GOVERNMENT OF INDIA
MINISTRY OF COAL

RAJYA SABHA
UNSTARRED QUESTION NO. 1475
TO BE ANSWERED ON 05.08.2024

Pollution caused due to coal mining

1475 Dr. Sasmit Patra:

Will the Minister of ***Coal*** be pleased to state:

(a) the details of studies undertaken to identify the pollution (air, water, soil) that has taken place due to mining of coal in the country in the last five years, the details thereof, in a study-wise format;

(b) steps taken by Government to reduce the pollution due to mining of coal, specific details to this effect; and

(c) the details of prospective/potential pollution that would be caused with more coal mining blocks being auctioned for excavation and steps being proposed to handle it?

ANSWER

MINISTER OF COAL AND MINES
(SHRI G. KISHAN REDDY)

(a): Central Pollution Control Board (CPCB) has informed that they have not undertaken any studies to identify the pollution (air, water, soil) that has taken place due to mining of coal in the country in the last five years.

However, in order to assess the pollution caused by coal mining, detailed Environmental Impact Assessment (EIA) is made for each new mine prior to its opening and also for each mine prior to its proposed expansion, based on the stipulated guidelines of Environment Impact Assessment Notification, 2006 and subsequent amendments. The EIA is also combined with subsequent mitigation plan as Environmental Management Plan (EMP).

(b): The Ministry of Environment, Forest and Climate Change (MoEF&CC) has notified environmental standards for coal mines. The environmental standards are enforced by the respective State Pollution Control Boards (SPCBs) / Pollution Control Committees (PCCs) through consent mechanism under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981. The SPCBs /PCCs carryout periodic monitoring to verify the compliance of the consent conditions imposed to the unit.

The Government has made it mandatory to obtain Environmental Clearance (EC) for mining of coal, major minerals and minor minerals. The project proponent is required to carry out Environment Impact Assessment (EIA) and prepare Environment Management Plan (EMP). As per conditions of EC, air and water monitoring in mining project area is to be carried out by project proponent and reports submitted on six monthly basis.

It is mandatory to get prior Environmental Clearance as per Environmental Impact Assessment (EIA) Notification 2006 for new or expansion coal mining projects. For securing Environmental Clearance EIA/EMP is a mandatory document which incorporates the issue raised by public during Public Consultation including all major positive / negative impacts on Environment / Ecology / social aspects of the surrounding areas caused due to mining.

MoEF&CC imposes various Specific as well as General conditions in Environmental Clearance of the coal mining project to reduce the negative effects of coal mines on environment. Compliance of EC conditions is ensured by the project proponent by submitting EMP implementation status report to MoEF&CC on regular basis.

In order to reduce the pollution due to coal mining, in the EIA/EMP detailed pollution control measures are deliberated. Accordingly, this EIA/ EMP is implemented & pollution control measures are taken. The major measures with respect to various attributes are given below:

Air Pollution Control Measures :

- Installation of mist sprinklers/ fixed type Sprinklers/ Rain guns at/ along/ around the dust generating sources.
- Deployment of Truck mounted fog cannons, trolley mounted fog cannons, mobile Water sprinklers along haul roads & other transportation roads.
- Coal handling plants are covered with proper enclosures and are provided with mist sprinklers / fixed sprinklers along the conveyor route, crushers, at various transfer points and bunkers etc.
- In order to prevent dust generation during coal transportation, majority of the coal produce is transported through Railway and limited percentage of coal is transported by road ways.
- Coal Transportation by Pipe Conveyor and First Mile Connectivity (FMC) to minimise coal transportation through road mode.
- Continuous Ambient Air Quality Monitoring station(CAQMS) has been introduced.
- For minimizing adverse effects of blasting, surface miners have also been introduced.

Water Pollution Control Measures :

- For mine discharge, pumped out mine water is treated through sedimentation both in mine sump and also on surface in sedimentation pond/settling tank prior to its discharge.

- Mines are equipped with workshops which are provided for the proper maintenance of the HEMMs with plants for treatment of effluents.
- Effluent from residential colonies is also treated through conventional means as well as designated Sewage Treatment Plants (STPs) in combined townships.
- NOC from CGWA is secured for dewatering. As per the CGWA NOC conditions, Piezometers are being commissioned for water level monitoring.
- Further, the recharging of ground water is also taken up in nearby villages by creation of ponds, rainwater harvesting structures and desilting of existing tanks/ ponds.

Land Reclamation :

- For reclamation, plantation in the mining areas covering the external OB dumps, as well as the reclaimed land (internal dumps) is carried out through State Level Expert Agencies with 4 years of maintenance after each year of planting, as per the provisions made in the approved EIA/EMP.
- The monitoring of major OCPs for progress of land reclamation is carried out through Satellite imagery annually (> 5MM ^{3} Coal + OB) and for other OCPs mines, it is done once in 3 years.
- Coalfield wise vegetation covering maps are also prepared once in 3 years for land use monitoring of mines.

(c): The Coal Block Development and Production Agreement (CBDPA) executed between Nominated Authority (Ministry of Coal, GoI) and Successful Bidder for commercial coal mines stipulates that the Successful Bidder endeavors to minimize the carbon footprints from operations at the Coal Mine, undertake steps to reduce environmental pollution and promote sustainability, in accordance with Good Industry Practice**.** Further, Successful Bidder shall implement mechanized coal extraction, transport and evacuation in the Coal Mine, in line with modern and prevalent technologies.

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