

Technology to Reduce Coal Mining Pollution

Posted On: 30 JUL 2025 3:55PM by PIB Delhi

All coal mining operations are undertaken with valid statutory clearances, including Environmental Clearance, Forest Clearance (wherever required), Consent to Operate, and Groundwater Clearance. These are granted as per the guidelines of MoEF&CC and monitored regularly through submission of compliance reports to the Pollution Control Boards and MoEF&CC. The EC grant process includes detailed assessment of impact on air, water, soil, forest, and biodiversity through Environmental Impact Assessment (EIA) and formulation of mitigation strategies via Environmental Management Plans (EMP). As per the EIA Notification, 2006, issued under the Environment (Protection) Act, 1986, all mining proposals are appraised by the Expert Appraisal Committee (EAC). Environmental Clearances are granted only after thorough scrutiny of the approved Mine Plan (including the Closure Plan), incorporating mandatory provisions for environmental safeguards such as dust control, noise mitigation, green belt development, biodiversity conservation, and post-mining land restoration.

In respect of coal-fired power plants, a comprehensive framework of environmental policies and advanced technologies have been adopted to minimize air, water, and soil pollution. These initiatives align with national regulatory guidelines and commitment to sustainable and responsible power generation.

For promoting sustainable means of livelihood and to manage socio-economic and environmental impact of mine closures, the Government has issued comprehensive guidelines for Mine Closure on 31.01.2025 that focuses on an integrated approach that includes skill development of locals, livelihood generation, land restoration, ecosystem rehabilitation, community participation, and post-closure development.

In addition, coal companies as well as power companies such as CIL, NTPC, DVC are undertaking a variety of initiatives under Corporate Social Responsibility (CSR) programs focusing on skill-building and livelihood enhancement activities in regions like Jharkhand and Odisha.

The Government has not set any targets and timelines for phasing out inefficient coal mines.

The Government is taking following initiatives to promote coal and lignite gasification -

- i. The Government has approved an incentive scheme for promotion of coal and lignite gasification projects for PSUs and private sector with an outlay of ₹ 8,500 crore.
- ii. A new sub-sector, "Production of Syngas leading to coal gasification," was created under the Non-Regulated Sector (NRS) linkage auctions policy to support coal gasification initiative.
- iii. The Government has allowed coal supply to gasification projects under the NRS auction with a floor price at the notified price of the regulated sector, for the projects commissioning within the next seven years.
- iv. 50% rebate in the revenue share for coal used in gasification has been introduced in commercial coal block auctions, provided that at least 10% of the total coal production is used for gasification purposes.
- v. A framework has been established for granting waivers from registration for Transfer of Technology (ToT) from land-border-sharing countries on a case- by-case basis. Waiver to one application has been granted.

The following measures are undertaken in close consultation with the State Governments and with active participation from local communities to ensure inclusive development and environmental rehabilitation -

- i. Following a structured process for land acquisition and R&R in all its coal mining projects, strictly in

accordance with schemes approved by the respective State Governments. Consultation with local stakeholders is an integral part of this process to ensure transparency, address local concerns, and secure community participation in decision-making.

ii. Undertaking progressive and final mine closure activities, including both technical and biological reclamation of mined-out areas, in consultation with State authorities to restore land for alternative productive use.

iii. Converting reclaimed lands into eco-parks, water reservoirs, and tourism sites (e.g., Saoner Eco Park and Gunjan Park), promoting green cover and enabling community engagement and economic opportunities.

iv. Conducting large-scale afforestation drives in and around mining areas. Additionally, saplings are distributed to local communities, enhancing biodiversity and contributing to the carbon sink.

v. Repurposing mine voids for irrigation, drinking water supply, and pisciculture, which directly benefits nearby communities and supports sustainable water resource management.

This information was given by Union Minister of Coal and Mines Shri G. Kishan Reddy in a written reply in Lok Sabha today.

Shahid T Komnath

(Release ID: 2150154)