checking the illegal mining activities at state and district levels so far.
11. The Ministry of Mines (MoM) through Indian Bureau of Mines, has developed the mining Surveillance System (MSS), a satellite based monitoring system which aims to establish a regime of responsive mineral administration, through public participation, by curbing instances of illegal mining activity through automatic remote sensing detection technology.
12. 21 State Governments including Tamil Nadu have framed rules under section 23C of MMDR Act, 1957 to curb illegal mining.

13. Issue of Notification by Ministry of Mines of Atomic Mineral Concession Rules, 2016 (AMCR-2016) towards protecting and conserving the "Atomic Minerals". "Beach Sand Minerals" (which include Ilmenite, Rutile, Zircon, Monazite, Sillimanite, Leucosene and Garnet) are included to the list of "Atomic Minerals" declared under the MMDR Act, 1957.

14. Directorate General of Foreign Trade, Department of Commerce, Ministry of Commerce and Industry, Government of India issued Notification No. 26/2015-2020 dated 21.08.2018 on export policy on BSM under which export of BSM have been brought under State Trading Enterprise and shall be canalized through IREL, a CPSE under DAE.

15. MoM has issued Notification No. G.S.R. 134(E) dated 20.02.2019 towards ensuring complete government control over "Monazite" and "Zircon" occurring within the "Beach sand Minerals", amended the Threshold value of "Monazite" for BSM occurring in beach sand or placer deposits as "0.00%" in Total Heavy Minerals (THM), which resulted in bringing the overall BSM deposits of the Country under the complete control of the AMCR, 2016 irrespective of Monazite content.

16. In the interest of regulation of mines & minerals development and conservation of BSM resources, MoM vide Order No. 1/1/2019-M.VI dated 01.03.2019 requested all the State Governments to take necessary action for pre-maturely terminating the existing private BSM mining leases under section 4A(1) & 4A(3) of the MMDR Act 1957 towards conservation of Zirconium, Hafnium, Rare Earths and Thorium bearing strategic beach sand minerals.

17. A notification dated July 27, 2019 was issued for reserving the prospecting and mining rights of offshore minerals under Offshore Areas Mineral (Development and Regulation) Act, 2002 exclusively to Government and Government owned companies for curbing illegal mining of atomic minerals by private parties.

18. MoM issued Notifications vide Nos. S.O. 2805 (E) dated 12.07.2021 and S.O. 2807 (E) dated 12.07.2021 under Section 22 (Cognizance of Offences) and Section 24 (Power of entry and inspection) of MMDR Act, 1957 specified under Part B of First Schedule to the MMDR Act, 1957. The above Notifications authorized Director, AMD and other officers of AMD for the purpose.

\*\*\*\*\*