



सत्यमेव जयते

**Ministry of Environment,  
Forest and Climate Change**  
Government of India



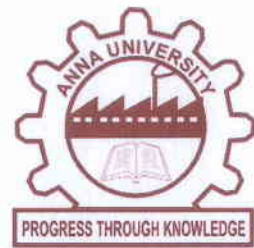
**State Expert Appraisal Committee (SEAC),  
Tamil Nadu**



## **Sustainability Star Rating Valuation Process of Minor Minerals in Tamil Nadu, INDIA**



By



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24.07.2023

**Note Submitted to the Vice Chancellor**

- Sub:** Approval requested for carrying out **Star Rating Valuation** of the Quarries of Minor Minerals located in Tamil Nadu assigned by the SEAC-TN - Reg.
- Ref:** (i) SEAC -TN Chairman Lr No. SEAC-TN/Rating System for Minor Minerals/2022 dated. 28.05.2022  
(ii) Vice Chancellor's email to the SEAC-TN Chairman dated. 01.07.2022

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With reference to the above, The State Appraisal Expert Committee (SEAC-TN) has permitted the Department of Mining Engineering, CEG, Anna University to implement **STAR RATING VALUATION** of the quarries operating in Minor Minerals located in Tamil Nadu. This system is to ensure sustainable and safe mining in Tamil Nadu. The similar kind of Star Ratings are being done by **The Ministry of Coal and Indian Bureau of Mines** (Ministry Mines), Govt. of India.


The Star Rating will be given to the quarries / mines of major minerals for the efforts and initiatives taken for implementing the Sustainable Development Framework (SDF). As we have already agreed and informed to the State Appraisal Expert Committee (SEAC-TN) for carrying out the valuation to award 'Star Rating' for Granite and Rough Stone quarries located in the state of Tamil Nadu, we seek approval for implementing this system. Therefore, it is submitted for approval to carry out **STAR RATING VALUATION** by the Department of Mining Engineering.

This is for kind Approval please.

  
24/07/2023  
HoD/Mining

  
24/7/23  
Registrar

Approved / Not Approved

  
24/7/23  
Vice Chancellor

# Environmental Sustainability

The Department of Mining Engineering, Anna University, Chennai, India, has demonstrated a commendable commitment to environmental sustainability in minor mineral quarries. Recognizing the ecological impact of quarrying activities, the department has started implementing a comprehensive framework to mitigate adverse effects and promote responsible sustainable mining practices in Tamil Nadu state, India. Central to this framework is a meticulous environmental impact assessment that helps to identify potential risks and develop effective mitigation measures. Through rigorous monitoring and regular audits, the department plans to ensure strict compliance with environmental regulations and guidelines. Sustainable quarrying techniques, such as controlled blasting, progressive reclamation, mineral conservation and water management, are actively promoted to minimize ecosystem disturbance and habitat loss. Additionally, the department prioritizes community engagement and awareness initiatives, fostering a harmonious relationship between mining operations and the local communities.

Furthermore, the Department of Mining Engineering, Anna University, Chennai, takes a holistic approach to address environmental sustainability in minor mineral quarries located in Tamil Nadu state, India. The framework emphasizes the adoption of innovative and eco-friendly technologies that minimize the ecological footprint of mining operations. Advanced dust suppression systems and noise reduction measures are implemented to mitigate air and noise pollution. Efforts are made to conserve water resources through efficient recycling and rainwater harvesting practices. In order to restore and rehabilitate the landscapes affected by quarrying activities, the department actively engages in reforestation and afforestation programs. Native plant species are carefully selected to restore biodiversity, and measures are taken to protect and preserve local flora and fauna. This restoration process not only helps in offsetting carbon emissions but also enhances the overall ecological health of the region. To ensure the safety and well-being of quarry workers, the department places a strong emphasis on occupational health and safety practices. Proper training and equipment provision are prioritized to minimize accidents and health hazards associated with mining operations.

Moreover, the department actively collaborates with local regulatory bodies and environmental organizations to stay updated with the latest sustainable mining practices and contribute to the development of responsible mining policies and guidelines. Research projects related to environmental sustainability are undertaken to continually improve and refine the existing SGDs sustainable framework. By integrating advanced technologies and sustainable practices into the mining sector, the Department of Mining Engineering at Anna University sets a commendable example for the industry, showcasing how responsible extraction of minor minerals can coexist with environmental preservation for a more sustainable and ecologically balanced future.

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## **Social Sustainability**

The Department of Mining Engineering, Anna University, Chennai, India, has taken a proactive approach to social sustainability in minor mineral quarries located in the state of Tamil Nadu. Recognizing the significant impact of mining activities on local communities, the department has started implementing a comprehensive social sustainability framework. Community engagement and consultation play a central role in the decision-making process, ensuring that the concerns and aspirations of the nearby residents are heard and incorporated into mining operations. The department fosters meaningful partnerships with local stakeholders, including community leaders, non-governmental organizations, and government agencies, to address social issues and create mutually beneficial solutions. An emphasis is placed on promoting social inclusivity and fair labour practices within the mining operations. The department ensures that workers are treated with dignity and respect, and their rights and well-being are safeguarded. Training and skill development programs are provided to enhance the employability and livelihood opportunities of the local workforce.

Furthermore, the department is planning to support the overall development of the surrounding communities through various social welfare initiatives. This includes investments in education, healthcare, and infrastructure development, which contribute to enhancing the quality of life for residents in the area. To minimize the impact of mining on cultural heritage and local traditions, the department collaborates with cultural experts and historians to identify and protect significant sites. Sensitivity to local customs and practices is integrated into the mining operations to preserve the rich cultural heritage of the region. Through regular social impact assessments and ongoing monitoring, the department ensures that the social sustainability goals in SGDs are met and that any adverse impacts on the communities are addressed promptly. Transparent communication channels are established to keep the communities informed about the mining activities and their potential implications. By prioritizing social sustainability alongside environmental considerations, the Department of Mining Engineering at Anna University sets a commendable example for the mining industry.

# Governance and Policymaking

The Department of Mining Engineering, Anna University, Chennai, India has diligently developed a comprehensive governance and policy framework for minor mineral quarries that reflects the institution's dedication to sustainable and responsible mining practices. The governance structure is designed to ensure strict compliance with all relevant laws, regulations, and environmental guidelines governing quarrying activities. It includes a robust system of checks and balances, regular audits, and inspections to maintain transparency, accountability, and ethical conduct within the mining operations. The policy framework, shaped through meticulous research and collaboration with industry experts and stakeholders, lays out the guidelines for sustainable quarrying practices. It emphasizes environmental protection, community engagement, and social responsibility. The policies are continually updated to incorporate the latest advancements in technology and best practices, ensuring that the quarrying operations align with global standards of sustainability. Stakeholder engagement is a key pillar of the governance and policy framework. The department actively involves local communities, government authorities, environmental organizations, and mining industry representatives in the decision-making process. Their valuable input is considered to strike a balance between mining activities and the preservation of local ecosystems and cultural heritage.

The governance and policy framework also places a strong emphasis on health and safety measures for quarry workers, aiming to create a safe and conducive work environment. Regular training programs and awareness campaigns are conducted to promote worker welfare and enhance their skillsets. By establishing a robust governance and policy framework, the Department of Mining Engineering at Anna University sets a commendable example for the mining industry. Through their steadfast commitment to sustainable practices and ethical governance, they demonstrate how minor mineral quarries can operate responsibly, contributing positively to the environment, communities, and the overall well-being of society.

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