

Government of Rajasthan



RAJASTHAN M-SAND POLICY 2024



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I am pleased to introduce the Rajasthan M-Sand Policy 2024, a transformative initiative aimed at fostering sustainable development and responsible resource management. With continuous growth in population and expansion of infrastructure, the demand for construction materials has surged substantially. It is imperative to safeguard our rivers, which serve purposes far beyond simply providing sand.

Manufactured Sand (M-Sand) presents a sustainable alternative to river sand (Bajri). Produced through the crushing of rocks, M-Sand offers high-quality material for construction while mitigating the environmental impacts on river ecosystems.

This policy seeks to promote M-Sand adoption by simplifying procedures, streamlining regulations, providing incentives for M-Sand production units, and ensuring adherence to quality standards. It also encourages the recycling of construction and demolition waste and sustainable mining practices, minimizing harm to the environment.

The M-Sand Policy 2024 will drive both economic growth and environmental protection, generating local employment opportunities while preserving our State's natural heritage. Looking forward, this policy will play an essential role in realizing our vision of a Viksit Rajasthan by 2047.

I hope that this Policy will strengthen the M-Sand sector, attracting new investments and innovations aligned with the spirit of the Rising Rajasthan Summit 2024 and pave the way for a sustainable, resilient, and prosperous Rajasthan.

BHAJAN LAL SHARMA Chief Minister, Rajasthan



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1. INTRODUCTION

1.1 Preamble

Rajasthan, with its growing urban population and expanding infrastructure needs, recognizes the importance of sustainable resource management. Rivers serve a greater purpose beyond being mere sources of sand. Effective management of these vital natural resources is essential for both current and future well-being. Manufactured Sand (M-Sand) provides a viable alternative to river sand (Bajri), essential to supporting the State's development while preserving its ecosystems.

M-Sand is produced through the crushing of rocks, overburden and construction/demolish waste using shaping, screening, and classifying methods. It offers an eco-friendly, high-quality construction material that meets the demands of the industry without putting undue strain on river ecosystems. As natural sand becomes scarcer and more difficult to extract sustainably, M-Sand emerges as a cleaner, more consistent solution that enhances the quality of construction materials. Its growing adoption by the construction industry highlights the necessity of a robust policy to promote its widespread use.

The M-Sand Policy 2024 aims to incentivize M-Sand units, simplify regulations, and promote quality standards. It aims to ensure environmental protection, foster economic growth, and support community well-being, contributing to Rajasthan's sustainable development.

1.2 Demand And Supply

The total demand for river sand in Rajasthan currently stands at approximately 70 million tonnes per annum. However, 36 operational M-Sand units in the State collectively produce only around 13 million tonnes per annum. This significant gap between demand and supply calls for urgent efforts to promote the establishment and expansion of M-Sand units across the State. Scaling up

M-Sand production is not only necessary to meet the current needs but is also vital to address the projected increase in demand due to ongoing and future infrastructure development.

1.3 Need For Policy

Several rulings from the Hon'ble Supreme Court have underscored the environmental consequences of unregulated river sand mining. In 2012, the ruling in Deepak Kumar vs. State of Haryana & Others prohibited river sand mining without environmental clearances, citing irreversible damage to river ecosystems. Further, the 2017 Supreme Court order banning sand mining without scientific replenishment studies on water recharge re-emphasized the need for sustainable alternatives. These judicial decisions highlight the urgency of developing responsible mining practices and transitioning toward alternatives like M-Sand.

The Rajasthan Mineral Policy 2024 also focuses on sustainable mining practices, drawing attention to modern technologies and the need to transform waste into wealth. The state has emphasized the importance of environmental, social, and governance (ESG) parameters, recognizing that responsible resource extraction is key to long-term sustainability. M-Sand aligns perfectly with this vision, as it leverages mining by-products and overburden waste, turning them into valuable resources for the construction industry.

Given the evolving regulatory landscape and increasing demand for sustainable construction materials, the need for an updated M-Sand policy is evident. While the 2020 M-Sand policy laid the foundation, the growing infrastructure requirements, in combination with the principles laid out in the Rajasthan Mineral Policy, 2024, call for a more refined approach. This updated M-Sand policy will ensure that Rajasthan remains committed to sustainable development, addressing current construction needs while preserving natural resources for future generations.

1.4 Characteristics Of Sources Used For M-sand Production

The materials used for M-Sand production should not contain any harmful minerals or materials, which may adversely affect the properties, strength, durability, and appearance of the concrete/plaster and/or may cause corrosion of metal lathing or other metal in contact with the concrete/plaster above the permitted level.

- 1. Rocks/Natural Gravel/Granite Waste: The Rocks/Natural Gravel/Granite Waste/Quartzite/Sandstone devoid of iron pyrites, alkaline minerals, calcareous minerals, mica and other flaky mineral, sulphates, salts, organic impurities above the permitted level are the best suited rock types available in the State for the manufacturing of M-Sand.
- 2. **Overburden:** The overburden of Sandstone/Quartzite deposits and of lignite/silica sand/gravel and pebble mines/quarries devoid of iron pyrites, alkaline minerals, salts, sulphates, lignite, mica, shale, soft fragments, calcareous or flaky materials, and other organic matter exceeding permitted level, is ideal for manufacturing of M-Sand.
- 3. Coarse and fine aggregates from the Construction and Demolition (C&D) Waste (Recycled Aggregates): The C&D waste (debris) viz., stone aggregates, brickbats, tile pieces, mortar pieces, etc. devoid of excavated earth, wood pieces, plastic, metal bits can be used for manufacturing of M-Sand after proper gradation.

2. OBJECTIVES

- 1. Minimize harm to river ecosystems by managing use of river sand judiciously and decreasing reliance on it.
- 2. Offer a simple and affordable substitute for river sand.
- 3. Increase existing M-sand production by 20% every year, targeting 30 million tonnes per annum by 2028-29.
- 4. Utilize the existing overburden in mining areas to promote sustainable and eco-friendly mining practices.
- 5. Promote recycling of the coarse and fine aggregates in construction and demolition waste of building/concrete structures in the State.
- 6. Promote M-Sand industry and simultaneously develop opportunities for employment at local level.



3. POLICY FEATURES

3.1 Duration of Policy

The M-Sand Policy shall come into effect from the date of its publication and remain in force until 31st March 2029, or till a new Policy is announced. The policy will be subject to amendments as deemed necessary in response to developments in the mineral sector.

3.2 Incentives For M-sand Units

A. Financial Incentives:

M-Sand unit, for the purpose of availing incentives, is defined as a unit which produces at least 50% of its total produce as M-Sand.

- 1. Status of M-sand units as an industry will continue to remain in effect.
- 2. Contribution towards District Mineral Foundation Trust Fund for the use of overburden dumps in manufacturing M-Sand is exempted.
- 3. Requirement of minimum Net-worth and Turnover for setting up of a M-Sand unit is waived off.
- 4. Royalty over utilization of overburden dumps lying on Government land for manufacturing of M-Sand is exempted by 50%.
- 5. Plots of overburden dumps lying on Government land will be delineated and allotted through auction for establishment of M-Sand units. The reserve price will be reduced by 50% of the applicable dead rent.
- 6. Keenness Money will be reduced by 50% of existing applicable value to facilitate smoother establishment of M-Sand units.
- 7. Following incentives under clause 4.1.2 of Rajasthan Investment Promotion Scheme, 2024 and as amended from time to time, will be applicable to the new M-Sand units:
 - a. Investment Subsidy: 75% of State tax due and deposited for 10 years.
 - b. Employment Generation Subsidy: Reimbursement of 50% of

employer's contribution towards EPF and ESI for 7 years (for domiciled employees only).

- c. Fund Raising Incentive: One-time financial assistance on raising funds (capital) through SME platform, to the extent of 50% of the investment made in the process of raising funds (capital), up to INR 5 lacs.
- d. Stamp Duty Exemption: Exemption from payment of 75% stamp duty and reimbursement of 25% stamp duty.
- e. Electricity Duty Exemption: 100% exemption of Electricity Duty for 7 years.
- f. Conversion Charges: Exemption from payment of 75% conversion charge and reimbursement of 25% conversion charge.
- Minimum of 25% of the quantity of sand used in various construction 8. works carried out by the State Government, Semi-Government, Local Bodies, Panchayati Raj Institutions, and other organizations financed by the State Government will have to be M-Sand. It will be increased to 50% in a phased manner by 2028-29..

B. Operational Guidelines: Simplification of Procedures

- Requirement of minimum experience for setting up of M-Sand unit is 1. waived off.
- 2. Reservation of maximum number of plots per district per year for establishing M-Sand units will be increased from 2 to 5.
- Simplification of provisions of permit for the overburden lying in mining 3. lease/quarry licence areas and in khatedari lands, i.e. issuance of permits to concessionaire or his/her consent holder.
- Star-Rating System for minor minerals under Rajasthan Mineral Policy 4. 2024 will also be extended to M-Sand units, promoting quality and environmental responsibility.
- 5. M-Sand manufacturers will be registered with the Department of Mines

and Geology (DMG) and subsequently will be included on the proposed Sand-Portal, providing them with a platform to connect directly with end users, streamlining the supply chain.

- 6. Timely disposal of applications for setting up M-Sand units.
- 7. M-Sand manufacturers will be allowed for suitable disposal of Dust/Soil generated from M-Sand production.

3.3 Quality Standards and Control Measures

The State remains committed to ensuring the availability of high-quality, cost-effective building materials for construction while upholding safety standards.

- The best suitable deposits of rocks viz. Quartzite, Granite, and Sandstone, etc. and overburden for the manufacture of M-Sand will be identified, through sample studies by conducting petrographical, mineralogical, geophysical, and geochemical investigations using suitable advanced techniques/instruments.
- All M-Sand manufacturers will be required to adhere to the standards/specifications in the BIS code viz., "IS 383:2016" for concrete, "IS 1542:1992" for Plastering, "IS 456:2000" for wash water and such other standards fixed by the BIS from time to time.
- 3. The M-Sand for concrete/masonry and plastering as well as the wash water, must satisfy the relevant standards stipulated by the BIS for checking the quality of aggregates. In this connection,
 - a. M-Sand manufacturers will obtain BIS certification for their products to ensure quality and market credibility.
 - b. M-Sand manufacturers will establish a quality testing laboratory at their premises to conduct daily random quality checks, with records maintained as per BIS standards. These records will be subject to periodic verification by the DMG.
 - c. M-Sand manufacturers will conduct quality tests for both the product

and wash water at NABL-certified/DMG/university laboratories, with reports submitted to the DMG on quarterly basis.

4. Create a dashboard within the DMG-OMS (DMG-Online Management System) to monitor M-Sand production and select units for inspection based on defined parameters.

3.4 Waste Management

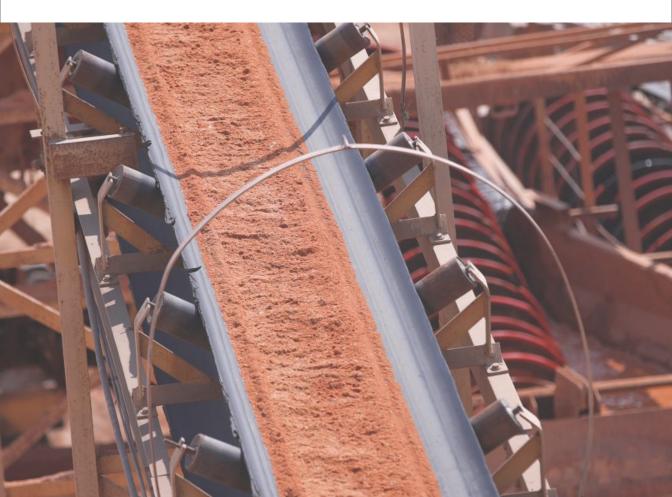
- Considering the need for conservation of water resources, judicious use of water will be insisted, without compromising the quality of washing the M-Sand. M-Sand units will operate on the concept of zero-discharge and will be required to re-use the water used for washing after necessary treatment.
- 2. Water from urban sewerage treatment plant qualifying required wash water quality standards may be used for M-Sand production.
- 3. M-Sand units will operate in an environmentally responsible manner, ensuring that waste disposal does not negatively impact the surrounding ecology. Proper procedures will be followed to manage waste generated during production.
- 4. The waste generated from the units such as muddy slurry, must be disposed of in a scientific and systematic manner. These materials can be repurposed for other value-added products, such as bricks, agriculture purpose or for other appropriate uses.

4. Implementation of M-sand Policy

The State is committed to successful and time-bound implementation of this Policy. To ensure that all key aspects are successfully implemented, all required compliances, standards are timely met by the operating M-Sand units, a dedicated M-Sand Cell under DMG will be established at Jaipur. The cell will also be responsible for identification of suitable overburden dumps and mineral blocks, coordination with concerned authorities for timely auctioning of dumps/blocks.

The progress of implementation of this policy will be reflected in the annual progress report of DMG.

Any ambiguity or dispute arising from the interpretation of any provision of this policy, State Government shall have the final and binding authority.









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