CAG Report Summary
Assessment of Environmental Impact due to Mining Activities and its Mitigation in Coal India Limited

- The Comptroller and Auditor General (CAG) of India submitted its report on the assessment of the environmental impact of mining activities and its mitigation in Coal India Limited and its subsidiaries on December 11, 2019. The study was conducted from 2013-14 to 2017-18. Coal India Limited (CIL) is a central public sector enterprise under the Ministry of Coal. It has seven coal producing subsidiaries. Key findings and recommendations of the CAG include:

- **Air pollution**: Certain number of air quality monitoring stations were to be established as specified in the environment clearance for each mine. CAG noted that in 12 of the sampled 30 operating mines, only 58% of the required monitoring stations were established. Further, 12 mines of the 28 mines studied, did not comply with the State Pollution Control Boards directives for installation of continuous ambient air quality monitoring stations.

- The National Ambient Air Quality Standards notified by the Ministry of Environment, Forest and Climate Change prescribe maximum concentration levels of PM$_{10}$ and PM$_{2.5}$ in the air. CAG noted that during 2013-18 in six mines, the concentration of these pollutants always exceeded the prescribed levels.

- **Water pollution**: CAG observed that during 2013-18, out of the 28 mines studied, pollutants exceeded the limits prescribed by Bureau of Indian Standards in eight mines. Further, certain mines continued to use ground water for their operations without obtaining a no-objection certificate from the Central Ground Water Authority.

- **Land management**: In 13 of the 23 mines studied, topsoil was set in the earmarked area and reported periodically. However, basic records indicating the quantity and areas of stacking were not maintained. Further, one subsidiary had not set yearly internal targets for biological reclamation (land reclamation through plantation) of mined out area and another had biologically reclaimed only limited part of the de-coaled area.

- **Environment management system**: The National Environmental Policy (NEP) was formulated in 2006 and requires all concerned central, state and local bodies to prepare environment protection action plans consistent with the NEP. However, CIL amended its original environment policy and formulated a comprehensive environment policy much later in 2012. CAG noted that six of the seven coal producing subsidiaries of CIL did not have an environment policy approved by the Board of Directors as mandated by the Ministry. It recommended that all coal sector companies should have an environment policy approved by their respective Boards.

- **Adherence to regulations for environment protection**: CAG noted that the 35 mines which were closed between April 1946 and July 2009 did not have CIL required Mine Closure Status Report. As of March 2018, 16 units were being operated without valid environmental documents. Nine of these did not have an environment clearance, six units did not have the consent to operate and one did not have the consent to establish.

- CIL subsidiaries did not have a uniform policy for dumping ash produce by burning of coal. In one power plant, this ash was dumped in the open space, posing an environmental hazard. CAG recommended CIL to frame uniform and scientific policy towards the use of ash to ensure environmental sustainability.

- **Monitoring environment activities**: CAG noted that while the quality parameters relating to air and water were being monitored fortnightly, reports on these were given to the subsidiaries quarterly. Thus, there was no scope for initiating remedial measures on adverse readings. It recommended strengthening the monitoring mechanism by streamlining the existing reporting process.

- CAG noted that from 2013-18, the deployment of executives exceeded the sanctioned strength at CIL headquarter, however, it fell short at the mines. There were inconsistencies in deployment of manpower for environmental activities in the subsidiaries. It recommended that manpower in CIL and its subsidiaries be reorganised.

- **Other recommendations**: CAG made certain other recommendations such as: (i) the subsidiaries should complete all capital work related to pollution control measures expeditiously, and (ii) implementation of solar power projects to increase environmental benefits should be improved.