

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
STARRED QUESTION No. 51
TO BE ANSWERED ON 24.07.2023

Pollution due to Coal Mining

*51. SHRI PASHUPATI NATH SINGH:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether any measures are being taken by the Government to control the air pollution caused by coal mining in the country;
- (b) if so, the details thereof;
- (c) whether the Government is aware of the pollution caused by mining in Dhanbad Parliamentary Constituency also known as the coal capital of the country;
- (d) whether any concrete measures are being taken by the Government in this regard; and
- (e) if so, the details thereof?

ANSWER

MINISTER FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI BHUPENDER YADAV)

(a) to (e): A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARAS (a) TO (e) OF THE LOK SABHA STARRED QUESTION NO. 51 DUE FOR REPLY ON 24.07.2023 REGARDING 'POLLUTION DUE TO COAL MINING' RAISED BY SHRI PASHUPATI NATH SINGH, HON'BLE MEMBER OF PARLIAMENT

(a)& (b)

To control the air pollution caused by coal mining in the country, Central Government has devised the process of Environment Impact Assessment, as a regulatory tool under the provision of Environment (Protection) Act, 1986. Under the said Act, Ministry of Environment, Forest and Climate Change (MoEF&CC) has notified the Environment Impact Assessment (EIA) Notification, 2006 as amended from time to time, which deals with the process of granting Environmental Clearance (EC) after having comprehensive analysis of EIA reports prepared by the coal companies.

The Government has also prescribed environmental standards for the coal mining activities. The respective SPCBs/PCCs issue the Consent to Operate under the provisions of Air (Prevention and Control of Air Pollution) Act, 1981 and Water (Prevention and Control of Pollution) Act, 1974 to oversee the compliance of emissions/effluent standards and take action against violators under the provision of Water and Air Acts.

In addition, to monitor the air quality of project site in coal mining areas/washeries, a condition for installing the Continuous Ambient Air Quality Monitoring Stations (CAAQMS) is prescribed in the Environment Clearance. As per available information, M/s Coal India Limited (CIL) has installed 72 Continuous Ambient Air Quality Monitoring Stations (CAQMS) for air quality monitoring. The CIL has also installed 70 PM₁₀ Analyser through its subsidiaries namely M/s Eastern Coalfields Limited, M/s Central Coalfields Limited and M/s Bharat Coking Coal Limited including 7 PM₁₀ analysers in coal washeries.

(c) to (e)

Government is well aware of the pollution caused by mining in Dhanbad also known as the coal capital of the country. Different sources of pollution including that by mining is continuously monitored.

To improve air quality in major cities, Government has launched National Clean Air Programme (NCAP) in 2019 as a national level strategy to reduce air pollution levels across the country. Taking into account the available international experiences and national studies, the tentative national level target under NCAP is 20%–30% reduction of particulate matter concentration by 2024.

Under NCAP, Central Pollution Control Board (CPCB) has identified 131 cities (including 123 non-attainment cities exceeding National Ambient Air Quality Standards (NAAQS), which were notified to protect human health) including Dhanbad, Ranchi and Jamshedpur cities of Jharkahnd State. City action plan of Dhanbad covering action to control air pollution including coal mines, collieries and coal washeries and action taken by the coal mines companies is annexed as **Annexure-I**.

The measures taken to reduce the pollution caused by mining in Dhanbad Parliamentary Constituency *inter-alia* include:

- All mines of BCCL operate as per the approved Environment Impact Assessment – Environment Management Plan (EIA-EMP) and Environmental Clearance granted by Ministry of Environment Forest and Climate Change.
- All coal transport is done through tarpaulin covered trucks/tippers.
- All coal transport contracts and tenders floated have specific and mandatory clause of transport of coal through tarpaulin covered trucks.
- Water Sprinklers both conventional mobile type, fixed and mist type are operational to reduce fugitive dust from coal transport.
- Apart from this, BCCL has adopted modern technology in sprinkling and deployed Truck Mounted Fog Canons, Trolley Mounted Fog Canons.
- Coal Handling Plants (CHPs) are being enclosed to reduce coal dust emission outside CHP.
- Drills are provided with dust extractors/wet drilling mechanism.
- Noise generation by equipment is kept under control by regular maintenance. Blasting operations are carried out between 14:00 to 15:00 hours only i.e. during change of shifts. Ear-muffs and ear-plugs are provided to employees wherever required.
- Garland Drains and Toe walls have been constructed around the OB dumps in various areas of BCCL.
- Stone Pitching/Check Dams/Toe Walls has been constructed in various areas of BCCL along various nadi/jore and nallah.
- Avenue plantation is being carried out along coal transportation route with help of State Forest Department to reduce pollution from coal transportation.
- Oil and Grease trap have been installed/constructed in Workshops for treatment of workshop effluents.
- For Disposal of Hazardous solid waste containing oil, Authorization from State Pollution Control Board is duly taken and these wastes are stored in specifically constructed sheds and disposed off through authorized Common Treatment Storage & Disposal Site, available in the state.
- Mine water is utilized gainfully and supplied to nearby population for community purposes (Drinking, irrigation, domestic use etc.)
- BCCL has also entrusted Forest Research Institute (FRI), Dehradun for technical guidance and monitoring of Ecological restoration works carried out in BCCL.
- Afforestation/Eco-Restoration in an area of 1596.03 ha has been carried out.

Annexure-I

Action plan for prevention and control of air pollution for mine/collieries of BCCL which is to be followed on continuous basis

Sl. No	Environmental Aspect	Activities	Current Practices	Future Action Plan		
				Short Term (by August 2020)	Mid Term (by August 2022)	Long Term (by August 2024)
1	Ambient Air	Covered Transportation	This is being practiced	Strict enforcement and random audits with Pollution Control Board	Mechanically covered trucks shall be deployed on availability with OEM (CIL referred for same)	
		Permanent Pucca Transportation Road	Road made up of local stones and OB/ Pucca		Will be compacted to control fugitive dust	Will be black topped in Non- Coal Bearing Area
		Sweeping of road		Manual sweeping of sides of road of Major NH through which transportation is done	Mechanical sweeping will be done	
		Drilling with Dust extract or /wet drilling	Some drills are equipped with dust extractor while some are equipped with wet drilling		All new and old drills will be fitted with wet drilling and dust extractor system	

		Sprinkling arrangements at Siding/ Permanent Transportation routes/Coal Dumps	Mobile sprinkling on haul roads, Fixed sprinkling at feeder brakers and washeries	Mobile water sprinkling frequency will be increased. Road sides of major NH being used will manually broomed	Fixed Sprinkler shall be installed at Railways siding, FEEDER/Braker at dust generating sources.	Fixed Sprinklers shall be installed at Railways siding, Feeder/Braker at dust generating sources. Mist type mobile sprinklers will be used for haul roads and unloading operations.
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Action plan for prevention and control of air pollution for Coal Washeries of BCCL which is to be followed on continuous basis

S. No	Action Point	Action Plan for stakeholders	Compliance
1.	The ambient air of the premises of coal washeries remains dusty due to pliance of uncovered trucks and those too on kutcha haul roads and on reject dumps and due to uncovered processing of coal	a) The covering of loaded transport vehicles will be compulsory.	Coal transportation from out underground colliers takes place through underground belt conveyor network system directly to captive washery. Coal transportation through trucks is done only from BCCL, mines till washery and it is ensured that only optimally loaded trucks with proper tarpaulin cover are allowed into the washery premises Clean coal is dispatched via rail from the Rail-yard situated in the washery premises.
		b) All transport roads will be made pucca.	All the internal roads of the washery have been concreted while the approach roads are black-topped.
		c) Reject dumps will be enclosed by pucca boundary wall to prevent entry through them.	Rejects are already kept in stockyards enclosed by pucca boundary wall and rejects are sold off regularly to various customers.
		d) All processing (crushing screening, etc) chambers of coal will be covered.	All processing chambers are provided with enclosures. Conveyer belts in washery are covered on top and both sides. In addition, dry fog system is installed at all transfer points of CHP.
		e) Fixed type of water sprinklers will be installed in all dust prone areas.	Fixed water sprinklers are installed in internal roads of washery for dust suppression. In addition, movable water sprinklers are also being deployed on the roads for dust suppression.

Action plan for prevention and control of air pollution for Coal Mines of Tata Steel Limited, Jharia which is to be followed on continuous basis

S. No	Action Point	Action Plan for stakeholders	Compliance by Tata Steel Limited, Jharia
1	The ambient air of the collieries remains dusty due to pliance of uncovered trucks and those too on kutchha haul roads and on OB dumps and due to drilling & blasting and uncontrolled emission of their boilers.	a.The covering of loaded transport vehicles will be compulsory.	Coal transportation from our underground colliers takes place through underground belt conveyor network system directly to; our washeries only sand is transported via tarpaulin covered trucks from riverbed to sands towing yard.
		b.Coal Transport roads and long-time transport road shall be made pucca. New haul roads will be taken in use after making it pucca.	This is not applicable for underground mines. However, the approach hroads of the underground collieries are already made pucca.
		c.OB dumps will be enclosed by pucca boundary wall to prevent entry through them.	Not applicable as Tata Steel is presently operating underground mines only. Earlier, we had one open cast mine viz. Kalimela OCB for which production has been ceased since Nov'14. There is retention wall of around 2200 meters that exist around the dump of OCP Kalimela.
		d.All drillings shall be done with dust containment and suppression systems. The fixed type sprinklers will be installed in all dust prone areas, including all coal stock & sidings.	Not applicable as this is for open-cast mine. The Kalimela OCP is already closed and back-filling of the mine void is being done. Raw coal is directly transported from underground mines to washery via belt conveyor networks where water sprinkling arrangements are present at transfer points.
		e. The prudent operational practices will be adopted to control dust.	The best environmental practices adopted by Tata Steel Jharia Division