





ENVIS Newsletter on Environmental Problems of Mining

Sponsored by Ministry of Environment, Forest and Climate Change, Govt. of India

Department of Environmental Science & Engineering Indian Institute of Technology (Indian School of Mines), Dhanbad

No. 111

Quarterly Publication

Dec 2021

Editorial Team

Prof. Anshumali, Head of the Dept. Prof. Sheeja Jagadevan, Assistant Professor

ENVIS TEAM

Prof. Anshumali, ENVIS Coordinator Prof. Sheeja Jagadevan, ENVIS Co-coordinator Dr. Ashvani Kumar, Programme Officer Mr. Bishwajit Das, Information Officer Mr. Durga Das Chandra, IT Officer

CONTENTS

- 1. Wholesomeness of Forests can save Rivers and Aquifers
- 2. Abstracts of some relevant Research Papers
- 3. Notifications
- 4. Current News
- 5. Important Parliamentary Questions
- 6. Environmental Clearance
- 7. Various activities of IIT(ISM) ENVIS Centre & other Organisations
- 8. ENVIS Query Form

Subscription

Request a copy of the newsletter by writing to us or send us an e-mail to ism@envis.nic.in

Disclaimer

The information in this newsletter has been compiled from various sources and does not necessarily depict the views of the Indian Institute of Technology (Indian School of Mines), Dhanbad

Published by

IIT (ISM) ENVIS Centre
Dept. of Environmental Science & Engg.
Indian Institute of Technology
(Indian School of Mines)
Dhanbad- 826 004 (INDIA)
Email: ism@envis.nic.in



Land Use and Land Cover changes in the Betwa River Basin (Venkatesh & Anshumali, 2020)

EDITORIAL

The IIT(ISM) Dhanbad has been funding an R&D Project of National Importance entitled "Delineation of the Administrative Boundary of the Banki River, Garhwa District, Jharkhand: An Implication in Restoration and Conservation of the Ganga River Basin" for the financial year 2021-22. The area of the Ganga River Basin is decreasing day by day only because we are not taking into account the conservation of the first or second-order rivers. These small rivers are originating from hilly forest areas. The River Banki is one such small river of 52 km in length originating from the Sagma Hills located near the Nagar Untari-Dhurki Road in the Garhwa District of Jharkhand. River Banki is the tributary of the North Koel River. The North Koel is the Tributary of the Son River and the Son is the tributary of River Ganga. In nutshell, the Garhwa district is an integrated part of the Ganga River Basin where small rivers like Banki are playing a very important role in the ecohydrology and socio-economic development. This project will deliver two major outputs: 1. design and develop empirical formula for deleniation of the administrative boundary and (2) define conservation category of the Banki river. The outputs of the project will give strength to the Ministry of Jal Shakti, which at present regulate "Jal" (water) without "Shakti" (land). Also the Ministry of Environment Forest & Climate Change (MoEF&CC) will be benefited in terms of achieving the target of sustainable livelihood, mitigation of climate change and water security at the local levels in the 21st Century.

The current issue of the ENVIS Newsletter features abstract on the subject, Gazette notifications, news, list of the environmental clearance accorded to Mining projects and a glimpse of events conducted during October to December, 2021.

EDITOR



Wholesomeness of Forests can save Rivers and Aquifers

Redefine forests, delineate administrative boundary of rivers, and adopt IUCN RED DATA LIST for river conservation will save Sub-continent from Water Crisis and Climate Change

By

ANSHUMALI^{1*}, RAJIV SHEKHAR²

¹ Professor & Head, Dept. of Environmental Science & Engg., IIT(ISM), Dhanbad ² Director, IIT(ISM), Dhanbad

* Correspondence Author; email: anshumali@iitism.ac.in

The Himalayan and Peninsular Rivers are experiencing enormous qualitative and quantitative changes since the inception of human civilization. The restoration and conservation of rivers that traverse the forests, agricultural lands and habitats have become extremely important to establish a strong linkage between natural resources and man-made ecosystems in the 21st Century. In the last two decades, the "Restoration and Conservation" projects have emphasized the principle of 3R (reduce-reuse-recycle) and discharge of treated wastewater. At the same time, we are neglecting the ecological significance of those streams that recharge aquifers and discharge fresh water in the Ganga River basin during monsoon and winter seasons. Hence, the Ganga River basin is facing two challenges concurrently: (a) loss of riverfronts (i.e., drainage network covered with vegetation) and (b) unprecedented discharge of wastewater from urban and industrial centers. In the present scenario of human settlement, the riverfront is understood as a water edge area (i.e., river bank) where the urban centers meet the river. This concept is partly true; however, the ecological riverfronts are much wider, including ecological and geological entities that develop drainage networks, including streams, tributaries, and main rivers in the form of a watershed. Riverfront is the most easily accessible or soft component of the ecosystem where natural forest covers exiting on geological formations are gradually or rapidly converted into barren and agricultural lands by local people, further altered by the more advanced stages of human civilization.

Once upon a time, the major monsoon rivers originate from the different plateau and mountain regions of the sub-continent were covered with thick tropical deciduous forests and tropical

cover i.e., the green appearance of the forest due to the spread of weeds, must be quantified to delineate the actual contribution of native species to vegetation cover in the notified forest areas. The impacts of LULC changes on hydrological processes in a river basin pose severe threats to the sustainable existence of water resources in India. From recent studies, the decadal decline in the forest covers and barren areas is 6 to 12 % and 10 to 15 %, respectively, in the major river basins due to the high land use demand. The diversion of forest areas for non-forest purposes directly links the increasing dependency on groundwater resources for various man-made activities. For example, The recent studies on the LULC changes in the local river basin (e.g., Izri River, a tributary of Damodar River in Bokaro District) showed the diversion of 9 % forest cover and 61.3 % barren areas for non-forest purposes, especially agriculture land (+ 9.6 %) and built-up land (+ 73.6 %) in last three decades (1987-2020), which leads to decrease in the area under shallow ponds and streams (- 33.5 %). Such land-use practices primarily disturbed the natural connectivity between forests and rivers (i.e., riverfronts), resulted in the loss of groundwater recharge and increasing runoff and sedimentation, posing a severe threat to river catchment. As a result, the aquifer systems are now the sole source of fresh water to support livelihood practices and community services. However, the water supply for irrigation and municipalities is being sourced from the constructed water tank/reservoirs in every district of the country. The Izri River's story represents only a small portion but the very grave ecological health of the Damodar River basin. If we map the total Damodar river basin then it is possible to notice some more irreversible changes occurred its LULC patterns as we have seen in case of the Chambal, Betwa, Ken and Son Rivers



Fig.1: Degradation of Riverfronts (Photographs by ANSHUMALI)

rainforests. In the last three decades, the land use and land cover (LULC) pattern indicate significant diversion of forests and geology for occupation and settlement, which incurred loss irreversibly on the river ecology, especially the riverfronts. The latest "India State of Forest Report" (ISFR 2019) revealed that the forest cover is 24.56 percent of the country's total geographical area. Here, it is pertinent to mention that the estimation and subtraction of pseudo-vegetation

(tributaries of the Yamuna River) originating from different parts of the Central India. Similarly, the Himalayan Rivers are highly affected by the anthropogenic denudation of the hilly terrains, deforestation, infrastructure developments, forest fire, landslides, cloud bursts and glacier melting. In the Greater Himalaya, the death of streams, channels and nalas is causing migration of the people from their centuries-old habitats searching for fresh water and



livelihood. In the southern Peninsula, the people face an acute shortage of freshwater only because of giving more importance to land and ignoring ecological values of the diversity in water bodies.

The Ganga River Basin Management Plan (GRBMP) is a flagship mission launched by the Government of India in January 2015 with the objectives of taking comprehensive measures for restoration of the wholesomeness of the Ganga ecosystem in terms of four defining concepts: (a) Aviral Dhara (Uninterrupted Flow), (b) Nirmal Dhara (Unpolluted Flow), (c) Geologic Entity and (d) Ecological Entity. This approach is very systemic and comprehensive; however, an urgent nationwide attention is required to remove the bottlenecks in the existing plan. For example, the irony is that stakeholders are much more interested in the restoration and conservation of river banks in the urban context, especially towards improving water quality and reducing pollution, without paying serious attention to the conservation of riverfronts. This explains why the study on ecological riverfront design in India is limited. There is no data available on the conservation of geological entities (for example, conservation of Deccan Trap, Vindhyan, Gondwana, Marginal Alluvial Plain, Central Alluvial Plain and Piedmont Plain). Further, there is no data available on conserving forests and geological entities to sustain perennial/ephemeral river systems at local and regional scales. Yes, it is true that ecology and geology have been conserved for wildlife species but their conservation for aquatic ecosystems is never being addressed at the State and Union level. Now the time has come to design and develop the best water management practices dealing with interlinking forest cover and geological formations with surface and subsurface water networks at Village-Panchayat-Tehsil-District levels. The interlinking of rivers is an impossible task unless we are ready to interlink fragmented forest areas. If we are serious about restoring and conserving the holocoenotic nature of the ecosystem, then planning and implementing the GRBMP must include a conservation plan for riverfronts at the local level. These approaches will give strength to the Ministry of Jal Shakti, which at present regulates "Jal" (water) without "Shakti" (land).

To restore Aviral Dhara and Nirmal Dhara of any river system, we need to redefine the concept of the "Forest". Because the "Forest" is the only natural resources that will help restore the wholesomeness of the River Ganga. We should not misunderstand the meaning of "Forest" as a green vegetation cover found in a given area; instead, "Forest" includes vegetation, rocks, plateau, mountain, river, aquifer, barren measure, wildlife, settlement and occupation. Hence, the existence of any river system is possible only in the wholesomeness of the forests. To counter the scaling down of length-width-depth of the rivers, the most robust solution for restoration and conservation is the demarcation of their administrative boundaries. Let's fix the right and left flanks of any river system using unanimously designed standard protocols that will reduce > 50 % threat to the riverfronts and their natural courses of restoration may begin through inheritance of the intrinsic ecosystem characters. We can learn lessons from the demarcated administrative boundaries of the railway lines, highways, protected forests, wildlife sanctuaries, national parks, agricultural fields, urban centers, industrial parks, etc. Such administrative boundaries help present and future planning, development and management of natural and man-made resources. To achieve this, we have to standardize the morphometric, ecological, hydrological, geological and geophysical parameters for the classification of rivers into Nine Conservation Categories on the line of IUCN RED DATA LIST (e.g., Not Evaluated, Data Deficient, Least, Concern, Near Threatened, Vulnerable, Endangered, Critically Endangered, Near to Extinction and Extinct), which is prepared for the conservation of Flora and Fauna. Then why not "Rivers" could be classified similarly for sustainable development of surface and subsurface water for the conservation of biodiversity, mitigation of climate change, and support livelihood practices to "Foster & Forecast" "Food & the Water Security" in the 21st Century.

IIT(ISM) Dhanbad Initiative

1. The IIT(ISM) Dhanbad has been funding an R&D Project (IIT(ISM)/2021-2022/826/INSTITUTE) of National Importance entitled "Delineation of the Administrative Boundary of the Banki River, Garhwa District, Jharkhand: An Implication in Restoration and Conservation of the Ganga River Basin" at the cost 21.00 Lakh for the financial year 2021-22. The project activities are carried out by the Centre for Water Resource Management (CWRM), IIT(ISM) Dhanbad.

2. Why the Banki River?

Practically, we have noticed rivers outside forests; the result is an unprecedented decrease in the watershed area. For example, if the watershed area of the River Banki is 500 km² according to Survey of India toposheets, but at present, it is only 200 km² then it is scientifically not sound to say that we are taking firm steps to conserve the Ganga River Basin. The area of the Ganga River Basin is decreasing day by day only because we are not taking into account the conservation of the first or second-order rivers. These small rivers originate from hilly forest areas. The River Banki is one such small river of 52 km in length originating from the Sagma Hills located near the Nagar Untari-Dhurki Road in the Garhwa District of Jharkhand. River Banki is the tributary of the North Koel River. The North Koel is the Tributary of the Son River, and the Son is the tributary of River Ganga. In a nutshell, the Garhwa district is an integrated part of the Ganga River Basin, where small rivers like Banki play a vital role in ecohydrology and socio-economic development.

3. Administrative Boundary

We are carrying out different scientific studies and management practices while considering the natural boundary of any river. However, such studies are futile because land use and land cover changes are causing the extinction of small rivers. Hence, we urgently need an administrative boundary to protect the natural boundary of a river. The administrative boundary of any river should be just like the officially notified boundary of any government or private entities where we can maintain current land-use practices and propose future planning and development. For example, the wildlife sanctuaries, national parks, biosphere reserves, tiger conservation areas, wildlife corridors, land dedicated for railways, national or state highways, panchayat roads, municipal areas, etc., have well defined notified administrative boundaries. But, we have never thought of demarcating the official boundary of any river. As a result, we observe a drastic decrease in the length, width, and depth of rivers and their tributaries. Not only this, many river catchments have been diverted for agricultural activities, settlement, industrial development, etc. Once rivers have their administrative boundaries, we can think about their long life and achieve optimum carrying capacity. The official boundary of any river and its tributary can be classified into core zone and buffer zone, and their legislative



regulation should be at par with Wildlife (Protection) Act, 1972. Saving rivers by delineating their administrative boundary is the only solution to protect natural boundaries, earn a livelihood, protect biodiversity and mitigate climate change on a short-term and long-term basis.

Now the question arises, how to demarcate the administrative boundary of any river? To achieve this, we are carrying out the study on river morphometry, geophysical survey, geology, river-aquifer interaction, historical changes in land use and land cover, ecology and biodiversity, socio-economic changes, etc. to design and develop scientifically and socially acceptable model for delineating the administrative boundary of the Banki River.

4. Methodology

1st Stage: Generate Primary Data on the basis of Survey of India Toposheets, High-Resolution Remote Imagery, and GIS techniques.

2nd Stage: Ground truth verification to validate the data generated by the RS and GIS, identification of hotspots for the preparation of the river boundary plan.

3rd Stage: Carry out scientific studies and restoration activities.

4th Stage: Design and develop an empirical formula for allocating notified land for the river boundary.

5th Stage: Standardize the parameters for the classification of the Banki River into the following Conservation Categories (e.g., Not Evaluated, Data Deficient, Least Concern, Near Threatened, Vulnerable, Endangered, Critically Endangered, Near to Extinction and Extinct).

5. Deliverables

Policy change in the Ganga River Basin Management Plan (GRBMP) Framework: The output of the project will give strength to the Ministry of Jal Shakti (MoJS), which at present regulates "Jal" (water) without "Shakti" (land). Also, the project will benefit the Ministry of Environment Forest & Climate Change (MoEF&CC) in terms of achieving the target of sustainable livelihood, mitigation of climate change, and water security at the local levels in the 21st Century.

References

Balakrushna Panda, Madavi Venkatesh, Bijendra Kumar, Anshumali (2019). A GIS-based approach in drainage and morphometric analysis of Ken River basin and sub-basins, Central India. Journal of the Geological Society of India, 93(1): 75-84.

Balakrushna Panda, Madavi Venkatesh, Bijendra Kumar, Sanchit Kumar, Umesh Kumar Singh, Anshumali (2020). Water quality assessment of Ken River for irrigation purpose in the marginal plain of Bundelkhand region and Ganga River Basin, Page No 40-48: In Proceedings of National Conference on —Recent Trends in Environmental Pollution and Disaster Risk Reduction 6-7, February, 2020, FICCI Federation House, New Delhi.

Bijendra Kumar, Anshumali (2020). Geochemistry of surfacewater: An implication in restoration and conservation of Govind Ballabh pant Sagar Reservoir, India, Page No 65-78: In Proceedings of National Conference on —Recent Trends in Environmental Pollution and Disaster Risk Reduction 11, 6-7, February, 2020, FICCI Federation House, New Delhi.

Bijendra Kumar, Madavi Venkatesh, Anshuman Triphati, Anshumali (2017). A GIS-based approach in drainage morphometric analysis of Rihand River Basin, Central India. Sustainable Water Resource Management 4(1); 45–54.

Kriti Shukla, Anshumali (2020). Micronutrient distribution in arid and semi-arid agricultural soils under rainfed and irrigated agroecosystems of Central India, Page No 116–135: In Proceedings of National Conference on —Recent Trends in Environmental Pollution and Disaster Risk Reduction 8, 6-7, February, 2020, FICCI Federation House, New Delhi.

Madavi Venkatesh, Anshumali (2019). A GIS-based assessment of recent changes in drainage and morphometry of Betwa River basin and sub-basins, Central India. Applied Water Science 9:157.

Madavi Venkatesh, Anshumali (2020). Appraisal of the carbon to nitrogen (C/N) ratio in the bed sediment of the Betwa River, Peninsular India. International Journal of Sediment Research, 35(1): 69-78.

Phuong Quynh Ngo, Sanchit Kumar, Madavi Venkatesh, Anshumali (2020). Appraisal of livelihood vulnerability index in the industrial and non-industrial regions of Ganga River basin, Northern India, Page No 7-29: In Proceedings of National Conference on —Recent Trends in Environmental Pollution and Disaster Risk Reductionll, 6-7, February, 2020, FICCI Federation House. New Delhi.

Abstracts of some relevant research papers

Appraisal of the carbon to nitrogen (C/N) ratio in the bed sediment of the Betwa River, Peninsular India.

Venkatesh, M., & Anshumali, International Journal of Sediment Research, 35(1), 69-78, 2020.

Bed sediment carbon to nitrogen (C/N) ratio is one of the essential variables reflecting sources of organic matter in river basins. In order to explore the spatial variability in sources of sediment C/N ratios, and the influence of land use and land cover (LULC) changes on the Betwa River basin in Peninsular India, 51 river bed sediment samples were collected in December 2016. The coefficient of variation (CV) was >35% indicating highly variable biogeochemical parameters. The sediment C/N ratio varied from 2.94 to 10.09, 3.21–56.40, and 6.50–76.97 in upstream, mid-stream, and downstream regions, respectively, indicating a progressive change in sources of organic matter and depositional environment. The positive correlation between total carbon (TC) and C/N ratio was increasing in the downstream direction [upstream (+0.560) < mid-stream (+0.603) < downstream (+0.838)], which is an indication of high deposition and slow decomposition of sedimentary terrigenous organic matter distant from the regions of urban pollution. The LULC change analysis done by remote sensing and Geographic Information System (GIS) methods revealed an adverse change for the forests and barren land and a positive change for the agricultural land and built-up areas. The sediment C/N ratio mapping showed the impact of LULC changes on the sediment quality. The spatial distribution of bed sediment C/N ratio in the Betwa River basin has important reference value for managing organic matter transport in the downstream Yamuna River and Ganga River basin.

A GIS-based assessment of recent changes in drainage and morphometry of Betwa River basin and sub-basins, Central India.



Venkatesh, M., & Anshumali, Applied Water Science, 9(7), 1-12, 2019.

Morphometric characterization of the Betwa River basin (BRB) in Central India has been carried out to understand the spatial variations in morphometric parameters and evaluate hydrological, geological and topographical characteristics by analyzing SRTM DEM and topographical maps using geographic information system. Based on catchment characteristics and anthropogenic activities, the Betwa River basin and sub-basins were divided into three regions: (a) upstream, (b) midstream and (c) downstreams regions. The BRB comprised a dendritic drainage pattern where the maximum number of the stream was found in the first order. The mean bifurcation ratio (4.61) showed that the drainage pattern was not affected by structural disturbances. The drainage texture analysis showed the dominance of coarse texture, low runoff, low erosional potential, permeable subsurface material, high vegetation cover and low relief. The circularity ratio (0.13) showed an elongated shape of the basin. The >74.5% of the study area had $<3^{\circ}$ slope indicates gentle terrain condition. These results could be utilized in developing watershed management, agricultural land-use planning, forestry management and planning of sustainable industrial facilities.

Modelling the effect of forest cover in mitigating nitrate contamination of groundwater: A case study of the Sherwood Sandstone aquifer in the East Midlands, UK.

Zhang, H., & Hiscock, K. M., Journal of Hydrology, 399(3-4), 212-225, 2011.

As the second largest aquifer in the United Kingdom, the Sherwood Sandstone is threatened by high nitrate concentrations and water shortages. Land-use change from arable agriculture to woodland could help mitigate agricultural diffuse pollution and this study provides an evaluation of the effects of woodland cover on groundwater quality. Six land-use change scenarios focusing on two public-supply borehole capture zones on the unconfined Sherwood Sandstone aguifer in Nottinghamshire were examined in predictive simulations of nitrate concentrations until 2025. Groundwater flow modelling (MODFLOW) and mass transport modelling (MT3DMS), incorporating outputs from a groundwater recharge model and an export coefficient model enabled a quantitative comparison between different scenarios on groundwater quality. Results revealed that the greatest decrease by 2025 in nitrate concentration (35%) was associated with the entire target zone covered with forest, whereas a decrease dependent on the application of best agricultural practice achieved a 20% reduction. Conversion of 80 ha and 240 ha of agricultural land to woodland in two borehole capture zones (with areas of 210 ha and 484 ha, respectively) could potentially restrict nitrogen losses such that the EU groundwater nitrate limit (50 mg L⁻¹) could be achieved in abstracted groundwater. It is concluded that the combination of forest creation and application of best agricultural practice in a borehole capture zone is a recommended approach to control nitrate pollution in the long term and provides scientific support for pollution control strategies that rely on land-use change to woodland to achieve water quality objectives.

Effects of land-use change on groundwater recharge model parameters.

Jinno, K., Tsutsumi, A., Alkaeed, O., Saita, S., & Berndtsson, R). Hydrological sciences journal, 54(2), 300-315, 2009.

Land development usually induces large changes in flood peak and

infiltration properties, thus affecting the entire hydrological environment of the area. In order to evaluate such negative effects caused by land-use change, it is necessary to estimate the changes in surface runoff and groundwater recharge rate. The effects of landuse changes on the parameter values of a groundwater recharge model were studied and are presented. The response of groundwater level was examined at several observation wells for two different unconfined aquifers consisting of weathered granite. The spatially calibrated parameters of the groundwater recharge model were classified in order to evaluate the effects of land-use change. It was shown that the parameter values most affected by land-use change were the surface runoff coefficient, F_{∞} , followed by the shape parameter, $(r)_{1/2}$. The field capacity parameter, R_0 , was also greatly affected. By defining the land-use change for these three parameters the hydrological change can be predicted.

NOTIFICATIONS

MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA, NEW DELHI

- **S.O. 5497 (E) [31.12.2021]** Draft Notification of notifies the Regulations on the Extended Producer Responsibility for waste tyre under the Hazardous and Other Wastes was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 31st Dec., 2021.
- **S.O. 5487 (E) [31.12.2021]** Notification of the Environment (Protection) Fifth Amendment Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 31st Dec., 2021.
- **S.O. 5481 (E) [31.12.2021]** A draft notification on ash utilisation by coal or lignite thermal power plants was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 31st Dec., 2021.
- **S.O. 5251 (E) [17.12.2021]** Notifies an area to an extent varying from 575 meters to 1.00 kilometres around the boundary of Jogimatti Wildlife Sanctuary, in Chitradurga district in the State of Karnataka as the Jogimatti Wildlife Sanctuary Eco-sensitive Zone was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 17th Dec., 2021.
- **S.O. 5188 (E) [13.12.2021]** Constitutions the Authority namely, the Maharashtra Coastal Zone Management Authority was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub-Section (ii) on 13th Dec., 2021.
- **S.O. 4954 (E) [2.12.2021]** Amendments in the notification of the Government of India, vide number S.O. 1687(E) dated the 23rd April 2021 for Air Quality Management in National Capital Region and Adjoining Areas Act, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part-II, Section-3, Sub-Section (ii) on 2nd Dec., 2021.
- **S.O. 4929 (E) [2.12.2021]** Notifies an area to an extent varying from 0 (zero) to 22 kilometres around the boundary of Askot Wildlife Sanctuary, in Pithoragarh District in the State of Uttarakhand as the Askot Wildlife Sanctuary Eco-sensitive Zone was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 2nd Dec., 2021.
- **S.O. 4894 (E) [23.11.2021]** Constitutions the State Level Environment Impact Assessment Authority, Chhattisgarh was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 23rd Nov., 2021.
- S.O. 4886 (E) [26.11.2021] Amendments in the Coastal Regulation Zone Notification, 2019 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 26th Nov., 2021.
- **S.O. 4793 (E) [22.11.2021]** Notifies an area to an extent varying from 50 meters to 2.21 kilometers around the boundary of Kais Wildlife Sanctuary, in Kullu District in the State of Himachal Pradesh as the Kais Wildlife Sanctuary Eco-sensitive Zone was Published in the Gazette of India,



- Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 22nd Nov., 2021.
- **S.O. 4790 (E) [18.11.2021]** Draft Notification of seeking public comments on proposed amendment in IPZ Notification, 2011 and ICRZ Notification 2019 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 18th Nov., 2021.
- **S.O. 4789 (E) [18.11.2021]** Draft Notification in the Island Coastal Regulation Zone proposed amendment in IPZ Notification 2011 and ICRZ Notification, 2019 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 18th Nov., 2021.
- **S.O. 4618 (E) [8.11.2021]** Notifies an area of 282.18 square kilometers to an extent varying from zero (0) to 3.519 kilometers around the boundary of Balaram-Ambaji Wildlife Sanctuary, in the State of Gujarat as the Balaram-Ambaji Wildlife Sanctuary Eco-sensitive Zone was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub-Section (ii) on 8th Nov., 2021.
- **S.O. 4617** (E) [8.11.2021] Notifies an area to an extent of uniform two kilometres around the boundary of Veerangana Durgawati Wildlife Sanctuary, in Damoh District in the State of Madhya Pradesh as the Veerangana Durgawati Wildlife Sanctuary Eco-sensitive Zone was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 8th Nov., 2021.
- **S.O. 4616 (E) [8.11.2021]** Draft Notification of notifies an area to an extent of 0.100 kilometres uniform around the boundary of Ralamandal Wildlife Sanctuary, in Indore District in the State of Madhya Pradesh as the Ecosensitive Zone was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 8th Nov., 2021.
- **S.O. 4615** (E) [8.11.2021] Notifies an area to an extent varying from 0 (zero) to 2.7 kilometres around the boundary of Kanawar Wildlife Sanctuary, in the Kullu District, in the State of Himachal Pradesh as the Kanwar Wildlife Sanctuary Eco-sensitive Zone was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub-Section (ii) on 8th Nov., 2021.
- **S.O. 4547 (E) [1.11.2021]** Draft Notification of Seeking Public Comments on proposed amendments in Coastal Regulation Zone (CRZ), 2019 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 1st Nov., 2021.
- **S.O. 4373** (E) [18.10.2021] Notifies an area to an extent varying from 0 (zero) to 26 kilometres around the boundary of Nagarjunasagar Srisailam Tiger Reserve, in Prakasam, Kurnool and Guntur Districts in the State of Andhra Pradesh as the Nagarjunasagar Srisailam Tiger Reserve Ecosensitive Zone was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 18th Oct., 2021.
- **S.O. 4293 (E) [14.10.2021]** Notifies an area to an extent varying from 0 (zero) to 3.89 kilometres around the boundary of Thane Creek Flamingo Sanctuary, in Mumbai Suburban district in the State of Maharashtra as the Thane Creek Flamingo Sanctuary Ecosensitive Zone was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub-Section (ii) on 14th Oct., 2021.
- **S.O. 4262 (E) [13.10.2021]** Notifies an area to an extent varying from 0.51 kilometers to 10.106kilometers around the boundary of Kishtwar High Altitude National Park, in the Union territory of Jammu and Kashmir as Kishtwar High Altitude National Park Eco-sensitive Zone was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub-Section (ii) on 13th Oct., 2021.
- **S.O. 4064 (E) [1.10.2021]** Draft Notification of an area to an extent varying from 0 (zero) to 3 kilometres around the boundary of Barail Wildlife Sanctuary, in Cachar District in the State of Assam as the Barail Wildlife Sanctuary Eco-sensitive Zone was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (ii) on 1st Oct., 2021.
- G.S.R. 798(E) [12.11.2021] Second Amendment the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II,

- Section 3, Sub Section (i) on 4th Oct., 2021.
- G.S.R. 759(E) [25.10.2021] Ammendment the Commission for Air Quality Management in National Capital Region and Adjoining Areas (Appointment, Salary, Allowances and other Terms and Conditions of Service of Chairperson, Full-time Members and Member-Secretary) Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part-II, Section 3, Sub Section (i) on 25th Oct., 2021.
- G.S.R. 742(E) [13.10.2021] The Commission for Air Quality Management in National Capital Region and Adjoining Areas (Manner of Taking Samples and Form of Notice) Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (i) on 13th Oct., 2021.
- **G.S.R. 724(E) [4.10.2021]** Amendment the Environment (Protection) 115 Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (i) on 4th Oct., 2021.
- **G.S.R. 722(E)** [6.10.2021] Draft Notification of the Regulations on the Extended Producer Responsibility under Plastic Waste Management Rules, 2016, as amended from time to time was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (i) on 6th Oct., 2021.

MINISTRY OF MINES, GOVT. OF INDIA, NEW DELHI

- G.S.R. 911(E) [30.12.2021] Notification of the Ministry of Mines, Indian Bureau of Mines, Lower Division Clerk (Group 'C' Post) Recruitment Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (i) on 30th Dec., 2021.
- G.S.R. 872(E) [12.12.2021] Notification of the Ministry of Mines, Indian Bureau of Mines, Chief Ore Dressing Officer Recruitment Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (i) on 12th Dec., 2021.
- **G.S.R. 860(E)** [16.12.2021] Notification about delegation of power for auction of mineral by central government to the designated officer was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (i) on 16th Dec., 2021.
- **G.S.R. 857(E)** [14.12.2021] Amendment the Mineral (Auction) Fourth Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (i) on 14th Dec., 2021.
- **G.S.R. 856(E) [14.12.2021]** Amendment the Minerals (Evidence of Mineral Contents) Second Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (i) on 14th Dec., 2021.
- **G.S.R. 780(E)** [3.11.2021] Amendment the Mineral Conservation and Development Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (i) on 3rd Nov., 2021.
- **G.S.R.** 776(E) [2.11.2021] Third Amendment the Mineral (Auction) Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part-II, Section 3, Sub Section (i) on 2nd Nov., 2021.
- **G.S.R.** 775(E) [2.11.2021] Fourth Amendment the Minerals (Other than Atomic and Hydro Carbons Energy Mineral) Concession Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (i) on 2nd Nov., 2021.
- G.S.R. 744(E) [14.10.2021] Reserves an area of 156.80 Sq. Kms. for mineral diamond in Baloda-Belmundi diamond block (Deposit No. 4 and 13) in Tehsil Saraipali, District Mahasamund, Chhattisgarh for undertaking prospecting or mining operations through M/s National Mineral Development Corporation Limited —Chhattisgarh Mineral Development Corporation, a joint venture of National Mineral Development Corporation Limited was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part II, Section 3, Sub Section (i) on 14th Oct., 2021.

MINISTRY OF COAL, GOVT. OF INDIA, NEW DELHI

S.O. 4903(E) [29.11.2021] Notification of intention to acquire all rights in



or over the land measuring 227.16 hectares (approximately) or 561.31 acres (approximately) described was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part - II, Section - 3, Sub - Section (ii) on 29th Nov., 2021.

S.O. 4902 (E) [29.11.2021] Notification of intention to prospect for coal from the land described was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part - II, Section - 3, Sub - Section (ii) on 29th Nov., 2021

S.O. 4589 (E) [2.11.2021] Notification of increases the percentage of coal was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part-II, Section - 3, Sub - Section (ii) on 2nd Nov., 2021.

G.S.R. 717(E) [1.10.2021] Amendment Mineral Concession Rules, 2021 was Published in the Gazette of India, Registered. NO. D. L.-33004/99 Part - II, Section - 3, Sub - Section (i) on 1st Oct., 2021.

CURRENT NEWS

Take action against officers who gave wrong info on coal dispatch: R K Singh to Pralhad Joshi

NEW DELHI, Dec. 29, 2021: Union Minister of Power Shri R K Singh writes to Coal Minister Pralhad Joshi to see the matter of giving wrong information on coal dispatches. He asked to take action against the officers who lifted the wrong information, In a letter to the Coal Minister dated December 9, 2021, Singh said, "Your officers who told you that they had large stocks but the Gencos were not lifting gave wrong information. If they had the stock, why did they not load the rakes? They seem to have inflated the production figures. Proceedings need to be initiated again against the concerned officers." "We have checked up from the Generation Companies (GENCOS). Contrary to what your officers have told you, none of the major GENCOS were supplied the quantum of coal which they had indented. We have the data of 22 major GENCOS for the period April - October 2021, which was the critical period. They had indented a total of 67,098 rakes out of which the coal companies endorsed to supply 55,155 rakes and the railways sanctioned 55,055 rakes but the actual coal supply from coal companies was 34,620 rakes only," Power Minister said in the letter. The Power Minister added in the letter that "the coal crisis situation has been overcome for the present, and the average coal stocks at power plants have improved somewhat to 20.2 Million Tonnes (MT). However, this is only 10 days stock, whereas our revised stocking norms prescribe a reserve of 15 days at the pithead and 24 days at nonpithead stations. "This is the time to take corrective action keeping in mind our past experience so as to avoid a recurrence of the crisis in future. The estimates of likely power required for the year 2021-22 and the resultant coal requirement were conveyed to the Ministry of Coal in April.

(Source: https://www.psuconnect.in/)

Coal PSUs paid over Rs 33,479 crore as dividend in the current fiscal

NEW DELHI, Dec. 25, 2021: The Central Government has received Rs 3,668 crore from Coal India as dividend tranche, taking the total proceeds from dividend from PSUs to over Rs 33,479 crore for Financial Year 2021-22 so far. These figures were shared by Department of Investment and Public Asset Management (DIPAM) Secretary Tuhin Kanta Pandey in a series of tweets on December 23, 2021. In addition, the Government of India has also received Rs 21 crore, Rs 48 crore, Rs 69 crore and Rs 23 crore from Telecommunications India Ltd, IRCON, RITES and NIIFL as dividend tranches, he further added.

(Source: https://www.psuconnect.in/)

Coal: Leap in production, improved dispatches to stave off possible fuel shortages in 2022

Dec. 24, 2021: The country's coal production is expected to record a "sizeable leap" in 2022 with increased output mainly from Coal India and captive mines, providing adequate firewall against any possible dry fuel shortages like the one witnessed in the latter half of this year. While coal supplies have stabilised in recent times, efforts are on to further improve the

fuel dispatches and a top government official said power plants are now receiving slightly more coal compared to their requirements. Coal Secretary Anil Kumar Jain said the increase in coal output would be on account of more production from Coal India Ltd (CIL), captive coal blocks auctioned between 2015-2020 and commercial mines put on sale last year. In the last financial year, CIL dug out about 596 million tonnes (MT) of coal, he said, adding that in the ongoing fiscal, the output is likely to be upped to 640 MT. "Next (financial year), we are hoping that they (CIL) produce around 680 MT. So, between this year and next year, we expect an increase of 40 million tonnes," he said. The captive coal mines that were put on sale post cancellation of blocks by the Supreme Court produced 63 MT last fiscal. In the current financial year, their production is likely to be scaled up to 90 MT.

(Source: https://economictimes.indiatimes.com/)

Coal India organises HR ideation workshop

NEW DELHI, Dec. 20, 2021: Coal India organised an ideation workshop at its Corporate Office under the aegis of the Personnel Directorate. Ideas and opinions to improve the commitment, engagement and well-being of the organisation using HR interventions were discussed. Participants dwelled on identified topics to chart out the future course for human resources at CIL. Shri. Vinay Ranjan, Director (P&IR), CIL, and senior officials of the personnel department of CIL HQ. and subsidiary companies participated in the session.

(Source: https://www.psuconnect.in/)

99 coal mines for commercial mining put on sale

Dec. 16, 2021: The government on Thursday launched the fourth round of auction of coal mines for commercial mining under which 99 blocks have been put on sale. With coal mines rolling over from third round of commercial auction and second attempt of second tranche of commercial auctions, there will be total 99 mines on offer, the coal ministry said in a statement. "Union Minister of Coal, Mines and Parliamentary Affairs Pralhad Joshi has launched the fourth tranche of auction of 99 coal mines, including 24 new mines in a function here today," the statement said. Launching the latest tranche, the minister called upon the investors who have already completed successful bidding of coal mines to start production at the earliest for greater self-reliance in this sector. The minister also urged the officials to identify more coal blocks for auctioning. Joshi further pointed out that at least for next 30 to 40 years coal will continue to be crucial in India's energy sector. He urged investors to step up participation in the fully transparent auction process evolved by the ministry.

(Source: https://economictimes.indiatimes.com/)

Commercial mining: 53 bids for 20 coal mines; Vedanta, Hindalco, JSW among bidders

Dec. 15, 2021: As many as 53 bids have been received from 37 companies, including JSW, Jindal Steel & Power Ltd (JSPL), Vedanta and Hindalco Industries, for 20 coal mines that have been put up for sale for commercial mining. The auction process of 88 mines for sale of coal was launched by the Ministry of Coal on October 12, according to an official statement. "A total of 53 bids have been received for 20 coal mines of which 16 are fully explored mines and four are partially explored mines," it said. Two of these mines are coking coal blocks and the remaining 18 mines are non-coking coal blocks.

Two or more bids have been received for 10 coal mines, it said. The last date of submission of technical bid was Tuesday. As part of the auction process, technical bids comprising online and offline bid documents were opened on Wednesday in the presence of the bidders. A total of 37 companies have submitted their bids both offline and online in the auction process. The other companies which also submitted their bids are BALCO, Jindal Power and Sunflag Iron & Steel among others. The maximum of 12 bids were made for Namchik Namphuk coal block, followed by seven for Utkal C block, five for Bijahan mine among others. The bids will be evaluated by a multi-disciplinary technical evaluation committee and technically qualified bidders would be shortlisted for participation in the electronic auction to be conducted on MSTC portal from January 7, next year.

(Source: https://economictimes.indiatimes.com/)



Secretary Coal Inaugurated ICOMS-2021 at NCL Hq

SINGRAULI, Dec. 14, 2021: Dr. Anil Kumar Jain, Secretary, Govt. of India, Ministry of Coal, virtually inaugurated the 'International Conference on Opencast Mining Technology and Sustainability (ICOMS), 2021' at Northern Coalfields Ltd. (NCL) Hq. in Singrauli, Madhya Pradesh. Speaking on the occasion, Dr. Jain emphasised identifying challenges & opportunities in the coal sector. He urged the promotion of R&D in clean coal technologies & coal gasification. He added that this will help achieve energy efficiency which will, in turn, attain sustainability in the coal sector. NCL in association with IIT, BHU organises this annual conference with an objective to showcase best practices in opencast mining & sustainability.

(Source: https://www.psuconnect.in/)

MCL played major role in averting fuel crisis at power plants: Coal Secretary

TALCHER, Dec. 13, 2021: Dr Anil Kumar Jain, IAS, Secretary to the Government of India, Ministry of Coal, appreciated Mahanadi Coalfields Limited (MCL) for playing a pivotal role in helping the nation successfully controlling and recovering from the crisis situation that had occurred due to shortage of fuel at power plants. Dr Jain, who had arrived on a two-day official visit to MCL yesterday, reviewed the performance of the company and appreciated its role in timely scaling up coal supplies to the power plants and helping in averting the crisis situation for power in the country that aggravated in the beginning of the third quarter this financial year.

(Source: https://www.psuconnect.in/)

CIL organises workshop on sustainability in the coal sector

KOLKATA, Dec. 11, 2021: Coal India Ltd. organised a Workshop on "Sustainability in the Coal Sector & 100 Days Programme (Coal Production & Dispatch)" in Kolkata. Shri. Ajay Mathur, DG, International Solar Alliance (ISA) and Shri. Chandra Bhushan, CEO & President, iFOREST spoke on the occasion. Shri. Ajay Mathur, DG, International Solar Alliance (ISA), emphasised on emerging energy solutions and Shri. Chandra Bhushan, CEO & President, iFOREST, spoke on 'Managing Just Transition' and suggested different ways that transition can happen in the coal sector. Dr. Anil Kumar Jain, Secretary, Govt. of India, Ministry of Coal, Shri. V.K. Tiwari, Additional Secretary, Govt. of India, Ministry of Coal, Smt. Vismita Tej, Joint Secretary, Govt. of India, Ministry of Coal and Shri. Mukesh Choudhary, Director, Ministry of Coal were present on the occasion.

(Source: https://www.psuconnect.in/)

Coal Ministry adopted new technology for coal exploration to cover larger area in short time

NEW DELHI, Dec. 9, 2021: The government is not regulating the consumption of coal. Coal India Limited (CIL) has provided more coal during the current fiscal (up to November'21) in comparison to last year's same period. During April-November'21, CIL has dispatched coal to the tune of 421.11 Million tonnes in comparison to last year's same period figures of 357.13 achieving growth of about 18%. SCCL has dispatched coal to the tune of 42.47 Million tonnes in comparison to last year's same period figures of 26.52 achieving growth of about 60%.

(Source: https://www.psuconnect.in/)

IIT (ISM) organises training programme for Border Road Organisation

Dec. 8, 2021: Dhanbad-based IIT (ISM) mining engineering department is organising a two-week executive development programme (EDP) on Controlled Blasting Management for Road Construction in Mountainous Area for Border Road Organisation (BRO). The course has been formulated on the request of the Border Road Organisation (a unit of the ministry of defence that provides support to and is part of the Indian Armed Forces). BRO develops and maintains road networks in India's border). This is the first on-campus course being conducted by IIT ISM after the onset of the COVID-19 pandemic in 2020.

The course was inaugurated by Rajiv Shekhar, the director of the institute, who emphasised on the importance of such training to mitigate the instability issues being faced by the BRO during construction of border roads in a challenging and harsh environment. A total of 22 assistant executive engineers (civil) from different projects of BRO spread across the country are participating in this specialised training programme. A K Mishra, head of mining engineering department and the course coordinator, elaborated on the contents and structure of the course.

(Source: https://www.telegraphindia.com/)

CIL to achieve 1 BT coal production by 2023-24

NEW DELHI, Dec. 6, 2021: India's largest coal producer Coal India Limited (CIL) has been directed to achieve 1 BT coal production by 2023-24 with a required compound average growth rate (CAGR) of 10.95%, Shri Pralhad Joshi, Union Minister of Coal, Mines, and Parliamentary Affairs mentioned in its written reply in Rajya Sabha today. Details of raw coal production trend and average growth of CIL during the last five years is given below.

(in million tonnes)

Year	2016-17	2017-18	2018-19	2019-20	2020-21
Total CIL production	554.14	567.36	606.89	602.13	596.22
Growth (%)	2.9	2.4	6.97	-0.78	-0.98

(Source: https://www.psuconnect.in/)

Coal Minister reviewed coal production of CIL and its subsidiaries

NEW DELHI, Dec. 3, 2021: Union Coal Minister and Mines Shri Pralhad Joshi on Thursday, December 2, 2021, reviewed coal production of Coal India Limited and its subsidiaries, and dispatch to the power sector, along with Minister of State Raosaheb Patil Danve and officials from the Ministry of Coal, Government of India.

He emphasized the continuous supply of coal to the power sector, with constant efforts. He said Power Plants have a coal stock of 17.5 MT as on date, sufficient to last more than 9 days. Additionally, CIL has more than 32 MT coal stock. However, he directed coal companies to further scale up production on mission mode in order to meet the annual targets.

(Source: https://www.psuconnect.in/)

Expert Committee on Safety in Coal Mines

RANCHI, Dec. 2, 2021: The High-Level Expert Committee on Safety in Coal Mines (constituted by the Ministry of Coal for reviewing the safety status in coal mines) interacted with the Regional Executive Director (Coal Mining) & senior NTPC Coal Mining officers (Headquarters-Ranchi) on 29.11.2021. The committee is comprised of seven domain experts led by Shri T K Nag Ex-CMD (NCL) & the Chairman of the Committee.

During the discussion, committee members provided valuable insights based on their expertise which shall serve to be beneficial to NTPC in the long run. The Expert Committee visited NTPC Pakri Barwadih Mine on November 30,2021. Shri Partha Mazumder, Regional Executive Director (Coal Mining) accompanied the committee members for the physical visit and inspection of the mine. The Chairman and all the members appreciated the overall work done by the project and specifically the measures taken to ensure the safety of the manpower and machines deployed for mining operations.

(Source: https://www.psuconnect.in/)

Opening of Technical Bids for Auction of Coal Mines for Sale of Coal

NEW DELHI, Nov. 30, 2021: The auction process of eleven coal mines under the second attempt of 12thTranche of Auction under the Coal Mines (Special Provisions) Act, 2015 and second attempt of 2ndTranche of Auction under the Mines and Minerals (Development and Regulation) Act, 1957 for sale of coal was launched by the Nominated Authority, Ministry of Coal on September 27, 2021. The last date of submission of the Technical Bid was November 29, 2021. As part of the auction process, Technical Bids comprising of online and offline bid documents were opened today



(November 30, 2021) 11:00 am onwards at Ministry of Coal, in the presence of the bidders.

(Source: https://www.psuconnect.in/)

Both Private and Public Companies are Eligible to Participate in Auction: Pralhad Joshi

NEW DELHI, Nov. 29, 2021: The Union Minister of Coal, Mines, and Parliamentary Affairs Shri Pralhad Joshi in a written reply in Rajya Sabha today, November 29, 2021, mentioned the methodology for auction of coal and lignite mines/blocks for sale of coal/lignite on revenue sharing basis has been issued on 28.05.2020. In his reply, he also mentioned that both private and government companies are eligible to participate in the auction process. Salient features of the Methodology are as under:

- 1. Based on Revenue sharing mechanism. Floor percentage at 4%.
- Applicable to fully explored as well as partially explored coal blocks.
- Upfront amount is based on value of estimated geological reserves.
- 4. Successful Bidder to pay monthly revenue share based on % revenue share quoted, total quantity of coal and notional or actual price whichever is higher.
- 5. Incentives for early production, gasification and liquefaction of
- 6. Exploitation of Coal Bed Methane (CBM) is allowed.
- 7. No restriction on the sale and/or utilisation of coal. More flexibility in coal production schedule.
- 8. Government has issued directions to the Nominated Authority for allocation of 141 coal mines through auction for sale of coal. A total of 2 tranches of auction have been successfully completed and third Tranche is currently under process. 28 coal mines have already been successfully auctioned for sale of coal.

(Source: https://www.psuconnect.in/)

Supply of coal by CIL to power sector rises 23% in Apr-Oct

Nov. 28, 2021: The dispatch of coal to the power sector by state-owned CIL rose 22.7 per cent to 291.72 million tonne (MT) in the first seven months of the ongoing fiscal year. Coal India Ltd (CIL) had dispatched 237.75 MT of coal to the power sector in April-October period of 2020-21, according to monthly summary for the Cabinet for October. The supply of coal to the power sector by CIL during the last month also increased 21.7 per cent to 47.67 MT, over 39.17 MT in the year-ago period, it said.

 $(Source: \ https://economic times.india times.com/)$

Central Coalfields Ltd signs MoU with ICFRE

NEW DELHI, Nov. 27, 2021: Central Coalfields Ltd. signed an MoU with the Indian Council of Forestry Research & Education, an autonomous organisation under the Ministry of Environment, Forest & Climate Change, Govt. of India for ecological reclamation of mined-out areas and overburden dumps over the next five years.

(Source: https://www.psuconnect.in/)

Coal India Transforming lives in remote villages of Purulia, West Bengal

NEW DELHI, Nov. 25, 2021: Coal India Ltd (CIL), often described as the backbone of India's energy security is also quietly engaged in further consolidating its Sustainable Development Goals. In many of the backward and remote hamlets of India, CIL and its subsidiary units are bringing about tangible improvements in basic amenities and the living standards of the villagers. Eastern Coalfields Limited (ECL), one of the strong subsidiaries, is further strengthening the hands of CIL to provide solar energy, other environmentally-friendly amenities, and quality education facility in the remote villages of Purulia District, West Bengal.

(Source: https://www.psuconnect.in/)

Pralhad Joshi urges state govts to strengthen mining infrastructure

NEW DELHI, Nov. 23, 2021: Union Minister of Coal and Mines, Pralhad Joshi on Tuesday said that the Ministry of Mines is open to considering further policy reforms to bring about more growth in the mining sector of the country. Addressing the fifth National Conclave on Mines and Minerals here today, Joshi said that the Centre can consider more incentives to the State governments to give more fillip to mining process across the nation. He urged the state governments to strengthen available mineral infrastructure for attaining this goal. The minister pointed out that during the first seven months of this financial year, Odisha Government has generated Rs 10,000 crores through a pro-active auction process of mines. He added that the focus should be on reducing imports of minerals to the very minimum.

(Source: https://www.aninews.in/)

Coal mines auction: Government devises plans to seek interests, participation of private sector

Nov. 22, 2021: In view of the acute requirement of dry-fuel in downstream sectors, the government has laid down a plan to auction coal blocks which will also be a major boost for increasing the revenue streams for the mine bearing states. The development assumes significance in the wake of the Ministry of Coal launching the third round of commercial coal mining for 88 coal mines last month. The coal ministry is planning to organise road shows in different parts of the country to create sensitisation on the amendments made in Acts and Rules and generate private sector interest and participation. These road shows will be organised in Ranchi, Hyderabad and Ahmedabad, according to a notice by the coal ministry. In this regard, the Ministry of Coal will appoint a Programme Management Partner to organise and manage this event successfully.

(Source: https://economictimes.indiatimes.com/)

NCL kickstarts 2-day HR Conference SHRAM-2021

SINGRAULI, Nov. 17, 2021;:NCL kickstarted the two-days HR Conference SHRAM-2021 on Wednesday. Chief of NCL's holding company Coal India Limited Shri Pramod Agarwal, Inaugurated the two-day grand HR conference (SHRAM-2021) being held at NCL on 17th and 18th November 2021. A special 'HR Knowledge Park' was also modeled in the conference, which was the center of attraction of SHRAM-2021. The park pictured different phases of the Industrial Revolution and Best HR practices with their adoption in NCL through different models. A two-day Grand HR Conference (SHRAM-2021) is being held at NCL, Singrauli (MP), and witnessing attendance from national HR experts, Speakers, and motivational speakers.

(Source: https://www.psuconnect.in/)

Pralhad Joshi reviewed performance of coal companies in Ranchi

RANCHI, Nov. 13, 2021: Hon'ble Coal Minister Shri Pralhad Joshi chaired a review meeting at Central Coalfields Limited HQ during his Ranchi visit. He reviewed the operations & performance of Coal India and its subsidiaries along with CMDs & other senior officials and directed to ramp up coal production and dispatch to fulfill the energy requirements of the nation.

(Source: https://www.psuconnect.in/)

Coal mine project: Mamata announces Rs 10,000 cr compensation package for land losers

Nov. 9, 2021: Kolkata, West Bengal Chief Minister Mamata Banerjee on Tuesday announced a compensation package of Rs 10,000 crore for the ones who would get displaced or affected in some way or the other due to the Deocha-Pachami coal mine project in Birbhum district. The state has been allotted the Deocha Pachami Harinsingha Dewanganj -- the world's second-largest coal block -- by the Centre a few years ago. "We will not do anything like what had happened in Singur (forcible land acquisition for car project). We will start the project with government-owned land. We are a pro-people government. We don't believe in doing things by force," she told the Assembly. Banerjee noted that the mining project has the potential of generating nearly one lakh jobs in Birbhum and its neighbouring districts.

(Source: https://economictimes.indiatimes.com/)



Mineral (Auction) Third Amendment Rules, 2021

Nov. 2, 2021: The Ministry of Mines On November 02, 2021 has issued the Mineral (Auction) Third Amendment Rules, 2021 to further amend the Mineral (Auction) rules 2015. The following amendments have been made: In rule 6, which specifies Eligibility of Mining Lease, In sub-rule (3) the following Explanation has been Inserted, namely: "Explanation.— This sub-rule shall be applicable in all cases of auction, notwithstanding any order or direction to the contrary, passed by any court or authority, prior to the commencement of the Mines and Minerals (Development and Regulation) Amendment Act, 2021."

(Source: http://www.indiaenvironmentportal.org.in/)

MCL's new record of 6.04 lakh tonne coal dispatch; Coal Minister appreciates efforts

NEW DELHI, Oct. 30, 2021: Union Minister of Coal, Mines and Parliamentary Affairs Shri Pralhad Joshi and Minister of State for Rail, Coal & Mines Shri Raosaheb Patil Danve today felicitated the Chairman-cum-Managing Directors (CMD) and functional directors of Mahanadi Coalfields Limited (MCL), as company scripted new history by dispatching a record 6.04 lakh tonne coal to consumers on Thursday.

(Source: https://www.psuconnect.in/)

NCL Dispatched Highest Ever 4.1 Lakh Tonnes Coal in One Day; Sent 118 Coal Rakes

SINGRAULI, Oct. 28, 2021: Northern Coalfields Limited, The Singrauli based Subsidiary of Coal India Limited has dispatched its highest ever 4.1 Lakh Tonnes of Coal to consumers on Wednesday. The record despatch comes amid the soaring supply by NCL to meet the increasing demand for Coal. Breaking Records on a regular interval, the company in the last 2 months has achieved the 'Highest Ever' feat for the third time reaching 3.87 lakh Tonnes, 4 lakh Tonnes, and now 4.10 Lakh Tonnes. NCL's pathbreaking performance in terms of Coal Dispatch and its timing is assumed significance in the backdrop of spurt of the energy demand of the Nation.

(Source: https://www.psuconnect.in/)

Vedanta to divest copper mine in Australia

Oct. 27, 2021: Vedanta Ltd on Wednesday said its arm Monte Cello BV (MCBV) has entered into a term-sheet agreement to divest Mt Lyell Copper Mine in Australia. MCBV is the 100 per cent owner of the Mt Lyell Copper Mine, a small copper asset which has been on care and maintenance for the last five years and not strategic for Vedanta with its size and country presence. "MCBV, a 100 per cent subsidiary of Vedanta Limited, has entered into a term sheet agreement to divest Copper Mines of Tasmania (CMT) by way of an option agreement with New Century Resources," the company said in a filing to BSE. Following an internal strategic review, decision was made last year to divest CMT, running a global sale process to bring in a capable operator and potential owner to evaluate and eventually restart operations at Mt Lyell, creating value for the community, Tasmanian economy, shareholders and Vedanta, it added.

(Source: https://economictimes.indiatimes.com/)

Coal minister chairs Par panel's meet to discuss way ahead for Jharia Master Plan

Oct. 27, 2021: Coal Minister Pralhad Joshi on Wednesday chaired a meeting of the ministry's Parliamentary Consultative Committee to discuss the way ahead for the Jharia Master Plan. Members of Parliament participated in the consultative committee meeting. During the presentation, it was informed that due to unscientific mining in the pre-nationalisation period, mining areas in the Jharia coalfield in Jharkhand have faced problems of fire and subsidence. Now, these areas fall in the leasehold regions of Bharat Coking Coal Ltd (BCCL), a Coal India arm. "As an outcome of WP(C) No. 381/97 filed by late Haradhan Roy, Ex-MP in 1997 in the...Supreme Court of India, a master plan for dealing with fire, subsidence and rehabilitation in Jharia was approved on August 12, 2009, by the Government of India with the implementation period of 10 years and the pre-implementation period of two years. BCCL has proposed 8,000 houses to be utilised by the Jharia Rehabilitation and Development Authority (JRDA) for non BCCL families.

In the case of rehabilitation of non-BCCL families, there has been a substantial increase in the number of encroachers as of 2019 against the cut-off date provision of 2004. The state government is responsible for shifting legal and non-legal title holders. JRDA under the state government has taken up the construction of 18,352 houses, out of which 6,352 are completed and the rest will be completed by August 2022.

(Source: https://economictimes.indiatimes.com/)

MCL signs MoU with IIT (ISM) Dhanbad

SAMBALPUR, Oct. 25, 2021: Mahanadi Coalfields Limited (MCL) today signed a Memorandum of Understanding (MoU) with the Indian Institute of Technology (ISM), Dhanbad for collaboration in research and new initiatives. The MoU was signed by Mr Awadh Kishore Pandey, HoD (Innovation Cell) on behalf of MCL while Prof. Shalivahan, Deputy Director and Dean (R&D), signed it on behalf of IIT(ISM), Dhanbad. Mr P K Sinha, Chairman-cum-Managing Director, MCL graced the MoU signing ceremony, organised virtually, along with Mr O P Singh, Director (Technical/Operations), Mr KR Vasudevan, Director (Finance), Mr Keshav Rao, Director (Personnel), Mr Baban Singh, Director (Technical/Projects & Planning) and Mr P K Patel, Chief Vigilance Officer. The MoU was signed with objectives like promoting industry-institute interface and opening channels of interaction between academic fraternity of IIT (ISM), Dhanbad and officials of MCL in areas of mutual benefit.

(Source: https://www.psuconnect.in/)

NTPC Chatti-Bariatu Coal Mining Project to start mining soon

NEW DELHI, Oct. 23, 2021: NTPC Coal mining awarded the Mine Developer-cum-Operator (MDO) contract for Chatti-Bariatu Coal Mining Project successfully on October 2, 2021. Peak rated capacity from the Chatti-Bariattu Coal mine will be 7 Million Metric Tonnes per annum. Land acquisition of this coal mining project is in an advanced stage with the help of the Hazaribag district administration. NTPC expressed its confidence over the support from the Jharkhand State Government, Hazaribag District Administration, Villagers and Other Stakeholders for the early start of coal production from Chatti-Bariatu mine. In this regard, NTPC thanked Jharkhand State Government and Hazaribag District Administration for their active support in resuming the coal despatch from Pakri Barwadih Mine on October 10, 2021, after a local protest happening in the Banadag Railway siding area.

(Source: https://www.psuconnect.in/)

Order of the National Green Tribunal regarding sand mining in Bihar

Oct. 22, 2021: Order of the National Green Tribunal (Eastern Zone Bench, Kolkata) in the matter of Shivdani Paswan Vs State of Bihar & Others dated 22/10/2021. The matter related to stay on the auction of sand blocks and granting any mining lease in Bihar till a proper, scientific and legally valid district survey report is prepared in terms of the Notification, January 15, 2016 and the Sustainable Sand Mining Guidelines, 2016. Further, the applicant has requested quashing of MOM, September 22, 2021 issued by SEIAA wherein 45 "invalid and defective environmental clearances" for sand blocks situated on river Kiul, Barnar, Jhanji, Ulai and Anjana have been arbitrarily and illegally transferred in favour of Bihar State Mining Corporation Ltd. without following the EIA Notification, September 14, 2006.

 $(Source: \ http://www.indiaenvironmentportal.org.in/)$

MCL organises seminar on safety standards in blasting operations

SAMBALPUR, Oct. 21, 2021: A seminar on 'improving safety standards in blasting and blast performance' was organised on Thursday here at Mahanadi Coalfields Limited (MCL), the leading coal producer and supplying company in the country. The seminar was inaugurated by Mr. PK Sinha, Chairman-cum-managing Director, MCL & Northern Coalfields Limited (NCL), in the presence of Mr. OP Singh, Director (Technical/Operations), Mr. KR Vasudevan, Director (Finance), Mr. Baban Singh, Director (Technical/Projects & Planning), Mr. Subrata Shekhar



Sinha, Director (Technical/Projects & Planning), NCL and members of Safety Board from the trade unions.

(Source: https://www.psuconnect.in/)

Safe, productive and climate efficient: This is how Sandvik is revolutionizing the mining industry

Oct. 20, 2021: The world is likely to witness growing demand for minerals and metals for economic growth, which can result in significant challenges if this climate-driven, clean energy transition is not managed responsibly and sustainably. According to a World Bank report on mining, production of minerals, such as graphite, lithium and cobalt, may go up by nearly 500 percent by 2050. To realize a lower-carbon future, the mining sector needs to evolve in a way that minimizes the environmental and climate footprint. For decades, the mining industry has been dependent on diesel-powered machines but now the industry has started to embrace the benefits of electrification. With the right technology, electrification in mining underground cannot just change lives and create a safer and cleaner environment but also enhance revenues for mining companies.

(Source: https://economictimes.indiatimes.com/)

Coal Minister flagged off Dumper Truck at Nigahi OCP, NCL

NEW DELHI, Oct. 19, 2021: Shri Pralhad Joshi flagged off a Coal Dumper Truck at Nigahi OCP, Northern Coalfields Limited. This indigenous dumper has been manufactured by BEML. Minister visited Nigahi OCP of Northern Coalfields Limited today and inspected dragline, shovel, and surface miners at work. He further interacted with employees to understand their issues and boost their morale. Advised expediting Nigahi expansion project to achieve 25 MT coal extraction.

(Source: https://www.psuconnect.in/)

Closure of some mines, inundation due to monsoon led to coal crisis: Joshi

Oct. 14, 2021: Coal Minister Pralhad Joshi on Thursday said closure of some mines, and inundation of a few others due to monsoon led to the crisis but there is no need to panic as the situation is improving. Visiting the Ashoka mine of the Central Coalfields Ltd (CCL) at Piparwar in Chatra district of Jharkhand, Joshi said the power plants in the country will continue to receive the required amount of coal. "We are witnessing an improvement now," he said, asked about the current situation. The minister held discussions with officials of CCL and Eastern Coalfields Ltd (ECL) on the prevailing situation. "We can produce two million tonnes of coal per day," he said, asserting the need for producing more coal.

(Source: https://economictimes.indiatimes.com/)

Delay in forest, environment nods halts operations in CCL projects

Oct. 12, 2021: Delays in forest and environment clearances to some eight coal projects and a washery of the Central Coalfields Ltd (CCL) in this mineral-rich belt of Jharkhand has resulted in operations in these coal-mines coming to a standstill for several months. This in turn has caused significant production losses to CCL, General Manager, Barka-Sayal area of CCL, Amresh Singh said.

 $(Source: \ https://economic times.india times.com/)$

Pre-bid conference for auction for 11 coal mines

NEW DELHI, Oct. 11, 2021: The Nominated Authority in the Ministry of Coal had launched the second attempt of the auction for 11 coal mines (4mines under the Tranche 12 of CM(SP) Act and 7 mines under the Tranche 2 of MMDR Act) earmarked for sale of coal last month. These were the mines which were offered in the first attempt launched on March 25, 2021, and had fetched single bids. Ministry of Coal has organised a pre-bid conference today for prospective bidders. Presentations were made on terms and conditions of auction, technical details of mines and National Coal Index by SBI Capital Markets Limited, Central Mine Planning and Design Institute (CMPDI), and DDG respectively.

(Source: https://www.psuconnect.in/)

Coal availability is sufficient to meet Power Plant demands; clarifies Ministry of Coal

NEW DELHI, Oct. 10, 2021: Amid speculation about power cut due to coal shortage across the thermal power plants across the country, the Ministry of Coal, Government of India on Sunday, reassures that ample coal is available in the country to meet the demand of power plants. Any fear of disruption in power supply is entirely misplaced. In an official statement the Ministry of Power said that the coal stock at power plant end is about 72 Lakh tonnes, sufficient for four days requirement, and that the Coal India Limited (CIL) end is more than 400 Lakh tonnes, which is being supplied to the power plants.

(Source: https://www.psuconnect.in/)

Coal Ministry is in the process of finalising a robust mine closure framework

NEW DELHI, Oct. 7, 2021: The Ministry of Coal is in the process of finalising a robust mine closure framework with thrust on three major aspects of institutional governance, people &communities, and environmental reclamation & land repurposing on the principles of just transition. The Ministry is in consultation with the World Bank for obtaining support and assistance in this program. Vast experience of the World Bank in handling mine closure cases in different countries will be highly beneficial and will facilitate adoption of the best practices and standards in handling of mine closure cases. A Preliminary Project Report (PPR) for the proposed engagement with the World Bank has been submitted to the Finance Ministry for necessary approvals. The process of repurposing of closed mines sites has already been set in motion by the Sustainable Development cell of the Ministry of Coal. Several rounds of meetings have been held with coal companies and Coal Controller Office to discuss various aspects relating to the envisaged program. Inter-Ministerial consultations have also been made with ministries concerned and NITI Aayog to obtain their views and suggestions.

(Source: https://www.psuconnect.in/)

CIL approves pre-feasibility report for integrated greenfield aluminium project

NEW DELHI, Oct. 6, 2021: The government-owned coal mining and refining corporation Coal India Ltd on Tuesday gave the approval of the prefeasibility report for aluminium project in Odisha. In its regulatory filing, CIL mentioned, "CIL in its board meeting held on a date had accorded its in-principle approval to pre-feasibility report for setting up of integrated greenfield aluminium project in Odisha which shall include bauxite mining, alumina refinery, aluminium smelter and associated captive power plant by its wholly-owned subsidiary Mahanadi coalfields Limited," according to PTI

(Source: https://www.psuconnect.in/)

Coal Ministry amends Mineral Concession Rules, notifies rules for 50% Sale of Coal from Captive Mines

NEW DELHI, Oct. 5, 2021: The Ministry of Coal has amended Mineral Concession Rules, 1960 with a view to allowing the sale of coal or lignite, on payment of the additional amount, by the lessee of a captive mine up to 50 percent of the total coal or lignite produced in a financial year, after meeting the requirement of the end-use plant linked with the mine. Earlier this year, the Mines and Minerals (Development & Regulation) Amendment Act had been amended to this effect. This is applicable for both the private and public sector captive mines.

(Source: https://www.psuconnect.in/)

Coal Companies transforming villages under Jal Jeevan Mission

NEW DELHI, Oct. 5, 2021: In line with the clarion call given by the Prime Minister to provide potable water in remote villages under Jal Jeevan Mission, Western Coalfields Ltd., (WCL), a subsidiary of Coal India Ltd.(CIL) is transforming lives of villagers by not only providing purified potable mine water at their doorstep but also generating revenue for the women folks of the villages under Self Help Group (SHG) Scheme. Other



Coal Companies of CIL have also embarked upon an ambitious project of gainful utilisation of potable mine water in the nearby villages.

(Source: https://www.psuconnect.in/)

Coal ministry finalized Agenda Document for year 2021-22

NEW DELHI, Oct. 4, 2021: The Ministry of Coal has finalized an Agenda Document for the year 2021-22 which broadly focuses on the four areas of Coal Sector Reforms, Coal Transition and Sustainability, Institution Building, and Futuristic Agenda. This is for the first time that an Agenda document for the ensuing year has been brought out in the form of a compilation and provided to all senior functionaries who have been apportioned the responsibility of steering these four broad focus areas through the year with regular monitoring and appraisals.

The Agenda 2021-22 document is available on the website of Ministry of Coal.

(Source: https://www.psuconnect.in/)

Important Parliamentary Questions

LOK SABHA UNSTARRED QUESTION

Question No. 2945 answered on 15.12.2021

Closure of Mines

2945. SHRIMATI MANEKA SANJAY GANDHI:

Will the Minister of MINES be pleased to state:

- (a) whether the Government is seeking the assistance of the World Bank for the closure of mines;
- (b) if so, whether this includes financial assistance, and if so, the details thereof; and
- (c) whether the Government had sought the assistance of the World Bank for coal related projects in the past and if so, the details thereof?

ANSWER: THE MINISTER OF MINES, COAL AND PARLIAMENTARY AFFAIRS (SHRIPRALHAD JOSHI)

- (a): Yes, Sir. Ministry of Coal has informed that the Ministry is in receipt of a proposal from World Bank for rendering assistance in handling of mine closure cases on principles of just transition. The said proposal is under consideration at Ministry of Coal.
- (b): As per the information received from Ministry of Coal, World Bank has proposed for technical assistance of 16.15 million USD as grant and concessional financing of USD 1 billion as loan.
- (c): Ministry of Coal has informed that the Ministry had not sought any assistance from World Bank during last 5 years period for such proposals.

• Question No. 2918 answered on 15.12.2021

First Mile Connectivity Project

2918. SHRI CHANDRA SEKHAR SAHU:

Will the Minister of COAL be pleased to state:

- (a) whether an innovative Remotely Piloted Aircraft System (RPAS) at Mahanadi Coalfields Ltd (MCL) was inaugurated in the recent past;
- $(b) if so, the \, details \, thereof \, and \, the \, salient \, features \, of \, the \, said \, system; \\$
- (c) whether first mile connectivity project-Lajkura SILO has also been inaugurated;
- (d) if so, the details thereof and the extent to which dispatch capacity of Mahanadi Coalfields Ltd. will be improved from this project;
- (e) whether some additional employment opportunity will also be increased from the operation of first mile connectivity project; and
- (f) if so, the details in this regard?

ANSWER: MINISTER OF PARLIAMENTARY AFFAIRS, COAL AND MINES (SHRI PRALHAD JOSHI)

(a) & (b): Yes Sir. An internet-based platform called 'VIHANGAM' integrated with a Remotely Piloted Aircraft System (RPAS) at Mahanadi

Coalfields Limited (MCL) was inaugurated on 1st September 2021. The salient features of the said system are as under-

- (i) The system consists of a Ground Control Station (GCS), an RPAS, internet lease line of 40 Mbps and VIHANGAM portal. It has been deployed at two opencast mines of MCL namely Bhubaneswari and Lingaraj initially on trial basis.
- (ii) The system enables real-time transmission of aerial video of mining activities from mines to internet platform which can be accessed through VIHANGAM portal by authorized personnel only having ID and password.
- (c) & (d): The First Mile Connectivity project Lajkura RLS has been awarded to L&T Limited with Operation and Maintenance for 5 years for a total value of ₹285.05 crore. The Foundation stone for Lajkura RLS 15 Mty was laid on 01.09.2021. The anticipated date of commissioning of the RLS is March 2023.
- (e) & (f): The Operation and Maintenance of Lajkura RLS will be done by L&T for a period of 05 years by engaging necessary manpower.

• Question No. 1780 answered on 8.12.2021

New Coal Mines

1780. SHRI NAMA NAGESWARA RAO:

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

- (a) whether the Government is planning to open new coal mines due to recent shortage of coal;
- (b) if so, the details of the proposed number of new coal mines and the proposed sites of mining;
- (c) whether the Government is planning to use forest lands for the proposed new mines and if so, the details of places and the number of hectares of forest land to be used in case of each new mine; and
- (d) the percentage of energy needs of India that are achieved through usage of coal?

ANSWER: MINISTER OF COAL, MINES & PARLIAMENTARY AFFAIRS (SHRI PRALHAD JOSHI)

(a), (b) & (c) Details of new coal mines to be taken up for implementation by the Government and forest lands are as under:

Sl No	Project	Subsidiary	State	Туре	Forest Land in PR (in Ha)
1	Hura C	ECL	Jharkhand	OC	527.04
2	Itapara	ECL	West Bengal	OC	0.00
3	Muraidih	BCCL	Jharkhand	UG	0.00
4	Kapuria Ug	BCCL	Jharkhand	UG	216.20
5	Sanghmitra	CCL	Jharkhand	OC	572.71
6	Chandragupta	CCL	Jharkhand	OC	663.90
7	Kotre Basantpur	CCL	Jharkhand	OC	814.93
	Pachmo				
8	Patratu Abc	CCL	Jharkhand	UG	803.45
9	Piparwar Ph-I	CCL	Jharkhand	UG	37.81
10	Pichri Oc	CCL	Jharkhand	OC	23.02
11	Sayal D Oc	CCL	Jharkhand	OC	161.00
12	Dhankasa	WCL	Madhya Pradesh	UG	385.84
13	Gandhigram	WCL	Madhya Pradesh	UG	7.62
14	Gauri Pauni	WCL	Maharashtra	OC	0.00
15	Sharda	WCL	Madhya Pradesh	UG	9.50
16	Tawa Iii Rpr	WCL	Madhya Pradesh	UG	127.46
17	Wagoda	WCL	Maharashtra	UG	0.00
18	Durgapur	SECL	Chhattisgarh	OC	237.26
19	Madannagar	SECL	Chhattisgarh	OC	982.60
20	Pelma	SECL	Chhattisgarh	OC	761.53
21	Ketki Ug	SECL	Chhattisgarh	UG	208.00
22	Porda	SECL	Chhattisgarh	OC	183.03
	Chimtapani				
23	Rampur Batura	SECL	Chhattisgarh	OC	112.94
24	Ambika Rce	SECL	Chhattisgarh	OC	6.28
25	Batura West Oc	SECL	Chhattisgarh	OC	0.00
26	Jhiria West	SECL	Chhattisgarh	OC	323.74
27	Siarmal	MCL	Odisha	OC	349.71
28	Subhadra	MCL	Odisha	OC	146.29



(d) As per draft report of NITI Aayog on India Vision @2035, contribution of coal is 463 MToe in total primary energy supply of 937 MToe i.e. 49.41% for 2019-20.

• Question No. 662 answered on 1.12.2021

Auction of Coking Coal Mines

662 SHRI RAJBAHADUR SINGH,

SHRI SANGAM LALGUPTA,

SHRI MAHENDRA SINGH SOLANKY,

SHRIMATI SANDHYARAY.

DR. KRISHAN PALSINGH YADAV

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

- (a) Whether the Government is proposing to launch an auction for the coking coal mines;
- (b) if so, the details of the actions and steps taken in this regard;
- (c) the details of blocks auctioned during the last five years, State-wise; and
- (d) the target set for production of coking coal and the details of coking coal generated through the auctioned coking coal mines?

ANSWER: MINISTER OF COAL, MINES & PARLIAMENTARY AFFAIRS (SHRI PRALHAD JOSHI)

- (a) & (b) Coking and non-coking coal mines are auctioned together. Presently, Ministry is not proposing to launch auction exclusively for coking coal mines.
- (c) The details of coking coal blocks auctioned during the last five years, State-Wise is as under:-

S.	Auction	State	Name of the Coal	PRC (MTPA)
No.	Tranche		Mine	
1	11	Jharkhand	Brahmadiha	0.15
2		Madhya	Urtan	0.65
3		Pradesh	Urtan North	0.60
4	12	Jharkhand	Jogeshwar and	NA (PRC not available
			Khas Jogeshwar	since it is a partially
				explored coal mine)

(d) Total 5 coking coal mines have been auctioned with an aggregate peak rated capacity of 2.4 Million tonnes per annum, however, production from auctioned coking coal blocks is yet to start. Details of the above-mentioned 5 coal mines are as under:-

S.	State	Name of the Coal	PRC (MTPA)	Target Month of
No.		Mine		Production
1.	Jharkhand	Moitra	1.0	December-2018
2	Jharkhand	Brahmadiha	0.15	May-2025
3	Madhya Pradesh	Urtan	0.65	August-2026
4		Urtan North	0.60	May-2025
5	Jharkhand	Jogeshwar and Khas	NA	March-2027
		Jogeshwar		

• Question No. 619 answered on 1.12.2021

Accidents in coal mines

619. SHRI SUKHBIR SINGH JAUNAPURIA

Will the Minister of COAL be pleased to state:

- (a) whether any technical analysis has been performed to find out the causes of the accidents in the coal mines;
- (b) if so, the details of the findings and the measures taken as a result thereof;
- (c) the suitable measures taken in general to conduct study of the said circumstances and investigate landslides in mines;
- (d) whether these mines are equipped with any automatic alarm for early warning of any landslides; and
- (e) if so, the details thereof?

ANSWER: MINISTER OF PARLIAMENTARY AFFAIRS, COAL AND

MINES (SHRI PRALHAD JOSHI)

- (a) & (b): Yes Sir. Inquiries into all fatal accidents, major serious accidents and dangerous occurrences are conducted by Directorate General of Mines Safety (DGMS) officers to find out the causes and circumstances leading to the accidents/incidents in coal mines. As per the findings of the enquiries, suitable actions or measures are taken as per the provisions of the Mines Act, 1952 to prevent recurrence of such accidents or dangerous occurrences. The following measures taken:
- i. Based on the analysis, technical circulars are issued from time to time to the industry.
- ii. National Conference on Safety in Mines (NSC), a national level tripartite forum is organized periodically in which detailed deliberations on prevention of mine accidents and improving safety are made and the recommendations of NSC, are disseminated in the form of circulars and are reviewed periodically by different coal producing companies.
- iii. Scientific studies are carried out with the help of reputed institutes/scientific bodies to find out safe working culture.
- iv. Follow-up inspections are made periodically based on risk analysis.
- v. Improvement notices under section 22A of the Mines Act, 1952 are issued. vi. Penal actions/prosecution against the persons/officials found responsible
- for the accidents based on the enquiry findings of the report. vii. Coal Mines Regulations, 2017 has been enforced, which provides for risk based safety Management Plan (SMP) and preparation of safe Operating Procedure (SOPS).
- (c): The Coal Mines Regulations, 1957 was suitably amended incorporating provisions for conduct of scientific study for method of work, ultimate pit slope, dump slope & monitoring of slope stability, at opencast coalmines under Regulation 106 of the Coal Mines Regulations, 2017. All mines conduct Scientific Study, under these provisions of Coal Mines Regulations, 2017 before starting mechanized opencast working and work shall be carried out as per the recommendations of the Scientific Study reports. In case of landslides/slope failure, investigations are carried out and management are directed to conduct fresh Scientific Study & review the working parameters to prevent such slope failures.

Guidelines for systematic monitoring of slopes in coal and metalliferous Mines was circulated vide DGMS (Tech) Circular No. 02 of 2020 dated 09.01.2020 regarding real-time monitoring of slope stability.

(d)&(e): Yes, certain mines are provided with automatic alarm systems such as Slope Stability RADAR (SSR) for the early warning of slide at opencast mines. In other mines, regular monitoring of slope stability is carried out by using prisms and total stations.

• Question No. 546 answered on 1.12.2021

Coal Mining Activity

546. SHRIS. JAGATHRAKSHAKAN:

Will the Minister of COAL be pleased to state:

- (a) whether the Government agrees with the view that if livelihoods are not protected while reducing coal mining activity, it would precipitate a socio economic crisis;
- (b) if so, the details of the measures taken/being taken by the Government in this direction; and
- $(c) if not, the \, reasons \, thereof? \\$

ANSWER: MINISTER OF PARLIAMENTARY AFFAIRS, COAL AND MINES (SHRI PRALHAD JOSHI)

- (a): Being an affordable source of energy with substantial reserve, there is no plan to reduce coal mining activity in the foreseeable future.
- (b) & (c): Questions do not arise in view of answer to part (a) above.



• Question No. 509 answered on 1.12.2021

Coal Production

509. SHRI BALUBHAU ALIAS SURESH NARAYAN DHANORKAR: SHRI KARTI P. CHIDAMBARAM:

Will the Minister of Coal be pleased to state:

- (a) the year-wise details of coal production from 2004 to 2021;
- (b) the year-wise details of consumption of coal in thermal power plants from 2004 to 2021:
- (c) the year-wise details of coal imported between 2004 and 2021;
- (d) whether there is a scarcity of coal in the country and if so, the reasons therefor; and
- (e) the details of the actions taken by the Government to deal with the national shortage of coal supply and the resultant power cuts in several States?

ANSWER: MINISTER OF PARLIAMENTARY AFFAIRS, COAL AND MINES (SHRI PRALHAD JOSHI)

- (a): The year wise details of coal production from 2004 to 2021 is at table—A of the Annexure.
- **(b):** The year wise detail of consumption of coal in Thermal Power plants between 2004-05 to 2020-21 is at table –B of the Annexure.
- **(c):** The year wise details of coal Import from 2004 to 2021 is at table-C of the Annexure.
- (d): There is no shortage of coal in the country. Due to increased demand of power, less power generation by imported coal based power plants and some interruption in supply of coal due to heavy rains, the coal stock at the power plants depleted to 7.2 MT (sufficient for 4 days) as on 8th October, 2021. Subsequently with increased coal supplies, the coal stock has started increasing and has now reached 16.74 MT (sufficient for 9 days) as on 25.11.2021. Coal India Limited (CIL) has dispatched around 54 Million Tonnes (MT) more coal during April October'21 in comparison to the same period of last year. CIL has dispatched 291.72 MT coal during this period, against 237.75 MT during the same period of last fiscal. The coal stock at CIL pithead was 40.23 MT as on 08.10.2021 and 32.30 MT as on 25.11.2021.
- (e): Steps taken to improve coal supplies for meeting increased demand in the country are as follows:
- i. In order to address the issues of coal supplies to power sector, an Inter-Ministerial Sub-Group comprising of representatives from Ministry of Power, Ministry of Coal, Ministry of Railways, Central Electricity Authority (CEA), CIL and SCCL meet regularly to take various operational decisions to enhance supply of coal to thermal power plants as well as for meeting any contingent situations relating to power sector including critical coal stock position in power plants.
- ii. CIL had offered about 5.2 MT of additional coal from its various subsidiaries to States, Central Gencos for lifting through RCR/Road Mode. iii. In addition to Annual Contracted Quantity (ACQ), coal has been offered under RCR mode on 'as is where is basis' to build up stock at Power house end.
- iv. The Ministry of Coal has amended Mineral Concession Rules, 1960 with a view to encourage domestic coal production enhancement from captive mines by allowing sale of coal or lignite, on payment of additional amount, by the lessee of a captive mine up to 50 percent of the total coal or lignite produced in a financial year, after meeting the requirement of the end use plant linked with the mine. Earlier this year, the Mines and Minerals (Development & Regulation) Act had been amended to this effect. This is applicable for both the private and public sector captive mines. With this amendment, the Government has paved the way for releasing of additional coal in the market by greater utilization of mining capacities of captive coal and lignite blocks, which were being only partly utilized owing to limited production of coal for meeting their captive needs.

Annexure

Table-A (Fig in million tonnes)
Year	Production of coal from
	2004-05 to 2020-21
2004-05	382.615
2005-06	407.039
2006-07	430.832
2007-08	457.082
2008-09	492.757
2009-10	532.042
2010-11	532.694
2011-12	539.950
2012-13	556.402
2013-14	565.765
2014-15	609.179
2015-16	639.230
2016-17	657.868
2017-18	675.400
2018-19	728.718
2019-20	730.874
2020-21	716.084

Table -B (F	ig in million tonnes)
	~
Year	Consumption of coal
	in Thermal Power
	Plants between
	2004-05 to 2020-21
2004-05	278.00
2005-06	281.00
2006-07	303.00
2007-08	324.00
2008-09	348.00
2009-10	360.20
2010-11	386.60
2011-12	417.60
2012-13	454.60
2013-14	489.40
2014-15	530.40
2015-16	545.90
2016-17	574.30
2017-18	608.00
2018-19	628.00
2019-20	622.20
2020-21	615.40

Table – C (Fig in million tonnes)				
Year	Import of coal from 2004-05 to 2020-21			
	2004-03 to 2020-21			
2004-05	28.950			
2005-06	38.586			
2006-07	43.081			
2007-08	49.794			
2008-09	59.003			
2009-10	73.255			
2010-11	68.918			
2011-12	102.853			
2012-13	145.785			
2013-14	166.857			
2014-15	217.783			
2015-16	203.949			
2016-17	190.953			
2017-18	208.249			
2018-19	235.348			
2019-20	248.537			
2020-21	214.995			



• Question No. 51 answered on 1.12.2021 Setting up of DMF

51. SHRI RAMDAS C. TADAS:

Will the Minister of MINES be pleased to state:

- (a) whether District Mineral Foundation (DMF) has been set up in Maharashtra as per new order of the Ministry dated 23 April, 2021;
- (b) if so, the details thereof and if not, the reasons for the delay; and
- (c) the details of the works carried out so far under the Pradhan Mantri Khanij KshetraKalyanYojana (PMKKKY) for the welfare of the affected people in the State, particularly in Wardha and Amaravati districts during the last five years?

ANSWER: THE MINISTER OF MINES, COAL AND PARLIAMENTARY AFFAIRS (SHRIPRALHAD JOSHI)

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

Statement

(a) & (b): Sir, Government of Maharashtra has informed that the incorporation of amendment in the rules regulating the composition of Governing Council and management Committee of District Mineral Foundation in view of the order dated 23.04.2021 is under process in consultation with Law Department of the State Government. (c): Information is provided in annexure.

Annexure

DMF Fund Status - Maharashtra (Till September 2021)

S.No.	District	Total DMF	Number of	Details of Projects/	Amount	Amount
		Collection	Projects	Schemes under	Allocated	Spent (In
		(In Cr.)	Sanctioned	implementation	(In Cr.)	Cr.)
1	Amravati	23.17	70	70	17.75	16.63
2	Wardha	15.28	426	426	7.04	5.79
Total DMF Collection in		2790.71	6967.00	6967	1952.47	1314
the State (32 Districts)						

RAJYA SABHA UNSTARRED QUESTION

• Question No. 830 answered on 6.12.2021 Skill development in coal sector

830. Dr. Vikas Mahatme:

Will the Minister of COAL be pleased to state:

- a) the number and details of projects undertaken by Government in the last three years for skill development in the coal sector, State-wise;
- (b) the number of candidates trained in the last three years; and
- (c) whether Government has signed Memorandum of Understanding (MoU) for skill development in coal sector with other countries, if so, the details thereof and, if not, the reasons therefor?

ANSWER: MINISTER OF PARLIAMENTARY AFFAIRS, COAL AND MINES (SHRI PRALHAD JOSHI)

- (a): Skill development projects taken by Coal India Limited (CIL) and its subsidiaries and NLC India Limited (NLCIL).
- (b): The number of candidates, including apprentices trained in the last three years are as under:-

Sr. No.	Name of Company	Number of Person trained
1.	Coal India Limited	36519
2.	NLCIL	42636

(c): Skill development activities are focused on local youth in and around mining areas with the objective to train and develop them in various trades in line with locally available opportunities making them employable/self-reliant for their livelihoods. These needs are sufficiently served by engaging Indian skill development partners. Hence, no MoU has been signed so far with other countries for skill development under CSR by CIL and its subsidiaries and NLCIL.

• Question No. 828 answered on 6.12.2021 Workers health working in coal mines

828. Shri Rakesh Sinha:

Will the Minister of COAL be pleased to state:

- (a) the diseases which are commonly found among workers working in coal mines:
- (b) the medical facilities given to them;
- $(\ensuremath{\mathbf{c}})$ the difference between medical facilities given to permanent workers and contract workers;
- (d) whether there is any arrangement for regular medical checkups for the coal workers;
- (e) whether Government is aware of medical facilities given to coal workers working in non-Government owned coal mines; and
- (f) whether coal workers mostly suffer from lungs disease and tuberculosis? ANSWER: MINISTER OF PARLIAMENTARY AFFAIRS, COAL AND MINES (SHRI PRALHAD JOSHI)
- (a): People working in any mine, including coal, suffer from diseases such as Pneumoconiosis, Tuberculosis etc if no preventive and remedial measures are taken concurrently.
- (b): The employees of Coal PSUs and their dependants are provided with preventive, curative and rehabilitative medical facilities free of cost through the medical infrastructure in the company.
- (c): The Contractors Workers are engaged through Contractors to execute various jobs at Coal PSUs. In addition to the facilities provided by the Contractors to their workers, benefit of OPD and Indoor Treatment facility in Company's hospitals and Dispensaries free of cost including medicines, pathological examination and other surgical treatment are also extended to contractors' workers.
- (d): Conditions for engagement provide for regular medical checkup.
- (e): "In the Coal Mine / Block Development and Production Agreement signed between the successful bidders / allottees and the Nominated Authority, following clause is there in respect of health and safety of employees:-

The Successful Bidder/Allottee shall comply with all Applicable Laws and observe Good Industry Practice for the protection of the general health, safety, welfare, social security and minimum wages of employees engaged at the Coal Mine, including employees of any contractor or sub-contractor and of all other persons having legal access to the area covered by this Agreement."

No instance of violation has come to the notice of Ministry of Coal.

(f): As per information provided by Coal PSUs, disease burden of cases of lung disease and Tuberculosis have declined over the years owing to medical intervention and awareness resulting in the employees suffering from such ailments being in the same proportion as that of general population.

• Question No. 47 answered on 29.11.2021 Coal mine safety

47. Dr. Amar Patnaik:

Will the Minister of Coal be pleased to state:

- the number of serious injuries, serious accidents, fatalities that have been sustained by workers over the last five years in subsidiaries of Coal India Limited;
- (b) the details of the ex-gratia provided to employees and contractual workers over the last five years;
- (c) whether any inquiry has been undertaken to ascertain reasons behind accidents at coal mines;
- (d) if so, the details thereof, if not the reasons therefor;
- (e) whether Government has taken any measures to improve the safety and rescue division in the past five years; and
- (f) if so, the details thereof, if not the reasons therefor?



ANSWER: MINISTER OF PARLIAMENTARY AFFAIRS, COAL AND MINES (SHRI PRALHAD JOSHI)

- (a): The number of serious injuries, serious accidents, fatalities in the last 5 (five) years in subsidiaries of Coal India Limited are given in the Annexure.
- **(b) :** The total ex-gratia of Rs 12.75 Crores provided to the next of kin of deceased employees and contractual workers, who died in any mine accident arising out of and in course of employment, in the last five years as a special relief / ex-gratia, which is in addition to the amount payable under the Employee's Compensation Act-1923 (amended as on date), which has been increased to Rs. 15 lakhs w.e.f. 07.11.2019.
- (c) & (d): Yes Sir. All fatal accident cases were investigated to ascertain the causes and circumstances leading to these accidents.

The law enforcing agency / regulatory authority under the Mines Act- 1952 i.e. the Directorate General of Mine safety (DGMS) have conducted statutory enquiry to find out the causes and circumstances leading to these accidents, fixing the responsibility of person(s) and to suggest the corrective measures required to be taken to prevent recurrence of similar type of fatal accident as per the provisions under the Mines Act- 1952.

All mine accidents are also inquired / investigated by the Mine Manager or any Asst. Manager authorized by the Mine Manager and the Safety Officer of the respective mine as per provisions made under the Coal Mines Regulations-2017.

Apart from the above investigations / enquiries made under various provisions of the statutes, the Internal Safety Organization (ISO) of each subsidiary company has also conducted enquiry in case of fatal accidents. The causes and circumstances leading to those mine accidents have been identified through these investigations. The inquiry officials have also recommended corrective measures to be taken to prevent recurrence of accidents and identified responsibility of persons for such accidents.

(e)&(f): The Government has taken following measures to improve the safety mine:

- Development of suitable legislation, rules, regulations, standards and guidelines.
- (ii) CMR, 1957 was comprehensively revised and amended as CMR, 2017
- (iii) Occupational Safety, Health & Working Conditions (OSH& WC) code 2020 has been enacted.
- (iv) Awareness initiatives to promote safety and health culture amongst work-persons and stakeholders.
- (v) Inspection of mines, investigation into accidents, dangerous occurrences, complaints & other matters.
- (vi) Interactions for development of safety equipment, material and safe work practices through workshop etc.
- (vii) Organization of Conference on Safety in Mines, National Safety Awards to the mines practicing best safety
- (viii) Standard and Safety Weeks & Campaigns.
- (ix) Promoting, safety education and awareness programmes, workers' participation in safety management through workmen's inspector, safety committee, and tripartite reviews
- (2) Rescue & recovery service in the mine are regulated by Mine Rescue Rules, 1985 and accordingly the inspections of rescue station & Rescue room are done to ensure their effective functioning, preparedness at the time of emergency and checking the rescue and recovery items kept by them. Rescue practice and mock drills are conducted regularly. Also all India Mine Rescue competition are organized every year to develop, enhance & sharpen the emergency response skills of rescue brigades.

Annexure

Subsidiary	Subsidiary Year-wise Serious Accidents					
	2016	2017	2018	2019	2020	
ECL	44	20	24	18	18	
BCCL	5	13	7	10	9	
CCL	7	5	9	4	7	
NCL	13	10	8	12	14	
WCL	17	18	17	16	6	
SECL	27	36	20	22	15	
MCL	7	6	4	4	4	
NEC	0	0	0	0	0	
CIL	120	108	89	86	73	
	Year-		rious In	juries		
ECL	44	20	25	18	22	
BCCL	5	13	7	12	9	
CCL	8	5	16	4	7	
NCL	13	10	8	12	15	
WCL	17	18	17	17	7	
SECL	29	36	21	23	16	
MCL	7	6	4	4	4	
NEC	0	0	0	0	0	
CIL	123	108	98	90	80	
		wise fat	alities			
ECL	31	9	2	7	7	
BCCL	6	2	2	6	2	
CCL	4	6	8	2 2	1	
NCL	4	3	3	2	2	
WCL	5	3	5	2	4	
SECL	9	9	15	7	10	
MCL	2	5	8	8	4	
NEC	0	0	0	0	0	
CIL	61	37	43	34	30	

• Question No. 38 answered on 29.11.2021 New coal mines

38. SHRI DEEPAK PRAKASH:

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

(a) the number of new coal mines opened in various regions of the country by Government during the last three years, State-wise; (b) whether these initiatives have promoted domestic electrification under major schemes of Government; (c) if so, the details thereof; and (d) if not, the reasons therefor? ANSWER: MINISTER OF COAL, MINES & PARLIAMENTARY AFFAIRS (SHRI PRALHAD JOSHI)

a. Total of 77 coal mines in the country have got Mine Opening Permission from FY 2018-19 onwards. State-wise bifurcation of these mines is as below:

S.No	Name of State	Number of mines
1	Jharkhand	23
2	Chhattisgarh	12
3	Odisha	8
4	West Bengal	14
5	Telangana	12
6	Maharashtra	5
7	Karnataka	1
8	Madhya Pradesh	2
Total		77

• Question No. 34 answered on 29.11.2021 Demand of coal in power sector

34. DR. KIRODI LAL MEENA:

Will the Minister of Coal be pleased to state:

- (a) whether Coal India Limited is ready to fulfill the increasing demand of coal in power sector;
- (b) if so, whether the company is emphasizing on increasing its production to increase the supply for coal-based power plants;
- (c) whether a good percentage of coal based power production in the country is depended on supply by coal India Limited and, if so, the details thereof; and



(d) whether Coal India Limited has sufficient amount of coal in its coal mines and, if so, the details thereof?

ANSWER: MINISTER OF PARLIAMENTARY AFFAIRS, COAL AND MINES (SHRI PRALHAD JOSHI)

(a) & (b): In order to augment dispatches and achieve the targeted offtake, Coal India Limited (CIL) has taken necessary steps for achieving highest ever power despatch & power rake loading in 2021-22. CIL has dispatched around 54 Million Tonnes (MT) more coal during April-October 2021 in comparison to the same period of last year. CIL has dispatched 291.72 MT of coal during this period, posting a 23% growth against 237.75 MT during the same period of last fiscal. There is sufficient coal available at CIL's end to cater to the increasing needs of the power Sector in the coming days. CIL has envisaged a production Plan to reach 1 billion tonnes of coal production which will further boost the domestic availability of coal in the country.

(c): Ministry of Power/ Central Electricity Authority (CEA) has given a projection of 723 MT of coal to be supplied to Power Sector for the year 2021-22, out of which CIL caters to roughly 76% i.e. 548 MT. Thus, majority of the generation of Power in the country is fueled by CIL.

(d): CIL has sufficient amount of coal stock. In the year 2020-21, CIL had ended the fiscal with a record high stock of 99.13 MT at its pithead. In the current year, as on 24.11.2021, CIL is carrying a pithead coal stock of around 32.30 MT and with the surge in production in the coming days of the current fiscal, the stock is expected to increase further.

• Question No. 29 answered on 29.11.2021 Greening Initiatives in Coal Sector

29. DR. VINAY SAHASRABUDDHE

Will the Minister of Coal be pleased to state :-

- (a) the various greening initiatives undertaken by the Ministry and its PSUs in the coal sector;
- (b) the details of mines/clusters monitored for greening initiatives:
- (c) whether the Ministry has prepared any roadmap for undertaking greening initiatives in coal sector, if so, the details thereof and, if not, the reasons therefor; and
- (d) whether the Ministry has undertaken any initiative for reclamation of mined out areas, if so, the details thereof and, if not, the reasons therefor?

ANSWER: MINISTER OF COAL, MINES AND PARLIAMENTARY AFFAIRS (SHRI PRALHAD JOSHI)

- (a) In order to promote sustainable mining and minimize the adverse footprints of mining on native environment, coal/lignite CPSUs under Ministry of Coal (MoC) have been taking various green initiatives, namely
- Biological reclamation of mined out land and overburden dumps,
- Avenue plantation along coal transportation and other roads
- Creation of green belt around infrastructures, sidings and other industrial installations to reduce air pollution.
- Plantation around mine boundary and residential colony for noise attenuation.
- Plantation on free land parcels within and outside mine leasehold
- Distribution of saplings to people for participatory plantation programme.

With an aim to provide boost to greening initiatives, Ministry of Coal (MoC) organizes Vriksharopan Abhiyan every year involving all mining areas of coal/lignite CPSUs. Launch of such Abhiyan with participation of dignitaries from Ministry of Coal, senior officers of CPSUs and local leaders & celebrities provides impetus to the ongoing reclamation/plantation drive of CPSUs. Free distribution of saplings amongst local inhabitants/agencies during the Abhiyan enhances plantation and also sensitizes the host community on importance of plantation.

(b) to (d) As per MoC's Mine Closure Guidelines of 2009, which was subsequently revised in 2013 and 2020, all coal mines of coal/lignite CPSUs have an approved mine closure plan comprising of Progressive and Final Mine Closure Plan with detailed provisions for reclamation of mined out areas along with phasing of such activities. For financial assurance, all mines

have to deposit the estimated mine closure cost in an Escrow Account on annual basis towards security to cover the cost of mine closure activities. Based on provisions made in approved mine closure plans and projected plans for plantation in other areas, if any, coal/lignite mines have drawn a 5-year road map for taking up greening activities. CPSU-wise compiled targets for 5 year roadmap for greening activities are given in the following table:

Years	CIL (Ha)	NLCIL (Ha)	Total (Ha)
2021-22	1310	164	1474
2022-23	1310	192	1502
2023-24	1330	194	1524
2024-25	1405	194	1599
2025-26	1445	194	1639
Total	6800	938	7738

Note: Greening activities includes bamboo plantation, cultivation and grassing also

Mine-wise annual targets fixed in the roadmap, as above is monitored by the sustainable development cells of CPSUs at frequent intervals. Sustainable Development Section of MoC monitors the progress of greening activities of coal/lignite CPSUs through review meetings conducted at regular intervals.

In order to assess the efficacy of greening activities, CIL and its subsidiaries also undertake vegetation cover mapping based on satellite data periodically through CMPDI every year for major mines (producing more than 5 million cubic meter coal + OB) and every three years for minor mines (producing less than 5 million cubic meter coal + OB).

Environmental Clearance accorded to Mining Projects Project Details Date of EC Date of EC Receipt Granted State: Jharkhand (Category: Non-Coal Mining) Project No: EC/SEIAA/2021-22/2449/2021, Project Name: 19.10.2021 31.10.2021 PAHARPUR STONE MINE, District: Dumka, Tehsil: Shikaripara, Company: M/s. PAAHARPUR STONE MINE 19.10.2021 31.10.2021 Project No: EC/SEIAA/2021-22/2453/2021, Project Name: BHAGWAN CHIPS STONE OF SHRI AJIT SINGH & SHRI ABHISHEK ANAND, District: Palamu, Tehsil: Chhatarpur, Company: M/s. BHAGWAN CHIPS STONE OF PARTNERS - SHRI AJIT SINGH & SHRI ABHISHEK ANAND. Project No: EC/SEIAA/2021-22/2465/2021, Project Name: 19.10.2021 31.10.2021 Sunita Devi Stone Mines, District: Simdega, Tehsil: Kolebira, Company: M/s. SUNITA DEVI STONE MINES OF AREA 2.62 HA AT SIMDEGA. 19.10.2021 31.10.2021 Project No: EC/SEIAA/2021-22/2463/2021, Project Name: kukukala stone mine(1.56 ha), District: Palamu, Tehsil: Chhatarpur, Company: M/s. MALA KUMAR ENGINEERS PVT. LTD. Project No: EC/SEIAA/2021-22/2462/2021, Project Name: 19.10.2021 31.10.2021 Kukukala stone mine (1.32Ha), District: Palamu, Tehsil: Chhatarpur, Company: M/s. MALA KUMAR ENGINEERS PVT. LTD. Project No: EC/SEIAA/2021-22/2457/2021, Project Name: 19.10.2021 31.10.2021 Huliapather stone mine, District: Pakaur, Tehsil: Maheshpur, Company: M/s. GOVIND MANDAL S/O LATE SRI KUMAR MANDAL. Project No: EC/SEIAA/2021-22/2450/2021, Project Name: 19.10.2021 31.10.2021 Nawa Bazar Stone Mine, District: Palamu, Tehsil: Chhatarpur, Company: M/s. JAI MATA DI STONE WORKS. Project No: EC/SEIAA/2021-22/2448/2021, Project Name: 18.10.2021 31.10.2021 Matari Stone Mine, District: Dhanbad, Tehsil: Topchanchi, Company: M/s. SRI GANESH ENTERPRISE. 20.10.2021 31.10.2021 Project No: EC/SEIAA/2021-22/2455/2021, Project Name: DUGDUGIA STONE MINE, District: Khunti, Tehsil: Khunti, Company: M/s. CRYSTAL CONSULTANTS .



Project No: , Project Name: , District: , Tehsil: , Company:	20.10.2021	31.10.2021
M/s. CRYSTAL CONSULTANTS .		
Project No: EC/SEIAA/2021-22/2464/2021, Project Name:	20.10.2021	31.10.2021
HURINGDAG STONE MINE, District: Ranchi, Tehsil:		
Namkum, Company: M/s		
Project No: EC/SEIAA/2021-22/2460/2021, Project Name:	20.10.2021	31.10.2021
CHAPRAKOCHA STONE MINE, District: Ranchi,		
Tehsil: Ormanjhi, Company: M/s. CRYSTAL		
CONSULTANTS.		
Project No: EC/SEIAA/2021-22/2446/2021, Project Name:	20.10. 2021	31.10.2021
Srirampur Stone Deposit (Area 2.73 ha. or 6.75 Acre),		
District: Pakaur, Tehsil: Pakaur, Company: M/s. CEE BEE		
STONE WORKS.		
Project No: EC/SEIAA/2021-22/2452/2021, Project Name:	20.10.2021	30.10.2021
Kashila Stone Deposit, District: Pakaur, Tehsil: Pakaur,		
Company: M/s. GURU STONE WORKS.		
Project No: EC/SEIAA/2021-22/2447/2021, Project Name:	20.10.2021	30.10.2021
Srirampur Stone Mine, District: Pakaur, Tehsil: Pakaur,		
Company: M/s. RAJIV RANJAN PANDEY.		
State: Chhattisgarh (Category: Non-Coal Mining)		
Project No: J-11015/13/2018-IA-II(M), Project Name:	21.6.2021	4.10.2021
Proposed Kesla-II Limestone Mine (Area 357.067 ha) with		
production capacity 4.0 Million TPA ROM with crusher		
capacity of 1000 TPH located in villages Nahardih,		
Kharora, Kesla and Bardih, Tehsil Tilda, District Raipur,		
Chhattisgarh, District: Raipur, Tehsil: Tilda, Company:		
M/s. Dalmia Cement Bharat Limited, Project Type: New.		
State: Madhya Pradesh (Category: Coal Mining)		
Project No: J-11015/574/2007-IA(M), Project Name:	17.6.2021	18.11.2021
Kanchan Opencast Expansion, District: Umaria, Tehsil:		
Nowrozabad, Company: M/s. U.T.KANZARKAR, Type of		
project: Expansion.		
Project No: 140/SEIAA-CG/EC/CoalWash/RGH/225/10,	24.7.2021	28.10.2021
Project Name: Capacity Enhancement of Coal Washery		
from 0.96 MTPA to 5.0 MTPA with Increase in Land Area		
from 8.10 ha to 14.5 ha within Existing Plant Premises of		
M/s. Bhatia Energy Minerals Private Limited Located,		
District: nil, Tehsil: nil, Company: M/s. BHATIA		
ENERGY AND MINERALS PRIVATE LIMITED, Type		
of project: Expansion.		

State: Telangana (Category: Coal Mining)		
Project No: 23-78/2018-IA(III), Project Name: Cluster of	16.12.2019	1.12.2021
Godavarikhani No.1&3 Inclines, Godavarikhani No.2&2A		
Inclines and Godavarikhani No.5 Incline, District:		
Peddapalli, Tehsil: Peddapalle, Company: M/s. The		
Singareni Collieries Company Limited, Project Type: New		
Project No: J-11015/268/2007-IA.II(M), Project Name:	26.2.2021	11.10.2021
Jalagam Vengala Rao Opencast Mine (I&II Expansion),		
District: Khammam, Tehsil: Sathupalle, Company: M/s.		
The Singareni Collieries Company Limited, Type of		
project: Expansion.		
State: Orissa (Category: Coal Mining)		
Project No: IA-J-11015/49/2019-IA-II(M), Project Name:	13.5.2021	1.12.2021
Naini Coal Mine, District: Angul, Tehsil: Chhendipada,		
Company: M/s. The Singareni Collieries Company		
Limited. Type of project: New		
Project No: J-11015/573/2007I.A II (M), Project Name:	11.12.2019	6.10.2021
Dhani Abdullahwali Gypsum Minin, District: Bikaner,		
Tehsil: Mangan, Company: M/s. D.S. Acharya, Project		
Type: Expansion.		
State: Madhya Pradesh (Category: Non-Coal Mining)		
Project No: J-11015/80/2020/IA.II(M), Project Name:	2.8.2021	1.11.2021
Koni–Simariya Limestone Block of Jaykaycem (Central)		
Limited over an area of 3095.23 hectares with production		
capacity 9.05Million TPA of Total Excavation (Lime		
Stone: 5.08 Million TPA; Soil: 2.94Mill, District: nil,		
Tehsil: nil, Company: M/s. JAYKAYCEM (CENTRAL)		
LIMITED, Project Type: New.		
Project No: File number needs to be assigned, Project	2.9.2021	29.10.2021
Name: Deora, Sitapuri & Udiyapura Limestone Auction		
Block with ML Area - 344.783 ha with Limestone		
Production Capacity - 2.0 Million TPA, Top Soil - 0.17		
Million TPA, OB & IB - 0.25 Million TPA (Total		
Excavation - 2.42 Million TPA) at Villages: Deora,		
Sitapuri, Udiyapura and Muhali, Tehsil: Manawar, District:		
Dhar, State: Madhya Pradesh by M/s UltraTech Cement		
Limited (Unit: Dhar Cement Works), District: Dhar,		
Tehsil: Manawar, Company: M/s. UltraTech Cement Ltd.,		
Project Type: New.		
(Source: MOEF&CC Website)		

ENVIS Query Form

1. Name:

2. Designation:

3. Organisation and Address:

E-mail:

5. Literature will be used for: Date:

I would like to search your database in the following areas:

(tick appropriate subjects)

Subject	Subject	Subject	Subject
1.Sand Mining	7. Ergonomics	13. Wastewater Treatment	19. Solid Waste Management
2. Fly Ash	8. Land Use	14. Water Pollution	20. Impact Assessment
3. Ecorestoration	9. Policy and Planning	15. Air Pollution	21. Health and Toxicology
4. Mine Fires	10. Bioprocessing of Fuel	16. Land Reclamation	22. Mine Closure
5. Land Subsidence	11. Hydrogeology	17. Environmental Management	23. Remote Sensing and GIS
6. Noise and Vibration	12. Acid Mine Drainage	18. Socio Economic Environment	

7. Signature:

Please mail to the attention of Prof. Anshumali, Coordinator & Dr. Sheeja Jagadevan, Co-coordinator

IIT(ISM) ENVIS Centre, Dept. of Environmental Science & Engineering
Indian Institute of Technology (Indian School of Mines), Dhanbad- 826004 (Jharkhand).

PHONE: (0326) 2296624; 2235285; FAX: (0326) 2296624, 2296603, 2296613

e-mail: ism-env@envis.nic.in, envis@iitism.ac.in

Website: www.ismenvis.nic.in



Various Activities of Dept. of ESE in association with IIT(ISM) ENVIS Centre and other Organisations



Northern Coalfields Limited (NCL) organised a knowledge sharing Seminar on Improvement in Blasting Performance on Oct. 3, 2021 at MDI CETI campus HQ.



MCL organized seminar on 'improving safety standards in blasting and blast performance' on 21.10.2021 at Mahanadi Coalfields Limited (MCL), the leading coal producer and supplying company in the country.



Sambalpur: Mahanadi Coalfields Limited (MCL) signed a Memorandum of Understanding (MoU) with the Indian Institute of Technology (ISM), Dhanbad for collaboration in research and new initiatives on Oct. 25, 2021.



Vigilance Awareness Week 2021 was observed at Department of Environmental Science & Engg., IIT(ISM) Dhanbad on 26th October 2021. The theme for this year Vigilance Awareness Week is "Independent India @ 75: Self Reliance with Integrity".

Department of Environmental Science & Engineering (ESE), IIT(ISM) Dhanbad in association with IIT(ISM) ENVIS Centre organized online Keynote Lecture on "Biotechnological strategies for the recovery of technology critical elements from slid waste streams" on 4.11.2021. The Keynote Lecture was Coordinated by Prof. Anshumali, HOD/ESE, IIT(ISM) Dhanbad.



Prof. Shalivahan, Dy Director and Dean (R&D), IIT(ISM) Dhanbad, Chief Guest, delivered Inaugural Address



Prof. Anshumali, HOD/ESE, IIT(ISM) Dhanbad, delivered Welcome Address



Prof. Eric Van Hullebusch, Biogeochemistry of Engineered Ecosystems, Institute De Physique Du Globe De, Paris delivered key note lecture



Department of Environmental Science & Engineering (ESE), Indian Institute of Technology (ISM) Dhanbad in association with IIT(ISM) ENVIS Centre organized an online webinar on "Fouling at Water Purification Membranes" on 16.11.2021.



Prof. Shalivahan, Dy Director and Dean (R&D), IIT(ISM) delivered inaugural address



Prof. Anshumali, HOD/ESE, IIT(ISM) Dhanbad, delivered Welcome Address



Prof. Pankaj Vadgama, Clinical Biochemistry at the School of Engineering & Materials Science, Queen Mary University of London delivered Keynote Lecture



Convener - Prof. S.R. Samadder, Assiociate Professor, Dept. of ESE, IIT(ISM)





CIL Chairman Pramod Agarwal chaired review meet of NCL at Singrauli Headquarters on Nov. 16, 2021.



2 day organized an grand HR Conf. SHRAM-2021 concluded in NCL on "Industrial Revolution 4.0 : Competing Through People Matrix" Nov.17-18, 2021.



Minister of Coal and Mine, Pralhad Joshi, inaugurated the "E-portal of accreditation scheme" for minerals exploration on Nov. 23, 2021.



SAIL's iron ore mines receive 5-Star rated awards for sustainable mining practices on 24 11 2021

Department of Environmental Science & Engineering (ESE), Indian Institute of Technology (ISM) Dhanbad and IIT(ISM) ENVIS Centre organized an online webinar on "Recent Advances in Municipal Solid Waste Management" on 30.11.2021.





Prof. B.K.Dubey, Associate Prof., Dept. of Civil Engg., IIT, Kharagpur delivered Keynote lecture



Prof. Anshumali, HOD/ESE, IIT(ISM) Dhanbad, delivered Welcome Address



Convener - Prof. S.R. Samadder, Assiociate Professor, Dept. of ESE, IIT(ISM)



The Department of Environmental Science & Engineering, IIT(ISM) Dhanbad and IIT(ISM) ENVIS Centre celebrated the Constitution Day on 26th Nov., 2021 under the guidance of Prof. Anshumali, Head, Dept. of ESE.



The High-Level Expert Committee on Safety in Coal Mines (constituted by the Ministry of Coal for reviewing the safety status in coal mines) interacted with the Regional Executive Director (Coal Mining) & senior NTPC Coal Mining officers at Headquarters Ranchi on 29.11.2021.



Coal India Ltd. organised a Workshop on "Sustainability in the Coal Sector & 100 Days Programme (Coal Production & Dispatch)" in Kolkata on Dec. 11, 2021.



Dr. Anil Kumar Jain, Secretary, Govt. of India, Ministry of Coal, virtually inaugurated the International Conference on Opencast Mining Technology and Sustainability (ICOMS), 2021' at. NCL Hq. in Singrauli on Dec. 13, 2021.

From:		8
IIT(ISM)	ENVIS	Centre

Dept. of Environmental Science & Engineering

Indian Institute of Technology

(Indian School of Mines), Dhanbad – 826 004 (INDIA)

Website: www.ismenvis.nic.in

Phone	(0326)	2235285
ATTOTICE ((0320)	2233263

	Book Post
To,	