F. No. CPAM-34011/28/2019-CPAM [E-343762]
Government of India
Ministry of Coal
(MPS Section)
*****

Room No. 622-A, Shastri Bhawan,
New Delhi, Dated: 31st January, 2025

Office Memorandum

Subject: Guidelines for Preparation of Mining Plan and Mine Closure Plan for Coal and Lignite blocks 2025—reg.

The undersigned is directed to forward herewith the *Guidelines for the Preparation of Mining Plan and Mine Closure Plan for Coal and Lignite Blocks, 2025, for further necessary action and necessary compliance.*

2. All the provisions of this Mining Plan Guidelines shall become effective with immediate effect, except provisions contained in Para 2.7(c) and Para 2.9, which shall be effective upon issuance of necessary notification under the Mineral Concession Rules, 1960. Until the notification of the amendment in the Mineral Concession Rules, 1960, is issued, provisions contained in Para 1.3(A), 1.3(B), and 1.9 of the Guidelines for Preparation, Formulation, Submission, Processing, Scrutiny, Approval, and Revision of Mining Plan for Coal and Lignite Blocks dated 29.05.2020 shall continue to remain in force.

Encl: As above

Signed by
Hitlar Singh
Date: 31-01-2025 12:13:00
(Hitlar Singh)
Under Secretary to the Govt. of India
Email: hitlar.singh85@nic.in

To

1. Chairman, Coal India Ltd.
2. CMD, SCCL
3. CMD, NLCIL
4. Coal Controller, Coal Controller Organization, New Delhi
5. O/o Nominated Authority- to circulate it to all Coal Companies except stated above

Copy to:

1. Secretary, Ministry of Environment, Forest & Climate Change
2. Secretary (Mines)- All coal/Lignite bearing states
3. DG, DGMS
4. All Joint Secretaries, Ministry of Coal
5. Sr. Technical Director, NIC – with request to place on website of MoC

सत्यमेव जयते

GOVERNMENT OF INDIA

MINISTRY OF COAL

Mining Plan Guidelines

for

Coal and Lignite Mine

2025

List of Abbreviations

APA = Accredited Prospecting Agency
CPCB = Central Pollution Control Board
CCO = Coal Controller Organisation
CIL= Coal India Ltd.
Crs= Crores =10 million
CMDPA = Coal Mine Development and Production Agreement
CMPDIL = Central Mine Planning and Design Institute Limited
DGPS = Differential Global Positioning System
DGMS = Directorate General of Mines Safety
ERA = Expert Review Agency
EC = Environment Clearance
FC = Forest Clearance
GR = Geological Report
Ha = Hectare
IIT = Indian Institute of Technology
ISM = Indian School of Mines
Km = Kilometre
LS = Lumpsum
m = Metre
Max = Maximum
MCDR = Mineral Conservation and Development Rules
Mt = Million Tonne
MTPA = Millian Tonne Per Annum
ML = Mining Lease
MoEFCC = Ministry of Environment, Forest and Climate Change
MCR = Mineral (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 1960
Mm3 = Million Cubic Meters
MoC = Ministry of Coal
MPPA = Mining Plan Preparing Agency
NABET = National Accreditation Board for Education and Training
NLCIL = NLC India Limited
NEERI = National Environmental Engineering Research Institute
OC = Opencast
OB = Overburden
OBR= OB Removal
PAPs= Project Affected Persons
PL = Prospecting Licence
PWD = Public Works Department
PSP = Pump Storage Projects
PRC= Peak Rated Capacity
QCI = Quality Council of India
QP = Qualified Person
SCCL = Singareni Collieries Company Limited
SR = Stripping Ratio
SPCB = State Pollution Control Board
SWCS= Single Window Clearance System
t = Tonne
UG = Underground
WGS84 = World Geodetic System 1984
WPI = Wholesale Price Index
w.r.t= with respect to

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Government of India
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Shastri Bhawan, New Delhi
January, 2025

OFFICE MEMORANDUM

Subject: Guidelines for preparation of Mining Plan and Mine Closure Plan for Coal and Lignite blocks, 2025.

Chapter-I
Preliminary

1.1. Short title and commencement. - (a) These guidelines shall be called the "**Guidelines for preparation of Mining Plan and Mine Closure Plan for Coal and Lignite Mines, 2025"**.

(b) These Guidelines shall come into force from the date of publication. However, for the Mining Plans uploaded on SWCS before the date of publication, the guidelines dated 29.05.2020 will be followed.

(c) The Mine Closure Plan, inclusive of the Final Mine Closure Plan, shall constitute an integral component of the Mining Plan.

1.2. Objectives: (a) To optimize the extraction of coal and lignite resources while ensuring sustainable practices that minimize waste generation while maximizing efficiency.

(b) To emphasize the importance of systematic and scientific mining, to promote safety and health, to safeguard the interest of workers and communities involved in coal mining activities, to promote the implementation of robust safety protocols, infrastructure and adoption of global best technologies.

(c) To promote responsible mining practices that support both the coal and lignite industry and the broader ecosystem. Mandatory incorporation of restoration, remediation, and regeneration measures into mining plans to ensure the responsible and sustainable management of natural resources.

(d) To minimize environmental footprint, mitigate adverse impacts on local communities and ecosystems, and contribute to the overall conservation and preservation of natural habitats.

(e) To prioritize environmental conservation by monitoring soil, groundwater, and vegetation and implementing measures to improve air, soil and water quality.

(f) To obligate the project proponent to carry out the mining operations within the allocated block boundary.

1.3. Definitions: In these guidelines, unless the context otherwise requires

a) Abandoned Mines: Abandoned mines mean such working as have been abandoned with no intention of working in the future for which the owner of the mine has already submitted a notice to the Chief Inspector of Mines, Regional Inspector, and District Magistrate about abandonment in the prescribed format (Reg. no. 5 of CMR, 2017).

b) "Base Date" of the Mining Plan means the cut-off date on which the extractable reserve, balance life etc. have been quantified; In the case of mines already in operation, the date for estimation of resources should be at the end of the previous financial year.

For new mines, 1st year shall be determined from the date of receiving mine opening permission from CCO.

c) Closed Mines: Closed mines are those mines for which the owner/agent/manager has submitted notice of closure in the prescribed format (under CMR-2017, Reg.-5) to the Chief Inspector of Mines, Regional Inspector and District Magistrate and has also obtained the mine closure certificate from Coal Controller.

d) Discontinued Mines: Discontinued mines mean such working in a mine as have been discontinued for any reason and are inaccessible or rendered inaccessible but are likely to be worked again. These mines can be re-opened as per provisions of CMR (Reg.-6) and Colliery Control Amendment Rule-2021 (Rule no.9 (ii)).

e) Escrow account means an account opened by the project proponent in a scheduled bank in consultation with the CCO during the course of mine operations, facilitating the deposition and withdrawal of funds specifically designated for mine closure purposes;

f) "First-mile connectivity" means seamless movement of coal from the mine to the dispatch point with minimum road transport and mechanized loading onto railway rakes with minimum manual intervention or direct coal transfer to the consumer through conveyors, rails and thus mitigating the adverse impact on environment and health of communities around the coal mining projects.

g) "Leased Area" as per Section 3 (ac) of MMDR, Act, 1957 means the area specified in the Mining lease within which the mining operations are proposed to be undertaken, and includes the non-mineralized area required and approved for the activities falling under the definition of mine as referred to in The Mines Act 1952.

The mining plan of one mine may have multiple leases or Mining Plans of different mines may exist in single lease.

h) "Life of the Mine" means the total development and production years as given in the calendar plan from the zeroth year to the post-mining closure period and including post-closure monitoring period;

i) "Mine closure" means the comprehensive process of closing and securing a mine upon completion of mining activities. This involves a sequence of actions and strategies designed to safeguard the environment, local communities, and mining site, mitigating and addressing social impacts, executing land reclamation, and restoring the site to an acceptable level;

j) "Mine Closure Plan" means a formal document that includes financial provisions and activities to be implemented from an early stage and continued throughout the operation of a mining cycle to minimize adverse long-term environmental, physical, social and economic impacts; and to create a suitable landform to an acceptable level.

k) Minor changes mean the changes defined in Para 2.9(b) of the guidelines that require revision in the Mining Plan with approval by their company board and intimation to CCO and administrative section of Ministry of Coal dealing with block.

l) "Production Life of the Mine" means the period of development and production years as given in the calendar plan.

m) "Project Area" means the total area specified in the mining plan within which mining operations can be undertaken and includes the adjacent area required for OB dumping and infrastructure as per the definitions of the Mines Act, 1952. Residential areas, R&R colonies, evacuation routes outside the mining lease already part of Mining Plan may continue to be part of project area. For new mining plans, Project proponents may include or exclude, with due diligence, depending upon case to case basis based on site specific conditions.

n) Post closure monitoring period means the period of 2 (two) years after completion of final mine closure activities such as monitoring work done towards closure of the mine, air quality, water quality, subsidence etc to mitigate the effects on nearby communities.

o) Post mining closure period means the period that starts after the cessation of the mining operation until all the activities of final mine closure are completed.

1.4. Applicability: (a) Every coal or lignite mine to have a mining plan: All coal or lignite mine shall have a mining plan approved by the competent authority. No coal or lignite block shall be operationalized or allowed to produce coal or lignite without an approved mining plan. Mining operations shall be undertaken in accordance with the duly approved mining plan. The approved mining plan shall be valid for the balance life of the Mine, provided that

any revision(s) or modification(s) of the mining plan duly approved by the competent authority and such approval of the revised or modified mining plan shall remain valid for the estimated balance life.

(b) These guidelines shall apply to all Coal and Lignite mining operations including sand mining for use of stowing in mines in India. These guidelines supersede all previous Mining Plan and Mine Closure guidelines except Mine Closure Guidelines issued in 2022 for abandoned or discontinued mines. For the mines abandoned or discontinued before 2009, the Guidelines for Management of abandoned or discontinued mines dated 28.10.2022 will be applicable given in **Appendix-A**. The guidelines and format for the formulation of the Mining Plan of Coal and Lignite are detailed in **Appendix—I.** For sand mining used in stowing, the project proponent is required to prepare Mining Plans in accordance with the formats prescribed by the respective states. In the event that a state does not have a specific format, sample format is attached at **Appendix-II**

(c) The present system of approval of the Mining Plan by the Board of Coal India Limited or subsidiary of Coal India Limited, as the case may be, will remain unchanged as per the O.M. given in **Appendix-III.** However, the dispensation given to Coal India Ltd. is temporary in nature and the Ministry of Coal may review the O.M. after 2 years.

(d) Provided, if any other mineral with commercial value, is found in the leasehold area, it shall be reported to the State Government and concerned Ministry. The Mining Plan thereof shall be prepared as per the extant rules.

Chapter-II

Mining Plans

2.1. The mining plan shall encompass provisions for different phases of the life of the mine as stage plans. The Stage plans for 1st year, 3rd year, 5th year, 10th year, the year of achieving rated capacity of the mine, the final year (i.e. at the end of mine life), and post-closure, shall be submitted at the time of initial submission of mining plan.

The Mining Plan shall incorporate details of production scheduling with corresponding planning for the balance reserve projectized for a) 30 years, b) remaining life of the mine, whichever is less. Yr-30 stage plan and reclamation plan (i.e. Y-33) for end of mine life and related reclamation plan should also to be incorporated in Mining Plan. Beyond this period a scheme should be attached for tentative mining method and production capacity. In case the life of mine is extend beyond 30 years, project proponent is required to submit the revised Mining Plan at least one year before the expiry of 30 years.

2.2. **Project information:** The project proponent is to delineate crucial details such as the project's location, detail of allotment, previous approval of the Mining Plan, if any, and the modification and tentative socio-economic information. Guidelines aim to provide approving authorities with a clear understanding of the project's scope, feasibility, and potential impacts, facilitating informed decision-making and ensuring adherence to stringent mining regulations and environmental standards.

2.3. Geology: The project proponent shall envisage the action plan for exploration and liquidation of the balance reserve yet to be projectized. The Mining Plan shall be formulated as per Geological Report approved by competent authority. The approved Geological Report shall be thoroughly scrutinized to ascertain the most suitable method of mining. Subsequently, the Mining Plan shall be prepared for optimum extraction of coal to align with conservation and safety, and adhere to the stipulations outlined within the said Geological Report.

2.4. Mining Method: The paramount consideration is to be given by the project proponent to determine a Mining Method that achieves optimum extraction of mineral resources while ensuring safe and sustainable resource management. Coal resources shall be analyzed for optimized extraction for opencast or underground methods of mining.

2.4.1. Underground Mining: Adoption of advanced technology in mining is crucial for enhancing productivity, safety and efficiency. This includes the utilization of state-of-the-art blast-free technologies such as longwall mining systems, continuous miners, etc. The project proponent shall phase out the manual mining and give preference to mechanized mining or Mass Production technologies (MPT) such as longwall mining, and continuous miners over semi-mechanized methods. However, a detailed justification is to be given by the project proponent for choosing semi mechanised mining method.

(a) **Ventilation and Strata Control:** The project proponent shall ensure that the design of entries and traveling roadways should comply with statutory requirements. Preliminary assessment shall be conducted for planning. Parallely detailed scientific study may be taken up to assess actual requirements. The project proponent shall also ensure the monitoring of inflammable & noxious gases through scientific instruments to ensure safety.

2.4.2. Opencast mining: The suitability of opencast mining is to be meticulously assessed, with a preference given to blast-free mechanized technologies such as surface miners, rippers, highwall miners etc. wherever applicable. Deployment of equipment of Higher Capacity shall be preferred. Additionally, the feasibility to the extent possible, inducting draglines, in-pit crushers for coal, overburden, or both should also be evaluated.

(a) Standardization of Heavy Earth Moving Machinery (HEMM): Standardization in coal mining is crucial for ensuring safety, efficiency, and interoperability in mining operations. In order to establish common specifications, practices, and guidelines to enhance the overall performance and safety of these machines, the indicative standardization in HEMM for coal mining is given at **Appendix-IV.** The project proponent may select preferably the combination of equipment as per the specified combination.

(b) Make in India: The Project proponent is to put thrust on the selection of Indigenous equipment or equipment with indigenous components.

(c) Slope Stability: The project proponent is to conduct thorough geotechnical assessments to evaluate the stability of slopes, considering factors such as the geological structure, groundwater conditions, bench heights, drainage systems, etc in accordance with the statutory

provisions. Scientific studies may be conducted parallely to predict and assess potential failure mechanisms, ensuring suitable factor of safety.

2.5. Safety Management: The project proponent shall ensure that all mining operations are performed considering the due aspect of safety and prepare a Safety Management Plan as per Coal Mines Regulations 2017, before Mine opening permission. The Project Proponent shall also conduct the Safety and Health Management Audit as per the guidelines issued by Ministry of Coal in December 2023 and submit the report annually to the office of coal controller. This is for taking into appropriate consideration at the time of Mining plan approval.

2.6. Infrastructure facilities:

(a) First Mile Connectivity: In an ongoing pursuit of sustainable development and environmentally friendly coal evacuation, it is mandated to evacuate coal or lignite through conveyors or railway or any environment friendly transport other than road transport from mine sites to the railway siding or upto 25 Km, whichever is lower for projects with PRC more than 2 MTPA. Beyond that distance Technical Committee for scrutiny of Mining Plans may suggest for incorporation of FMC in Mining Plan on case-to-case basis. Also, preference to be given to eliminate road transport by adopting environment friendly transport of coal evacuation and opt for mechanized loading for projects with peak rated capacity even upto 2 MTPA.

(b) Mechanized Loading: The project proponent may opt for mechanized loading to optimize the movement of coal from siding to various end users. This will significantly enhance operational efficiency apart from protecting the environment.

2.7. Project Area: (a) For all coal blocks, the project boundary shall be delineated based on the DGPS survey with certification by CMPDIL. The certificate must be attached with the Mining Plan along with the KML file.

(b) The excavation or mining area envisaged in the Mining Plan must be restricted within the allotted or vested geological block boundary or existing mining lease. A certificate to this effect is to be provided by the Qualified Person or Accredited Mining Plan preparing Agency preparing the Mining Plan. The certificate must be made on the Conceptual Plan depicting Cardinal Point Co-ordinates (shape coordinates) of the project boundary, Lease boundary and allocated Block boundary (binding co-ordinates given in the vesting order). For mining plan approved before year 2014 and based on the approved mining plan, various clearances like EC, FC have already been obtained and transferred to successful bidder, in such cases, block boundary/mine lease boundary shall be taken as per the approved mining plan.

(c) In case the project area extends beyond the allotted block boundary or existing mining lease the following certificates for the additional area will be required: i) As the State government is the custodian of exploration data under provisions of Rule 16 of MCR 1960, a No Objection Certificate from Mines and Geology Department of concerned State Government (ii) A certificate in proof of the non-existence of coal or lignite in the area beyond

the vested or allocated boundary from CMPDIL (iii) In case of existence of coal or lignite, a certificate of technical-viability issued or certified by CMPDIL (iv) In case of Coal bearing area, an undertaking or Affidavit by the project proponent that they will rehandle the OB in a specified time period. These are the conditions to rule out the issue of encroachment and use of the area beyond the vested or allotted block boundary or existing mining lease in the Mining Plan. Indicative criteria for assessing technical viability are given in **Appendix-V.** However, CMPDIL may form his own criteria for deciding technical viability.

The application for the issue of a certificate from the Mines and Geology Department of the State Government must be supported with CMPDIL certificate for the area under reference (along with their Cardinal Point coordinates) duly certified. Where the project area extends beyond the block boundary or existing mining lease, the certificate issued as stated above must be attached in the Mining Plan along with the undertaking or Affidavit that the project proponent will rehandle the OB in a specified time period.

(d) If any part of an allocated block area is not included in the Project area due to major constraints such as forest land, densely inhabited areas, rivers, railways lines etc., which cannot be projectized with present technology, Technical Committee for scrutiny of Mining Plans may recommend for exclusion from Project Area maximum up to 10 percent of project area. However, prior approval of the Nominated Authority is required in case of allocated/auctioned coal blocks.

(e) In order to obtain any further clearances EC, FC, etc., delineation of forest land and non-forest land out of the project area is essential. Hence land scheduling shall be done to delineate the extent of forest land prior to the preparation of the mining plan. Pre-mining land ownership/land type furnished in the Mining Plan will be of indicative in nature along with data source at its footnote (viz. from topo-sheet, cadastral plan etc.).

2.8. Compliance Report: A compliance report for operating mines shall be submitted by the project proponent with respect to approval conditions of the Mining Plan including any deviations and revisions for changes other than minor changes, every 5 years to Coal Controller with intimation of submission to Administrative Section dealing with the allocation/allotment of the coal block at Ministry of Coal for information. Such submission shall be done within 180 days of completion of 5 years of the previous report or before 28.05.2025 whichever is later. In case of exceptional circumstances, submitted in writing by project proponent, the Coal Controller may grant extension up to 6 (six) months for submission of 5 yearly compliance report. The information desired above bear a self-certificate of the project proponent and have the approval of their company board. Non-submission of such information during the stipulated time may result in withdrawal of mine opening permission or cancellation of the approved mining plan, as may be decided by CCO. The compliance report should also include:

a) Changes made during implementation w.r.t. approved Mining Plan in tabular mode,
b) Proposed minor changes if any,
c) Stage plans for the next 5^{th} and 10^{th} years,
d) Revised balance life of the mine,
e) Revised calculation of Mine closure activities and ESCROW amount with respect to revised balance life.

The indicative format for compliance reporting is attached at **Appendix-VI.**

2.9. Revision of Mining Plan:

(a) The Mining Plan to be submitted for approval of the Coal Controller for reasons other than specified in Para 2.9(b). While submission of revised mining plan, the reason for revision shall be specified in writing by the lessee. A comparison of all the parameters in the approved and proposed mining plan shall be given.

(b) The project proponent is empowered to make revisions with the approval of the respective company Board. w.r.t. the following minor changes:

i. Changes in land type within the total leased area.
ii. Changes in location and type of infrastructure i.e. mine opening, box cut for opencast working, and access egress like shaft and incline for underground working, office premises within the project area, and subsequent related changes.
iii. Increase in production up to fifty percent of the sanctioned rated capacity and also the relevant changes required for the production enhancement including the stage plans etc.
iv. Change in sequence of extraction (of different seams) in underground mining without jeopardizing the safety and conservation of minerals as defined in the approved mining plan.
v. Depillaring with caving to depillaring with stowing/paste filling without change in mining method.
vi. Change in type of ingress and egress from shaft to incline or incline to shaft.
vii. The land required for M-sand plant (overburden to sand plant) installation
viii. Changes in the specification or configuration of equipment and Changes in HEMM deployment plan.
ix. Highwall mining, if introduced in opencast mines.
x. Use of land for repurposing including installation of solar plant, Pump Storage Projects, gasification, renewable source, washery etc subject to relevant statutes.
xi. Change in technology within the method of mining for more mechanization. (e.g. Shovel dumper to surface miner, Semi mechanized mining to continuous coal cutting technologies etc.)
xii. Dumping of Washery Rejects or Fly-ash in mines
xiii. Change in expenditure pattern to include the community development and livelihood projects in the mine closure plan

The project proponent shall submit a specific report prepared by QP/MPPA, containing relevant changes made in the approved mining plan to Coal Controller with a copy of the same to the Administrative Section dealing with the allocation or allotment of the coal block for information. The Project Proponent shall certify that no other changes have been made in the approved mining plan other than those submitted in the report.

(c) Flexibility in scheduled production plan: The project proponent can have flexibility for the increase in annual coal production ahead of the scheduled date of production, as per the approved mining plan. This flexibility for increase in coal production shall be maximum upto the approved coal production capacity. The above is subject to the fulfilment of following conditions, that the project proponent shall (i) Obtain requisite permissions, clearances, etc.

under any other law, guidelines or stipulations in force. (ii) Undertake requisite safety, environmental and other measures commensurate with the increased coal production.

(d) In the case of allotted/auctioned coal/lignite blocks, the Mining Plan may be revised or modified for extraction of more coal on a year-to-year basis.

Provided that the Mining Plan shall be revised for extraction of less coal on a year-on-year basis only under the following circumstances: **a**. if the remaining extractable resource of the coal mine is less than 3 (three) times the peak rated capacity of the current Approved Mining Plan; **b**. Change in method of mining from Opencast to Underground necessitated due to change in geo-mining conditions. However, revision of the Mining Plan for extraction of less coal would be subject to prior approval of the Nominated Authority.

Chapter-III

Mine Closure Plans

3. Mine closure guidelines aim to ensure scientific mine closure and rehabilitation of mining sites, minimizing environmental degradation, safeguarding public health, and promoting sustainable development by restoring the land to a condition suitable for future use of land or returning it to its near-natural state or better, while also holding project proponents accountable for their closure obligations.

3.1. Mine Closure Plans: Mine Closure Plans will have two components viz. **(i)** Progressive or Concurrent Mine Closure Plan, and **(ii)** Final Mine Closure Plan. Progressive Mine Closure Plan would include various land use activities to be done continuously and sequentially during the entire period of the mining operations, whereas the Final Mine Closure activities would start towards the end of mine life, and may continue even after the reserves are exhausted and/or mining is discontinued till the mining area is restored to an acceptable level. The Mine closure details of the Mining Plan should be oriented towards the restoration of land back to its original as far as practicable or further improved condition.

(a) **Mines abandoned/discontinued after year 2009:** Any mine abandoned/discontinued after the year 2009 without an approved mine closure plan the project proponent is mandated to prepare and obtain approval for Temporary and Final Mine closure plans in line with the Guidelines of Management of mines discontinued/abandoned/closed before the year 2009 issued by Ministry of Coal on 28th October 2022, within one year of issuance of these guidelines.

(b) **Surrender of Coal mine after partial extraction:** In case of surrender of coal mine after partial extraction, the Project Proponent shall be required to temporarily close the mine by preparing a Temporary Mine Closure Plan through CMPDIL. The project proponent is further required to deposit Bank Guarantee equivalent to 150 percent of the balance amount to be kept towards closure in Escrow account. The project proponent shall also assume the role of custodian of the mine until the mine is reallocated to a new entity or for a period of five (5) years, whichever is earlier. If the mine is not allocated/auctioned within the said five (5) year's period, final closure of the mine is to be completed by forfeiting the Bank Guarantee through

an agency, modalities of which, will be issued separately. CCO will release the escrow funds/certification after carrying out the verification. In case of successful allocation/auction within the five (5) year's period, the Bank Guarantee shall be returned to the Project Proponent after one year from the date of allocation/auction If Project proponent is failed to deposit the Bank Guarantee, a legal action will be taken against it. Further, it will be debarred to participate in any future auction.

3.2. Just Transformation: It refers to the equitable process of transitioning from traditional coal/lignite mining toward more sustainable and environmentally friendly and socially responsible manners, ensuring that the environment is protected, the land is restored, and affected workers, communities, and regions are supported and empowered throughout the transformation. It involves recognizing and addressing the social, economic, and environmental challenges associated with mine closure activities.

Every mine owner shall take all possible precautions for undertaking sustainable mining while accomplishing prospecting, mining and mine closure activities etc.

3.2.1 Restoration and Repurposing: With aims to minimize the long-term ecological damage caused by mining and to ensure that the land can support various ecosystems, regarding the land, replanting native vegetation, restoring water bodies, and rehabilitating wildlife habitats, the Project proponent shall complete all activities related to technical, biological reclamation and repurposing like agriculture, pisciculture, eco-park, recreational, landscaping, waterbody conservation or creation as per Mission Amrit Sarovar, irrigation, solar, green energy and green industries including micro, small and medium enterprises etc. wherever it is applicable related to Just Transformation before issuing the Final Closure Certificate. The third-party monitoring agencies authorized by the Central Government (Refer **Appendix-VII**) shall certify the expenditure on these activities.

3.2.2 (a) People and communities: All social amenities and infrastructure created like hospitals, schools, community centers etc. should be handed over to the State Government, wherever practicable. The office and other buildings of mine may also be utilized or developed as skill development centers or other social infrastructure based on the need assessment of the local community. The mining company should determine a Zone of Impact for mine closure as part of the Social Impact Assessment study, which shall include areas that are directly or indirectly dependent on the mine/cluster of mines, where income and livelihood of the workers and the local community will be affected by such closure.

The project proponent to actively engage with the local communities and self-help groups to collaboratively envision and co-create sustainable ideas and solutions. This engagement process will involve meaningful structured consultations, and collaborative decision making to ensure that their insights, needs, and perspectives are incorporated into the planning and decision-making phases during final mine closure.

The project proponent, wherever appropriate, shall integrate indigenous and local know-hows, including promoting traditional practices related to arts, culture, and heritage, promoting local species, fruit bearing plants, water conservation, wildlife conservation, flora and fauna conservation, top-soil management, creating horticulture/agricultural/pisciculture spaces, and

tourism along with outsourcing of operation and maintenance of public spaces to local communities and project affected persons, fostering employment opportunities for the local people and to enhance the sustainability and cultural relevance of that region.

(b) Skill Development and Livelihood: Efforts need to be systematically undertaken in each progressive closure period of 5 years to enhance skills, livelihoods, and living conditions of communities (PAPs) directly or indirectly dependent within the vicinity of the mine. The project proponent shall submit a 5 yearly report, outlining of the initiatives undertaken to skill development and sustain the livelihoods of the affected communities. It will be supplementary to the progressive closure claims submitted.

(c) Role of District Administration: The district administration is to facilitate community engagement to address social and economic impacts of closure of mine during final mine closure period. The district administration may create market mapping of skills, merge income generating schemes and utilise the District Mineral Fund (DMF).

3.2.3 Project proponents shall strive to achieve the Nationally Determined contribution to reduce their greenhouse gas emissions and set targets for the reduction of emissions in the Mining Plan by at least 10 percent of annual generation by the 10^{th} year through renewable sources wherever practicable. Further, The Project Proponent shall promote the use of electric vehicles (EVs) and gas-based vehicles in coal mines to reduce environmental impact and decrease dependency on diesel/petrol fuel.

3.3. **Environmental management**: The project proponent shall ensure mitigation of the adverse impacts of mining activities on the environment. This entails scientific assessment, monitoring, and control measures to safeguard air, water, and soil quality, biodiversity conservation, and identification of sensitive areas and potential risks of land degradation. safe and sustainable diversion of the nala for uninterrupted natural water flow. The project proponent shall also make efforts to recharge groundwater and adhere to water quality standards as per statutes. Five yearly Environmental Compliance Audit report is also required to be submitted along with the five yearly compliance report. This will assess the implementation and effectiveness of the Environmental standards.

3.4. Progressive mine closure status shall be prepared every 5 years from the beginning of the mining operations. These plans would be examined periodically in every five years period and to be subjected to third-party monitoring by the agencies authorized by the Central Government (Refer **Appendix-VII)** or any other institutes/ organizations/ agencies specified from time to time for the purpose.

3.5. **Mine Closure Cost:** The total cost for carrying out such activities shall be estimated for assessment of mine closure cost of the mine involving progressive and final mine closure activities such as spreading of topsoil, dismantling of structures/demolition and cleaning of sites, rehabilitation of mining machinery, plantation, physical/biological reclamation, landscaping, biological reclamation of left-out overburden dump, filling up of de-coaled void, for specified post environmental monitoring, supervision charges, power cost, protective and rehabilitation measures including their maintenance and monitoring, stowing for underground mines, miscellaneous charges barbed wire fencing as prescribed boundary wall all around the vulnerable area, etc. for the post-closure period.

3.5.1. Escrow Amount Calculation:

The revised rate for deposition towards escrow account is Rupees Fourteen Lakh per hectare for opencast and Rupees Two Lakh per hectare for underground Mine. These rates will be considered as Base Rate as on May 2024 to be escalated on the latest WPI declared from time to time by the Government of India. These rates may be revised at every 5 years by Ministry of Coal.

[Illustration: {(Rs 14 lakhs x Latest WPIs) / (WPI as of September 2024 i.e (base date)} = Rupees in lakh, in case of Opencast project].

The annual escrow amount is to be computed considering the total project area of the mine multiplied by the escalated rate (at the above-mentioned rates) and dividing the same by the balance production life of the mine in years. An amount equal to the escrow amounts to be deposited each year throughout the mine life compounded @5% annually.

The project proponent is required to deposit the said amount for each financial year by 30th September of the respective year, failing which an interest @1 percent/month will be charged on the amount to be deposited for that respective year.

[For example, if the annual amount works out to ₹100, then (in the first year the amount to be deposited will be ₹100, in the second year Rs. ₹100x(1+5%)^1 in the third year 100x(1+5%)^2 and so on.]

Further, in case of the mine, where an escrow account is already opened, the annual closure cost is to be computed considering the total project area at the above-mentioned rates minus the balance amount already deposited and dividing the same by the balance production life of the mine in years and annual cost as arrived should be compounded @5 % annually.

All operating coal/lignite mines are to revise their escrow agreement within one year after coming into force of these guidelines. Failing which CCO may withdraw mine opening permission or impose a penalty @ 1 % per month on amount to be deposited for that respective year. The revised rate of deposition of amount will be effective from 01.04.2025.

3.5.2. Financial Assurance: The Mining Company/ Mine Owner as a part of Financial Assurance will open a Fixed Deposit Escrow account, with the Coal Controller Organization (on behalf of the Central Government) as the exclusive beneficiary prior to the commencement of any activities on the land/project area of the mine and shall submit the same to Coal Controller Organization (CCO) before the permission is given for opening the mine. The mining company shall cause the payment to be deposited at the rate computed as indicated at Para 3.5.1. The owner of the company may select the Schedule Bank where the Escrow account is to be opened and inform the same to the Coal Controller, CCO.

3.5.3. The Coal Controller shall get the WPI (used for escalation of financial assurance amount at the time of formulation of Mining plan) updated at the time of opening of Escrow account. The mine owner/company including all public/private sector companies shall deposit the yearly amount in a Schedule Bank in accordance with Para 3.5.1. Coal Controller shall also get the information, submitted under Para 3.4 and 4.8, verified and get the yearly financial assurance amount modified with respect to the latest WPI in accordance with Para 3.5.1.

3.5.4. The money to be provided per hectare of total Project Area for the purpose is to be deposited every year on commencement of any development activity on the land for the mine after opening a Fixed Deposit Escrow Account before obtaining mine opening permission from the Coal Controller. Mining company/owners including all Public Sector Undertakings shall deposit the yearly amount in a Scheduled Bank. If the Mine owners fail to deposit the required annual amount in accordance with Para 3.5.1, 3.5.2 and 3.5.3, the Government may withdraw the mining permission.

3.5.5. Reimbursement of Escrow Amount:

i) Up to 50% of the total deposited amount in the previous year excluding interest accrued in the ESCROW account may be released based on work done towards mine closure after every year. The release shall be based on (a) Cost certification by certified auditor (b) Self Certification of work done (c) High resolution georeferenced orthorectified multispectral satellite image or drone survey of the mine/blocks along with processed output submitted by the project proponent for opencast mines. The amount released should be equal to the expenditure incurred on the progressive mine closure in the past financial year or 50% of deposited amount, whichever is less. Project Proponent is required to submit the claim by the 30th of September and CCO will release the amount by 31st of December. Further, CCO shall make the details of the deductions available to the proponent.

ii) In line with periodic examination of the Closure Plan as per Para 3.4 and 3.7, upto 50 percent of the remaining amount including interest for the progressive closure period in the previous five years shall be released. However, in the year in which 5 yearly reimbursement is claimed, the yearly reimbursement will not be applicable i.e. the 1st year of every progressive closure period. The balance amount shall be released to mine owner/leaseholder at the end of the final Mine closure on compliance of all provisions thereof. An illustration in this regard is attached at **Appendix-VIII.** The compliance report should be duly signed by the lessee and certifying that said closure of the mine complied all statutory rules, regulations, orders made by the Central or State Government, statutory organizations, court etc. and certified by the Coal Controller. Submission of claims and reimbursement shall be done through the dedicated portal. However, till the development of portal existing system of processing of claims will be continued. A minimum of 25% of the five yearly escrow amount deposited shall be utilized for community development and livelihood related activities. For mining plans already approved, all project proponents to incorporate the same in the existing mining plans with the approval of respective company board and communicate the specific report within six months of the publication of the guidelines. A indicative list of activities has been is given in **Appendix-IX.** Claim for expenditure towards any one activity shall not exceed one third of the five yearly total escrow amount earmarked exclusively to be spent for mine closure activities under the head.

(iii) 90 percent of the balance amount at the end of the post-closure monitoring period shall be released to the mine owner on compliance of all provisions of the Closure Plan duly signed by the mine owner/lessee to the effect that said closure of mine complied with all statutory rules, regulations, orders made by the Central or State Government, statutory organizations,

court etc. and duly certified by the Coal Controller. This should also indicate the estimated extractable coal resources and coal actually mined out.

(iv) A corpus from 10 percent of the balance deposited amount from final mine closure cost is to be created towards Just Transformation. This amount may be utilized by project proponent for socio-transition after the closure of the mine in consultation with district administration, local authority and stakeholders for skill development, sustained livelihood and employment generation etc. The detailed modalities for usage of fund will be issued separately. The proponent to prepare a plan for just transformation after the mine closure for utilizing 10% of just transformation fund and engage agency to implement the plan before the reimbursement of 90 % of the balance amount.

(v) In the case of fly ash dumping in abandoned mines where mine voids are separable as per Para 4.1 and a separate Mining Plan/Mine closure plans are prepared, only the apportioned amount for the required area for fly ash dumping such as the cost for Top Soil Management and Biological Reclamation, Safety and Environmental Monitoring till the final mine closure and post closure is to be retained. The remaining amount may be released for rest of the area after the completion of post-mining closure activities.

3.6. Final Mine Closure Plan: The details of the Mining Plan, covering the Final Mine Closure Plan envisaging the details of the updated cost estimates for various mine closure activities and the Escrow Account already set up, shall be submitted to the approving authority for approval at least five years before the intended final mine closure. Final Mine Closure Plan shall also contain a completion report containing operational history, Past investigation/study/Scientific findings and further action taken, if any; mine working maps and drawings; mine water discharge and their uses, GPS coordinates for all salient features, safely accessible open portions of mine workings, dumps, area depillared, partially extracted and standing on pillars, any monitoring and maintenance satellite data and final landscape data etc. (a) Final Mine Closure would be considered to be completed only after acceptance of the third-party audit report by the Coal Controller on the compliance of all provisions of the Mine Closure Plan. Any Institute/ Organization/Agency as may be specified by the Government for this purpose may be engaged for Third Party audit to create a self-sustained ecosystem. Failure of restoration within the specified period may result in forfeiture of the Escrow Account created as per Para 3.5.1, and 3.5.2. The details of the Final Mine Closure Plan along with the details of the updated cost estimate for various mine closure activities and escrow account already set up shall be submitted at the time of approval of final mine closure plan.

3.7. Time Scheduling for mine closure: Post mining closure period is to be taken as 3 (three) years and post closure monitoring period will be for 2 (two) years after that. However, in no case the combined period shall exceed 7 (seven) years. The Action plan for carrying out all mine closure operations (progressive and final mine closure) should be furnished in the form of a bar chart for the period of life of the mine plus post-closure period as specified in **Appendix-X,** but not limited to these activities. The project proponent is mandated to establish targets for closure activities according to the bar chart in accordance with activities approved in mine closure plan. Reimbursement of the ESCROW Amount during each

progressive and final mine closure phase will be contingent upon the completion of closure work in accordance with the established targets. Project proponent is required to submit the compliance of established target annually to the coal controller by 31st December.

3.8. The funds so generated are towards the financial security to cover the cost of closure in case the mine owner fails to complete the relevant closure activities. The prime responsibility of mine closure shall always lie with the mine owner, and in case these funds are found to be insufficient to cover the cost of final mine closure including the areas covered in Para 3.4, 3.5.1, 3.5.2, 3.5.3, and 3.6 above. The mine owner shall undertake to provide the additional fund equivalent to the gap in funding before five years of the end of coal production failing which it may be recovered by such other methods as the competent authority may deem fit in this regard. In case of deviation of mine closure activities from the approved mine closure plan CCO may charge up to 20% of the annual amount to be deposited in the escrow account as penalty.

3.9. **Final Closure Certificate:** CCO will issue mine closure certificate to the effect that the protective, reclamation, rehabilitation work and work related to sustainability in accordance with the approved Mining plan covering final mine closure provisions/activities carried out by the mine owner. After successful implementation of the final mine closure activities and post closure monitoring, mine closure will be considered as completed. The certificate of mine closure should be issued within five years of post-mining closure period.

Chapter-IV

Miscellaneous

4.1. **Fly-Ash Filling:** In the case of flyash filling in operating mines, the same shall be allowed with revision in the mining plan by company board. However, the scientific and slope stability study is required to be undertaken with due permission of DGMS in case of operating mines. In case of fly ash dumping in the separable mine voids of abandoned mines after the closure of mining activity, the final mine closure plan for the area required for fly ash dumping and balance area shall be prepared separately and submitted for the approval of coal controller. The calculation, retainment and reimbursement shall be done as per Para 3.5.1.

4.2. **Extraction of Barrier Coal between Opencast Mines:** With a view of conservation, extraction of coal can be optimized to the extent possible, including coal left in the barrier of adjoining coal mines. The common barrier between mine boundaries may be allowed to be extracted within their respective project area. The mining plans of respective mines shall be submitted along with a conceptual plan for the extraction of barrier coal. MoU/agreement signed between owners of adjacent mines shall address the safety, environment, other statutory provisions and compliances. Prior information shall be given to Nominated Authority in case of allocated/auctioned coal block.

4.3. **Disposal or Rehandling of OB in Nearby Mines:** For optimum utilization of land resources, minimize transportation of OB or maximize extraction of coal by using the available land or void of nearby mines through handling/rehandling of OB is allowed. An agreement or

Memorandum of Understanding (MoU) shall be signed between the mine owners in case of different owners along with the standard operating procedure to be followed by the respective mine owners. The Mining Plan(s) of both mines must be revised to incorporate and reflect this change. The consent of the respective State Government for this purpose shall be attached in the Mining Plan(s). In the case of allocated or auctioned coal blocks, prior consent of the Nominated Authority is required.

4.4. **Partial Mine Opening Permission:** In certain cases, where combined blocks are allocated under the CMSP Act, and approved mining plans along with Environmental Clearance (EC) and Forest Clearance (FC) are available for individual mines, partial mine opening may be allowed. In these cases, partial mine opening, based on the existing mining plan, may be permitted with the approval of O/o Nominated Authority subject to the condition that mining plan for the combined block shall be submitted as stipulated in the timelines of CMDPA. If mining plan for the combined block is not submitted within the stipulated time, the partial opening permission shall cease to exist.

4.5. **Approval of Company Board:** The Mining Plan submitted for approval shall have prior approval of the concerned Board of the Company.

4.6. The approval of the revised Mining Plan shall not result in changes in the terms and conditions or efficiency parameters mentioned in the CMDPA/Allotment Agreement signed at the time of allotment/vesting for the auctioned/allotted blocks without prior approval of the Nominated Authority or Central Government, as the case may be. However, efficiency parameters mentioned in the CMDPA/Allotment Agreement shall be linked to the rated capacity of the mine.

4.7. Approval Conditions: (i) The project proponent shall take all necessary precautions regarding safety of mine workings and persons deployed therein and shall adhere to all the statutory norms/guidelines with regards to safety. (ii) Proposed lease area envisaged in the Mining Plan shall not encroach into any other adjacent coal/lignite block unless permitted to do so by the Ministry of Coal in writing. (iii) The approval of the Mining Plan will be without prejudice to the requirement of approvals from competent /prescribed authority under the relevant rules/ regulations etc. (iv) The project proponent shall submit an undertaking that the mine shall be operated as per the Environment Clearance (EC) and Forestry Clearance (FC) for the project (v) Project Proponent should return the forest land after completion of mining activity as per the land surrender schedule submitted to Central Government during diversion of forest land.

4.8. Statutory Obligation: The legal obligations, if any, which the lessee is bound to implement, like special conditions imposed while execution of lease deed, approval of Mining Plan, conditions imposed by the Ministry of Environment, Forest and Climate Change (MoEF&CC), Central Pollution Control Board (CPCB),State Pollution Control Board (SPCB), Directorate General of Mines Safety (DGMS) or any other statutory organizations describing the nature of conditions and compliance thereof, should be indicated in the Mining Plan.

4.9. Mining is to be carried out in a phased manner along with reclamation and afforestation work in the mined-out area. Various project-specific activities viz. mined-out land details and their technical and biological restoration plan, water quality management, infrastructure to be retained and demolished; disposal of mining machinery, etc. shall be furnished in the relevant paragraphs. Where the backfilling of the mine void is being carried out as part of regular mining operation, it shall not be included in the list of progressive mine closure activities. However, in case, where the backfilling of the mine void is to be carried out specifically for the closure of the mine, the quantum of such overburden and the mine closure fund earmarked for the purpose must be included in the list of activities to be taken up for mine closure in the Mining Plan at the time of submission itself.

4.10. The Government may at any time before the closure of the mine require certain activities to be included in the mine closure plans, as considered necessary for the safety and conservation of the environment, or in compliance with any modification/ amendment in the relevant legislation.

4.11. **Implementation of the approved Mining Plan** shall be the sole responsibility of the mine owner. Mining is to be carried out in a phased manner i.e., continuation of mining activities from one phase to the other indicating the sequence of operations depending on the geo-mining conditions of the mine.

4.12. **Mine Closure Advisory Committee:** Mine closure advisory committee may be set-up to oversee community development and livelihood plan. The Committee may consist of:

a) District Collector, or District officer (as authorised by D.C.) - Chairman
b) Sarpanch/Secretary of Local Gram panchayat – Member
c) Representative of reputed NGO (in consultation with D.M.) – Member
d) Nodal Officer (Mine Closure) of Subsidiary Company – Member
e) Project officer/Agent/Sub Area Manager of that mine – Member
f) Retired Forest Officer– Member
g) Chairperson may nominate two other members (if deem appropriate).

Roles of Committee:

a) Facilitating periodical meetings and open forums to collaboratively envision and co-create sustainable ideas, consultations, and collaborative decision making.
b) Promoting initiatives that build local knowledge, skills, and resources, such as training programs or alternative livelihood projects, to help the community transition successfully post-mining.
c) Ensuring engagement of local communities and self-help groups in Operation & Maintenance of the project and public spaces.
d) Ensuring greening of project area through best suited species of plantation and sustainable tourism practices by promoting Geo-Tourism.
e) Proactive participation of local community in the domain of selecting skills to be developed to generate alternate economic resources to ensure ‘just-transition’.
f) Promote transparency and accountability in community-driven initiatives.

4.13. **Responsibility of the mine owner:** The mine owner shall (i) ensure that the protective measures contained in the mine closure plan including reclamation and rehabilitation works have been carried out in accordance with the approved mine closure plan and final mine closure plan. (ii) submit to the Coal Controller a yearly report before 1st July of every year setting forth the extent of protective and rehabilitative works carried out as envisaged in the approved mine closure plans (Progressive and Final Closure Plans).

4.14. If the Coal Controller has reasonable grounds for believing that the protective, reclamation and rehabilitation measures as envisaged in the approved mine closure plan in respect of which financial assurance given has not been or will not be carried out in accordance with mine closure plan, either fully or partially, the Coal controller shall give the mine owner a written notice of intention to issue the orders for forfeiting the sum assured at least thirty days prior to the date of the order to be issued after giving an opportunity to be heard.

4.15. If the Coal Controller determines that additional funds are required for mine closure, the project proponent is obligated to deposit the additional amount.

Chapter-V

Formulation, submission, scrutiny, approval, revision and timeline of Mining Plan

5.1. **Formulation of Mining Plan by Qualified Person (QP) or Accredited Mining Plan Preparing Agency (MPPA):** Formulation of Mining Plan shall be done by Qualified Person (QP)/ Accredited Mining Plan Preparing Agency (MPPA) in accordance with the recognition granted to QP/MPPA for preparation of mining plan u/s 22B of Mineral Concessions (Amendment) Rules, 2020.

5.1.1. No mining plan shall be accepted unless it is prepared by a Qualified Person (QP) or an Accredited Mining Plan Preparing Agency (MPPA).

5.1.2. Quality Council of India (QCI) or National Accreditation Board for Education and Training (NABET) has been engaged for accrediting the following entities:

(i) Accredited Prospecting Agency (APA) for undertaking prospecting operations and preparation of geological reports for Coal and Lignite Mines, and

(ii) QP/Mining Plan Preparing Agency (MPPA) for preparation of mining plan (for Coal, Lignite Mines and Sand for Stowing)

5.1.3. The Quality Council of India (QCI) or National Accreditation Board for Education and Training (NABET) shall grant accreditation in accordance with such standards and procedures as specified in Schedule VI of Mineral Concession (Amendment) Rule 2020.

5.1.4. Qualified Person (QP) or Mining Plan Preparing Agency (MPPA) who prepares mining plan for a block/mine, shall have recognition from the concerned company board that the qualification of the QP or accreditation of the MPPA has been duly verified and is in line with the relevant provision of the MCR 1960.

5.2. **Submission of Mining Plan to Approving Authority:** Every mining plan submitted for approval/revision shall be accompanied with a non-refundable application fee specified from time to time in this regard, for the project area specified in the Mining Plan and peer/expert review done by any accredited mining plan preparing or reviewing agency at their (applicant's) own cost. During examination of the Mining Plan by the Technical committee, if it is felt that a review by expert or by specialized agency is required, the committee may recommend referring the mining plan to such expert/agency with the approval of the Mining Plan approving authority. Charges for the expert review shall be borne by the applicant.

5.2.1. All pages (including cover page, plates and Annexure) shall bear the signature and stamp furnishing details of the QP/MPPA in physical mode of submission and e-signature/digital signature during the online system of submission.

5.2.2. Project proponent shall register online, using registered official mail ID. For the purpose of preparation of Mining plan through a QP or MPPA, project proponent shall share a temporary login with QP/MPPA. This temporary login shall be valid till the preparation and approval of mining plan only.

5.2.3. The QP/MPPA shall upload the Mining Plan through the temporary login and submit it to the project proponent; once QP/MPPA submits the Mining Plan to the project proponent, will not be able to modify it.

5.2.4. The Project Proponent shall after incorporating relevant company board approvals submit the Mining Plan to the Approving Authority; The Mining Plan submitted to the approving authority shall become visible to Administrative Section for the respective block, members of the Technical Committee, and Coal Controller office. Simultaneously, provision of SMS alerts shall be available at all stages;

5.2.5. Mining plans approved by respective Boards of subsidiaries of CIL or CIL shall be uploaded on SWCS portal within one month of approval whereas approved mining plans (latest) shall be uploaded within 6 months of coming into force of these guidelines. This includes the Mine Closure plans prepared for mines closed before 2009. Furthermore, compliance report as per Para 2.8 of the guidelines also required to be submitted by Coal India Ltd.

5.3. **Scrutiny and Processing of Mining Plans:**

5.3.1. **Technical Committee for making recommendations on Mining Plan:** There shall be a Technical committee notified by Ministry of Coal. Members of this Technical Committee shall examine the Mining Plan from the Technical and administrative aspects.

5.3.2. The Technical committee shall recommend the Mining Plan for "Approval" or "Rejection". In case of recommendation for Rejection, the committee shall record the reason for the rejection.

5.3.3. The Technical committee shall consist of:

a) Deputy Coal Controller of CCO or any officer nominated by Coal Controller till the regular appointment of Deputy Coal Controller - Member Secretary.
b) One officer nominated by Ministry of Coal
c) Two officers nominated by CCO, Members
d) Deputy Controller of Mines from IBM, Member
e) One expert with more than 12 years' experience in Mining

5.3.4. Observations of the Committee Members shall be uploaded online and the project proponent shall resubmit the Mining Plan, after incorporating compliance, online**.**

5.3.5. The Technical Committee shall scrutinize the Mining Plan and submit comments on the portal within Fifteen (15) days of receipt of the Mining Plan. Non-submission of comments within the stipulated time may be presumed as "no comments" to offer. Technical committee, if considered necessary shall make a physical verification of the site, however, no relaxation in the timeline as specified above may be given.

5.3.6. Members of the Technical committee may raise observation twice only. The observation raised shall be communicated directly to the project proponent for incorporating the same in the Mining Plan. The project proponent shall make presentation before the Technical committee for scrutiny.

5.4. **Timeline:** Once the observation of the Scrutiny of the Mining Plan is uploaded on the portal (https://scws.coal.gov.in), the Project Proponent is required to submit the Mining Plan after incorporating the compliance to the observation within a period of 15 days of the communication, failing which the Mining Plan submitted for approval shall be rejected.

Provided that any such application may be entertained after the said period of 15 days if the applicant satisfies the approving authority that he had sufficient cause for non-submission of the mining plan (after incorporating the compliance) in time. However, in any case, this period may not be extended beyond 30 days from the date of receipt of communication of the observation.

5.4.1. The approving authority shall dispose the application for approval of the Mining Plans within a period of 30 days from the date of receiving of such application (The Mining Plan received on or before 30th of Current Month will be considered in the ensuing meeting). Provided that the aforesaid period of 30 days shall be applicable only if the Mining Plan is complete in all respects, and in case of any modifications, subsequently suggested after the initial submission of the Mining Plan for approval, the said period shall be applicable from the date on which modified mining plan is re-submitted.

5.5. **Approval:** Coal Controller Organization, New Delhi has already been delegated with the power of processing, scrutiny and approval of mining Plan.

5.5.1. The person delegated for approval of the Mining Plan under sub-section (1) of section 26 read with clause (b) of sub-section (2) of section 5 of the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957) (hereinafter, the 'Act') may seek the help of an Technical committee constituted for the purpose.

5.5.2. **Communication of Approval**: In case of an allotted/auctioned mine, the CCO shall communicate the decision of the approving authority within a period of 5 (five) working days in the form of a letter confirming "in-principle approval" of the Mining Plan to the project proponent with a copy of the same to the Nominated Authority, Government of India. Final approval of the Mining Plan in such cases shall be communicated by the CCO within 3 (three) days of receipt of applicable payments and its confirmation from the Nominated Authority, Government of India. However, in case of no dues already received from Nominated Authority, CCO may grant final approval directly.

5.5.3. While for mines other than auctioned/allotted mines where prior receipt of applicable payments has already been obtained, the CCO shall communicate the decision of the approving authority within a period of 5 working days.

5.6. **Circulation of Approved Mining Plans:** CCO shall circulate the copy of approved mining plans along with approval letter to the Ministry of Environment Forest and Climate Change and DGMS and District Administration through email for information.

5.7. **Violation cases:** In case of any deviation or violation noticed by the Technical Committee, depending on the gravity of the deviation or violation, the Technical Committee is to examine the extent of the violation for conditional approval or rejection of the mining plan. The Technical Committee can seek opinion of the Legal Cell of Ministry of Coal.

5.8. **Removal of difficulties:** Any individual, project proponent, or Technical committee encountering difficulties with the Guidelines may seek clarification from the Ministry of Coal.

5.8.1. In the interest of coal production, efficiency and faster development of coal mines, Ministry of Coal may relax any of the provisions. It may also issue directions to CCO for removing any difficulties in the interest of faster coal production or mine development.

5.9. **Appeal:** The Secretary (Coal) will be the appellate authority in the matter related to approval/rejection. Project proponent aggrieved by any order made or direction issued in respect of a mining plan by an officer competent to approve mining plans shall within 30 days of the communication of such order or direction, apply for a revision of such order or direction thereon.

5.9.1. On receipt of any application for revision, the authority shall give the aggrieved person a reasonable opportunity of being heard and may within 30 days confirm, modify or set aside the order or direction and decision thereon shall be final.

5.10. These Guidelines are without any prejudice to any other relevant rules and regulations, such as those issued by the State Governments, Ministry of Environment, Forest and Climate Change, Ministry of Labour and Employment, etc.

Appendix- I

DETAILS TO BE FURNISHED IN THE MINING PLANS FOR COAL/LIGNITE BLOCKS

A. Cover Page

The Cover page should contain the following information:

(i) Name of the Mining Plan and Mine Closure Plan /Final Mine Closure Plan

(ii) Indication: If it is a Revised Mining plan seeking approval under Rule 22E of MCR 1960, it should be marked as "Revised Mining Plan with Revision No." i.e. First Revision, Second Revision etc.

(iii) Name of the Coal/ Lignite Block area (Hectare)

(iv) Name of the Coalfield and its location i.e., District(s) and State(s)

(v) Name and address of the Applicant

(vi) Targeted capacity

a. Rated capacity :in___ MTPA

b. Peak Capacity (@ 150% of the rated capacity): in ___ MTPA

(vii) Name of the **Qualified person/Accredited Mining Plan preparing agency (MPPA)** preparing the Mining Plan with details (Details should be spelt out, e.g., Accreditation no. Validity, Address, e-mail, phone nos., etc.)

(viii) All Plans must be colored distinctly with proper legends.

(ix) All Plans must have a north direction/grid. A representative scale, legends in distinctive colours, and Project area boundary.

B. Index of Chapters of the Mining Plan (Including Mine Closure Plan) / Mine Closure Plan or Final Mine Closure Plan

Sl. No.	***Chapters***	***Page No.***
1	Checklist	
2	Project Information	
3	Exploration, Geology, Seam Sequence, Coal Quality and Reserve	
4	Mining	
5	Safety Management	
6	Infrastructure Facilities proposed and their Location	
7	Land Requirement	
8	Environment Management	
9	Progressive and Final Mine Closure Plan	

C. Index for List of Annexure

D. Index of List of Plans/ Drawings Attached enclosed as Plates

E. List of Abbreviations used.

CHECKLIST

Details		(✓/✗)
Text	Expert-review Report	
Text	Project Information	
Text	Exploration, Geology, Seam Sequence, Coal Quality and Resource	
Text	Mining	
Text	Safety Management	
Text	Infrastructure Facilities proposed and their Location	
Text	Land Requirement	
Text	Environment Management	
Text	Progressive and Final Mine Closure Plan	
Annexure-I	Copy of allotment order Vesting order.	
Annexure-II	Certificate by the Qualified person/ Accredited Mining Plan preparing agency (MPPA) certifying that project area is confined within the vested/allotted block boundary/ existing mining lessee. Where the project area extends beyond the block boundary, a certificate of Qualified person/ Accredited Mining Plan preparing agency (MPPA) should be supported with certificates (i) No objection certificate from Mines and Geology Department of the concerned State Government (ii) A certificate in proof of the non-existence of coal or lignite in the area beyond the vested or allocated boundary from CMPDIL (iii) In case of existence of coal or lignite, a certificate of technical-viability issued or certified by CMPDIL (iv) In case of Coal bearing area, an undertaking or Affidavit by the project proponent that they will rehandle the OB in a specified time period.	
Annexure-III	Approval of the Company Board	
Annexure-IV	Copy of earlier approval of mining plan.	
Annexure-V	Plan / chart showing the schedule of Implementation of Mine closure activities (progressive and final closure) with the duration of important activities	
Annexure-VI	Expert-Review Report carried out by an Accredited Mining Plan Preparing Agency (MPPA)	
Annexure-….	Other document (if any)	

Details		(✓/✗)
Plates	Location plan	
Plates	A combined plan showing the required ML, Block Boundary, and Project Boundary. Certification on the conceptual plan must show all three.	
Plates	Plan showing the Block Boundary proposed as per DGPS coordinates given by CMPDIL or the block boundary delineated through DGPS Survey and certified by CMPDIL. QP/MPPA shall also certify the same. (i) if the block boundary and project area are the same, QP/MPPA shall certify that the allocated block boundary/existing mining lease and project area are the same. (ii) where the project area extends beyond the block boundary, a Plan certified by a Qualified person/ Accredited Mining Plan preparing agency (MPPA) should be supported with a plan with cardinal coordinates duly certified by the Mines and Geology Department of the concerned State Government. Plan in support of **Annexure – II.** (iii) In case if Project area is less than the allocated block boundary, QP/MPPA shall indicate the left-out areas along with the justification for the same.	
Plates	A printed copy of the KML file superimposed in the recent (not older than one year from the base date) dated satellite Image duly certified by an Accredited Agency should also be attached. Note: The soft copy of the KML file shall also be part of the Mining Plan.	
Plates	Cadastral plan showing approved block boundary vis-a-vis proposed/existing mining lease and Mine boundary superimposed over it in distinct colour, showing land use and infrastructure etc.	
Plates	Geological plan showing all the boreholes drilled and proposed to be drilled showing allotted block boundary and required lease area	
Plates	Representative Graphic Litholog	
Plates	Surface Plan showing drainage system, Contour, preferably at 3m interval, location of BH (borehole)	
Plates	Conceptual plan showing activities related to the project such as infrastructure facilities including colony, boundary of mining area, mine entries, roads including road diversion alignment etc.	
Plates	Tentative land use plan showing land type (Govt., forest and tenancy land) with its data source	
Plates	Floor contour plan(s) and seam folio plan(s), iso-grade plan(s)	

Details		(✓/✗)
Plates	Cross-section showing coal/lignite seam(s)	
Plates	Plan showing existing and proposed surface layout(s)	
Plates	Plan showing total coal thickness and overburden thickness and stripping ratio (in case of opencast (OC) Mines)	
Plates	Final stage quarry plan showing haul road alignment (in case of OC Mines)	
Plates	Plan showing mode and location of entries and surface layouts (in case of underground (UG) Mines)	
Plates	Layout of the panel for each system (like Longwall, Continuous Miner, Bord and Pillar, road header etc.) should be given (in case of UG Mines)	
Plates	Layout of pillar extraction (in case of UG Mines)	
Plates	Support system (in case of UG Mines)	
Plates	Haulage and transport system (in case of UG Mines)	
Plates	Post-mining land use plan	
Plates	Progressive mine closure plan/ stage plans	
Plates	Year 30 Stage Plan	
Plates	Reclamation plan for which detailed planning has been done	

Chapter 1: PROJECT INFORMATION

	Parameters	Details
1.1	**INTRODUCTION**	
1.1.1	Name of Coal / Lignite mine or block	
1.1.2	Name of Coalfield/ Lignite field	
1.1.3	The base date of Mining Plan	
1.1.4	Linked End Use Plant	
1.1.5	Distance of End use plant from the pit head of the project in "km"	
1.1.6	Mode of Coal Transport/Despatch	

1.2 LOCATION, TOPOGRAPHY AND COMMUNICATION

1.2.1	Location of coal mine/block (District and State)	
1.2.2	Communication: PWD roads, railway lines, Air	
1.2.3	Availability of power supply, water etc.	
1.2.4	Prominent physiographic features, drainage pattern, natural water courses, rainfall data, highest flood level	
1.2.5	Important surface features within the project area and major diversion or shifting involved	

1.3 DETAILS OF THE ALLOTMENT AGREEMENT

1.3.1	Name of the Allottee		
1.3.2	Details of allotment/ vesting order		
1.3.3	Name and address of the applicant	**Regd. Office**	**Principal Place of Business**
1.3.4	Name of the Previous Allottee of the Block		
1.3.5	Date of Mining Opening permission granted		

	by CCO	
1.3.6	Rated Capacity as per CMDPA	
1.3.7	Production Schedule as per opening permission (meeting provisions of CMDPA, if any)	
1.3.8	End Use of Coal/Lignite as per allotment order if any	
1.3.9	Cardinal Point co-ordinates (WGS84) of the Block boundary	

ID	Latitude	Longitude
1		
2		

1.4 DETAILS OF THE PREVIOUS APPROVAL OF MINING PLAN

1.4.1	Whether any mining plan has been previously approved	
1.4.2	Title of the Mining Plan	
1.4.3	Base Date	
1.4.4	Submitted By	
1.4.5	Approval Reference, with Date	
1.4.6	Conditions, if any, and compliance	

Sl. No.	**Conditions**	**Compliance**
1.		
2.		
3		

1.4.7	Scheduled year of start of production	
1.4.8	Proposed year of achieving the targeted production	
1.4.9	Date of actual commencement of mining operations, if operations already started	
1.4.10	Likely date of mining operations, if operations not yet started and reasons for non-commencement of operations	
1.4.11	Planned production and actual levels	

Year	**Coal "Mt"**	**OB**	**SR**

	achieved in last 3 (financial year) years (Coal in Mt, OB in Mm^3, SR in M^3/t) and in current year till base date			**UG**	**OC**	**"MM^3"**	**m^3/t**
			Year 1, Planned				
			Year 1, Actual				
			Year 2, Planned				
			Year 2, Actual				
			Year 3, Planned till base date				
			Year 3, Actual till base date				
1.4.12	Statutory obligations vis-a-vis compliance status in a tabular form						
1.4.13	Reasons for difference between the planned and actual production levels						

1.5 PARAMETERS OF APPROVED MINING PLAN VIS-A-VIS PROPOSED MINING PLAN

	Parameters	**Approved Mining Plan**	**Proposed Mining Plan**
1.5.1	Allocated Block Area in "Ha"		
1.5.2	Allocated Block Area Projectised "Ha"		
1.5.3	Proposed Mining Lease area "Ha" (Besides, Mineralised zone Lease area may encompass other areas under the definition of a mine)		
1.5.4	Project Area "Ha"		
1.5.5	Life of the Project "Yrs"		
1.5.6	Minimum and Maximum Depth of working "m"		
1.5.7	Geological Block "Ha"		
1.5.8	Production Target "MTPA"		
1.5.9	Seams Available "As per GR"		
1.5.10	Seams not considered for Mining with Reasons		
1.5.11	Gross Geological Reserve "Mt" (as per GR,)		

	Parameters	Approved Mining Plan	Proposed Mining Plan
1.5.12	Net Geological Reserve "Mt" (as per GR)		
1.5.13	Blocked Reserve "Mt"		
1.5.14	Minable Reserve "Mt"		
1.5.15	Extractable Reserve "Mt"		
1.5.16	% of Extraction/ recovery		
1.5.17	Production till date (till the base date of the proposed Mining Plan) Reserve " Mt"		
1.5.18	Balance Extractable Reserve "Mt"		
1.5.19	Average Grade		
1.5.20	OB in Mm^3		
1.5.21	SR Mm^3/t		
1.5.22	Mining Technology		
1.5.23	Coal Beneficiation envisaged		
1.5.24	Handling of Rejects		
1.5.25	Land use pattern "Ha"		
i.	Excavation Area		
ii.	Top Soil Dump Area		
iii.	External Dump Area		
iv.	Safety Zone		
v.	Other Use		
vi.	Infrastructure area		
vii.	Green Belt		
viii.	Undisturbed Area		
	Total		
1.5.26	**Reasons for revision**		

1.6.: SUSTAINABILITY (Indicative)

	Parameters	
1.6.1	No. of Project Affected People (PAPs)	
1.6.2	No. of Woking-aged persons	
1.6.3	No. of Skilled/Semi Skilled /Unskilled persons profession wise, gender wise, age wise and location wise	

	Parameters	
1.6.4	No. of persons in Vulnerable Groups (Women, Children, Handicap etc.)	
1.6.5	Repurposing of land proposed	
1.6.6	Assessment of possible GHG emissions	
1.6.7.	Tentative measures to curtail GHG emissions	
1.6.8.	Efforts to achieve net zero, wherever applicable	

Chapter 2: Exploration, Geology, Seam Sequence, Coal Quality And Resource

<table>
<tr><th></th><th>Parameters</th><th colspan="3">Details</th></tr>
<tr><td>2.1</td><td colspan="4">DETAILS OF THE BLOCK</td></tr>
<tr><td>2.1.1</td><td>Name of the Geological Report with month and year of preparation,</td><td colspan="3"></td></tr>
<tr><td>2.1.2</td><td>Name of GR Preparing Agency</td><td colspan="3"></td></tr>
<tr><td>2.1.3</td><td>Particulars of adjacent Area/ blocks: North, South, East, West</td><td colspan="3">North :
South:
East:
West:</td></tr>
<tr><td>2.1.4</td><td>Location of the Block District / State</td><td colspan="3"></td></tr>
<tr><td>2.1.5</td><td>Area of the Block "Ha"</td><td colspan="3"></td></tr>
<tr><td>2.1.6</td><td>Area of the geological block projectised "in Ha" (Area of the geological block considered for liquidation of coal resource)</td><td colspan="3"></td></tr>
<tr><td>2.1.7</td><td>Balance area yet to be projectised "Ha"</td><td colspan="3"></td></tr>
<tr><td>2.1.8</td><td>Likely geological Resource in the area yet to be projectised "MTPA"</td><td colspan="3"></td></tr>
<tr><td rowspan="4">2.1.9</td><td rowspan="4">Cardinal Point Co-ordinates of the non-coal/lignite bearing area/ Coal/lignite bearing area within the existing mining lease outside the allotted Geological Coal/Lignite block.
(Duly certified in line with Para 2.7 (c) of the Guideline, if fresh mining lease required)</td><td colspan="3">Cardinal Point Co-ordinates of the non-coal (lignite) or coal (lignite) bearing area/exiting mining lease outside the allotted Geological Coal/Lignite block, <u>which is proposed to be included in the project area</u></td></tr>
<tr><td>ID</td><td>Latitude</td><td>Longitude</td></tr>
<tr><td>1</td><td></td><td></td></tr>
<tr><td>2</td><td></td><td></td></tr>
</table>

<table>
<tr><td></td><td></td><td colspan="3"></td></tr>
<tr><td>2.1.10</td><td>Certificate of Qualified person/ Accredited Mining Plan preparing agency (MPPA) if the project area is confined within the vested/ allotted block boundary/ existing mining lease and

Where the project area extends beyond the block boundary, a certificate of Qualified person/ Accredited Mining Plan preparing agency (MPPA) should be supported with a certificates i) As the State government is the custodian of exploration data under provisions of Rule 16 of MCR 1960, a No Objection Certificate from Mines and Geology Department of concerned State Government (ii) A certificate in proof of the non-existence of coal or lignite in the area beyond the vested or allocated boundary from CMPDIL (iii) In case of existence of coal or lignite, a certificate of technical-viability issued or certified by CMPDIL (iv) In case of Coal bearing area, an undertaking or Affidavit by the project proponent that they will rehandle the OB in a specified time period.</td><td colspan="3">Cardinal Points Co-ordinates of the Proposed Lease Area considered in the Mining Plan
<table><tr><th>ID</th><th>Latitude</th><th>Longitude</th></tr><tr><td>1</td><td></td><td></td></tr><tr><td>2</td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table>Note: Certificate should be given on conceptual plan envisaged in the proposed mining plan depicting OB area, infrastructure locations, boundaries and cardinal point co-ordinates of the lease area, block area, project area;
In case the project boundary extends beyond the allotted geological block boundary/<u>Existing mining lease</u> certificate of occurrence/non-occurrence of coal should be clearly shown.

Certificate should envisage that the Georeferenced Co-ordinates considered for preparation of Mining plan is in line with Vesting allotment order and does not encroach any other adjacent block, and the said area in case any proposed infrastructure or OB dump is outside the block area;

The Project area, Lease area and geological block area in ‘Ha” shall also be envisaged.</td></tr>
<tr><td>2.1.11</td><td>KML file of the Proposed lease area, Project Area and geological block.</td><td colspan="3">Note: Printed copy of the KML file superimposed in the recent (not older than one year from the base date) dated satellite Image duly certified by Accredited Agency should also be attached.

Note: The soft copy of the KML file shall also be part of the soft copy of the Mining Plan.</td></tr>
<tr><td>2.1.12</td><td>Whether the proposed project area is confined within the allotted block boundary/existing mining lease, if not, the reason for deviation from allotted block boundary, may be given.</td><td colspan="3"></td></tr>
<tr><td>2.1.13</td><td>If the project area extends outside the allotted block boundary/existing mining</td><td colspan="3"></td></tr>
</table>

	lease, confirmation about non-occurrence of coal/lignite in the area under reference needs to be furnished	
2.1.14	Type of the Project (Operating under implementation) and year of Starting.	

2.2	**EXPLORATION, GEOLOGY AND ASSESSMENT OF RESERVE**	
2.2.1	Regional geological set up of the area, geology, structure, stratigraphic sequence, characteristics of the litho-logical units (coal seams/partings/overburden).	(In Maximum 500 Words)
2.2.2	Local geology, Structure, Stratigraphic sequence, Characteristics of the litho-logical units (coal seams /partings/overburden).	(In Maximum 500 Words)
2.2.3	Geological Block Area "Ha"	
2.2.4	Status of Exploration of the block	
2.2.5	Area covered by 'detailed' exploration within the block (sq. km)	
2.2.6	Whether entire lease area has been covered by `detailed' exploration.	
2.2.7	No. of boreholes drilled within the mining area of the block	
2.2.8	Whether any further exploration/study is required or suggested and time frame in which it is to be completed	
2.2.9	Year wise future programme of exploration	
2.2.10	Overall borehole density within the mining area (no./ sq. km) approx.	
2.2.11	No of Seams available as per GR	
2.2.12	Seams not considered for Mining with Reasons	
2.2.13	Dip of the Seam	
2.2.14	Seam wise thickness, depth and reserve	

Seam	**Thickness range, m**	**Depth Range, m**	**Net Geological reserve 'Mt'**	**Blocked Resources below**					**Mineable Resource 'Mt'**		**Mining Losses**
				Highwall/ Batter	**Surface features**	**Barrier**	**Un-economic**	**Total Blocked**	**UG**	**OC**	

Total											

Seam	**Extractable Reserve "Mt"**			**As on base date "Mt"**							**Reason not considered for mining**
				Depletion of Reserve			**Balance Reserve**				
	UG	**OC**	**Highwall**	**UG**	**OC**	**High wall**	**UG**	**OC**	**Highwall**	**Total**	

Note : Break-up of the geological reserve for the block, considered in the proposed mining plan, to be projected later and that likely to be sterilized to be given seam wise along with the relevant plans.

2.2.15	Methodology of resources estimation (also mention if any software package has been used).	(In Maximum 500 Words)
2.2.16	**Average GCV "KCal/kg"**	
2.2.17	Gross Geological Reserve of the block "Mt"	
2.2.18	Net Geological Reserve of the block "Mt"	
2.2.19	Minable Reserve of the block "Mt"	
2.2.20	Blocked Reserve “Mt”	
2.2.21	Corresponding extractable Reserve of the block "Mt"	
2.2.22	Percentage of Extraction	
2.2.23	Resource already depleted (Base date of Mining Plan)	
2.2.24	Balance Resource (as on Base Date)	

Chapter 3: Mining

	Parameters	***Details***
3.1	**MINING METHOD**	
3.1.1	Existing method of mining if the mine is under operation	

3.1.2	Proposed method of mining with justification on suitability of method of mining.	• Seams to be worked, Choice of Mining Method and justification for Optimization of targeted capacity, sequence of mining, production scheduling, equipment configuration etc. • Behaviour of coal roof and floor and support system for strata control including, Geo-technical investigations, rock mechanics study carried out already, if any, Scheme of mine development in tandem with production, transport and winding system in underground for coal and rock (if required) and personnel; Sources of stowing material (if applicable). • Brief description of all operation e.g., winning, transport, blasting, overburden removal and disposal, Life of the mine furnishing the assumptions made and the detailed computations. • **Location of Mine Opening:** In case of opencast mines, location of Access trench and reason for selection of site thereof the mining system (geometry and bench parameters and its sequence of development, along with a drawing) and quarry parameters (surface area, floor area). thickness range of each seam and parting, minimum and maximum depth. Quarry stage plans including OB dumps for 1st year, 3rd year,5th year, year of achieving rated capacity of the mine, Final year (i.e. at the end of mine life) and post closure subsequently, also indicating the volume of excavation for coal and OB, area of excavation volume of internal and external dump and the area, in hectare, for internal and external dumps and height. Seam wise calendar programme of excavation, timeframe for commencement of Backfilling and justification thereof. • In case of underground mining, number and location, length and depth of shafts, inclines, and other mode of entries to be shown in the plan, e.g., Shaft 1, Shaft -2 etc.), HFL of the area, gassiness of the seams, Technology tie-ups if any.

		• Seams to be worked, method of working, optimization of coal roof and floor and support system for strata control including, Geo-technical investigations, rock mechanics study carried out already, if any, Scheme of mine development in tandem with production, the extent of working for 1st year, 3rd year, 5thyear, year of achieving rated capacity of the mine, Final year(i.e. at the end of mine life) and post closure, (all stages may be marked in distinct colour in the working plan of each seam),transport and winding system in underground for coal and rock (if required) and personnel; Sources of stowing material(if applicable). • Adequacy of ventilation system taking into account the development works with supporting calculations, specifications of Main Mechanical Ventilator, blasting requirements and requirement of explosives, the requirement in mass production technology (CMs/LWs), pumping requirements, and standby arrangements. (In Maximum 3000 Words)
3.1.3	Coal production capacity proposed "MTPA"	
3.1.4	Justification for optimization of Coal production capacity	(In Maximum 500 Words)
3.1.5	The calendar year from which the production will start	
3.1.6	Year of Achieving rated production	

3.1.7 Tentative Coal Production Plan "Mt"

Year		Coal Production Schedule			OB "MM^3,	SR Cum/t
Year of Operation	Calendar Year	UG	OC	Total		
Before Year 1						
Y-1						
Y-2						
Y-3						
Y-4						
Y-5						

	Sub-Total (From First Year)					
	Total					
	Note: Calendar Plan / Production Plan for the entire life of the mine.					

3.1.8	**Rated Capacity "MTPA"**	
	- By OC	
	- By UG	
	- Overall	
3.1.9	**Life of the mine: "Years"**	
	- By OC	e.g., 30 years (From 1st year to 30th year)
	- By UG	e.g.,20 years (From 31st year to 50th year)
	- Overall	e.g.,50 Years
3.1.10	Whether the proposed external OB dump site is coal/ lignite bearing: If so, whether coal/lignite below the waste disposal area is extractable, If so, by OC or UG method	
3.1.11	Whether negative proving for coal/lignite in the proposed site for OB dump/ infrastructure has been done.	
3.1.12	Results of any investigation carried out for scientific mining, conservation of minerals and protection of environment; future proposals.	
3.1.13	Type of Equipment/HEMM proposed	

Chapter 4: Safety and Health Management

	Parameters	*Details*
4.1	**Safety and Health Management System Audit**	
4.1.1	**Important safety aspects:** Major Risks and uncertainties to the project viz. Proximity to river, adjacent working, geo-mining disturbances, slope stability and remedial measures suggested. It should also include the proposed overall slope of the quarry and OB dump, dump height, strata control, fire and spontaneous heating, gas monitoring, disaster management, danger from inrush of water etc. Every mine should conduct a safety audit based on Safety Health Management Audit Guidelines.	(Maximum 500 Words)
4.1.2	A Commitment from the Company Board that entire mining operation will be carried out as per the Statutory provision given under Mines Act 1952, Coal Mine Regulation 2017 and and wherever specific permission will be required the company will approach the concerned authorities.	(To be furnished as a Part of Annexure-III)

Chapter 5: Infrastructure Facilities

<table>
<tr><th></th><th>Parameters</th><th>Details</th></tr>
<tr><td>5.1</td><td>Mine infrastructure required e.g., Equipment maintenance planning, Office buildings, Workshop, Power supply arrangement, Water supply etc.</td><td>(Tabular Form)
(Location to be shown in Conceptual Plan/Plates)

<table>
<tr><th>Sl. No.</th><th>Facilities/ infrastructure to be retained</th><th>Area, Ha</th></tr>
<tr><td>1.</td><td></td><td></td></tr>
<tr><td>2.</td><td></td><td></td></tr>
<tr><td>3.</td><td></td><td></td></tr>
<tr><td></td><td>Total</td><td></td></tr>
</table>
<table>
<tr><th>Sl. No.</th><th>Facilities/ infrastructure to be Dismantled</th><th>Area, Ha</th></tr>
<tr><td>1.</td><td></td><td></td></tr>
<tr><td>2.</td><td></td><td></td></tr>
<tr><td>3.</td><td></td><td></td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td></td><td>Total</td><td></td></tr>
</table></td></tr>
<tr><td>5.2.</td><td>Power supply and illumination.</td><td>(Max 500 Words)
(Location to be shown in Plates)</td></tr>
<tr><td>5.3</td><td>Drainage and Pumping: Assessment of Volume of Water for Pumping, Pumping Capacity and Pump Selection</td><td>(Max 500 Words)
(Location to be shown in Plates)</td></tr>
<tr><td>5.4</td><td>Coal Handling Arrangement: Brief detail of the CHP/ Mode of Dispatch, Coal quality and Coal staking and handling arrangement</td><td>(Max 500 Words)
(Location to be shown in Plates)</td></tr>
<tr><td>5.5</td><td>Coal washing and the proposed handling/ disposal of rejects.</td><td>(Max 500 Words)
(Location to be shown in Plates)
Annual Raw coal Feed plan and product with reduction in ash% from feed to product must be furnished in a tabular form</td></tr>
<tr><td>5.6.</td><td>Water Consumption and</td><td></td></tr>
</table>

	Wastewater generation (for coal handling/washing as applicable, manpower engaged, utilities, firefighting requirements, HEMM washing/maintenance, dust suppression as well as plantation, etc.)	
5.7.	Other infrastructures for air pollution control (fog cannons, fixed water spraying systems, cold fog, Vertical Greenery System (VGS), wind barriers, or other relevant technologies)	

Chapter 6: Land Requirement

<table>
<tr><th></th><th>Parameters</th><th>Details</th></tr>
<tr><td>6.1</td><td colspan="2">LAND REQUIREMENT</td></tr>
<tr><td>6.1.1</td><td>Total Land requirement for the mine in "Ha"</td><td>Break up of pre-mining land type (indicative)and source of data.
<table>
<tr><th colspan="2">Land Type</th><th>Area</th></tr>
<tr><td rowspan="7">Tenancy</td><td>Agricultural</td><td></td></tr>
<tr><td>Township</td><td></td></tr>
<tr><td>Grazing</td><td></td></tr>
<tr><td>Barren</td><td></td></tr>
<tr><td>Water Bodies</td><td></td></tr>
<tr><td>Road</td><td></td></tr>
<tr><td>Community/other use</td><td></td></tr>
<tr><td rowspan="4">Govt. Non-Forest</td><td>Agricultural</td><td></td></tr>
<tr><td>Township</td><td></td></tr>
<tr><td>Grazing</td><td></td></tr>
<tr><td>Barren/other use</td><td></td></tr>
<tr><td rowspan="3">Forest</td><td>Resource</td><td></td></tr>
<tr><td>Protected</td><td></td></tr>
<tr><td></td><td></td></tr>
<tr><td>Free Hold</td><td></td><td></td></tr>
<tr><td>Total</td><td></td><td></td></tr>
</table></td></tr>
<tr><td>6.1.2</td><td colspan="2">During mining Land use details:</td></tr>
</table>

Type	Land use (Proposed)	Land Use (End of Life)	Land Use (Post Closure)						
			Agricultural land	Plantation	Water Body	Public/ Company Use	Forest Land (Returned)	Undisturbed	Total
Excavation Area									
Backfilled Area									
Excavated Void									
Without plantation									
Top Soil Dump									
External Dump									
Safety Zone									
Haul Road between quarries									
Road diversion									
Diversion/ below River/Nala/ canal									
Settling pond									
Road and Infrastructure area									
Fly ash dumping, if any									
Rationalisation area									
Garland drains									
Embankment									
Green Belt									

	Water Reservoir near pit									
	UG entry									
	Undisturbed / Mining right for UG									
	Resettlement									
	Pit head washery/ power plant									
	Water harvesting									
	Agricultural land									
	Total									

6.1.3	Surface features over the block area	
6.1.4	No. of villages/Houses to be shifted	
6.1.5	Population to be affected by the project	
6.1.6	Proposed Rehabilitation programme	
6.2	**DETAILS OF LEASE**	
6.2.1	Status of Lease	
6.2.2	Existing Lease Area "Ha"	
6.2.3	Period for which Mining Lease has been granted/is to be renewed/ is to be applied for.	
6.2.4	Date of expiry of earlier Mining Lease, if any	
6.2.5	Whether the lease boundary/ required boundary is same as mentioned in the allotment order	
6.2.6	Lease Area (applied/ required) as per the Mining Plan under consideration (Ha)	
6.2.7	Whether the applied lease area falls within the allotted block	
6.2.8	Area (Ha) of lease which falls outside the delineated Block Boundary/Existing Mining Lease	
6.2.9	**Details of outside area:**	

	Whether forms part of any other coal block	
	Whether it contains any coal/lignite reserve	
	Purpose for which it is required, e.g., roads/ OB dumps/ service buildings/ colony/ safety zone/ others (specify)	
6.2.10	**Whether some part(s) of the allotted block has not been applied for mining lease.**	
	Total area in Ha of such part(s).	
	Total resources in such part(s). (Mt)	
	Brief reasoning for leaving such part(s)	

Chapter 7: Environmental Management

	Parameters	***Details***
7.	**ENVIRONMENTAL MANAGEMENT**	
7.1	The project proponent shall submit an undertaking that the mine shall be operated as per the Environment Clearance (EC) and Forestry Clearance (FC) for the project.	

Chapter 8: PROGRESSIVE and FINAL MINE CLOSURE PLAN

	Parameters	*Details*
8.1	***Land Degradation and restoration Schedule***	
8.1.1	Tentative Land Degradation and Technical Reclamation (Commutative Area "Ha")	

Stage/ Year		Land Degraded				Technically Reclaimed Area			
		Excav.	Dump (Extn + Top Soil)	Infra/ others	Total	Backfill /Stowing	Dump (Extn+ + Top Soil)	Others	Total
Up to Base year *									
Y-1									
Y-3									
Y-5									
Y-10									
Y-15									
Y-20									
Y-25									
Y-30									
Post Mining Closure									
Y-33									
Post Closure Monitoring									
Y-35									

*-Considering Base year i.e. 2024-25 and life of 35 years in this case

Note: For the purpose of preparation of Stage plan and action plan for restoration and assessment of life of mine and escrow account, the year in which any activity over the proposed land is envisaged, should be considered as 1st year i.e. First year of development.

Stages of reclamation and restoration of land should be given for 1st, 3rd, 5th, 10th and subsequently every five year for the entire life of the project and for 3 years post-mining closure.

8.1.2 **Tentative Biological Reclamation (Cumulative in "Ha")**

Year/Stage	Biologically Reclaimed Area					Forest land (Return)	Un Disturbed/ To be left for Public/com Use	Total
	Agricul-ture	Plantation	Water Body	Public/ Company Use	Total			

Up to Base year									
Y-1									
Y-3									
Y-5									
Y-10									
Y-15*									
Y-20									
Y-25									
Y-30									
Post Mining Closure									
Y-33									
Post Closure Monitoring									
Y-35									

Stages of reclamation and restoration of land should be given for 1st, 3rd, 5th , 10th and subsequently every five year for the entire life of the project and for 3 years post mining closure.

8.2	**Post Closure Water Quality management:**	(Max 200 Words) (Existing water bodies available in the lease hold area; Measures to be taken for protection of the same including control of erosion, sedimentation, siltation, water treatment, diversion of water course, if any; Measures for protection of contamination of ground water from leaching etc;)
8.3	**Post Closure Air Quality management**	(Max 200 Words)
8.4	**Waste Management (Figures in MM^3) (Tentative)**	

Year/Stage		OB Removal (Cumulative)			External Dump (Cumulative)		Internal Backfilling (Cumulative)		Embankment (Cumulative)	
		Top Soil	OB	Total	Top Soil	OB	Top Soil	OB	Top Soil	OB
Up to Base year										
Y-1										
Y-3										
Y-5										
Y-10										
Y-15										
Y-20										
Y-25										
Y-30										
Post Mining Closure										
Y-33										
Post Closure Monitoring										
Y-35										

* - Considering the life of 35 years in this case

Stages at 1st, 3rd, 5th, 10th and subsequently every five years for the entire life of the project and 3 years post mining closure

8.5 Top Soil Management — (Including Action plan for Top Soil management) (Tentative)

(All Figures are Cumulative and in MM^3)

Year/Stage		Top Soil Removal Plan	Top Soil Used				
			Spreading Over Embankment	Spreading over Backfill area	Spreading over External OB Dump area	Used in Green Belt area	Total Utilised
Up to Base year							
Y-1							
Y-3							
Y-5							
Y-10							
Y-15							
Y-20							
Y-25							
Y-30							
Post Mining Closure							
Y-33							
Post Closure Monitoring							
Y-35							

Considering the life of 35 years in this case

	Stages at 1st, 3rd, 5th, 10th and subsequently every five years for the entire life of the project and for 3 years post mining closure
8.6	Management of Coal Rejects.
8.7	Restoration of Land used for Infrastructure
8.8	Disposal of Mining Machinery
8.9	Safety and Security
8.10	**Mine Closure Cost and Financial Assurance**
8.10.1	**Mine Closure Cost:**

Cost of Activities to be taken up for closure of the mines					
Head	**Particulars**	**Unit**	**Proposed Mine Closure Activities Cost**		
			Quantity	**Rs ₹/ Unit**	**"Rs. Cr"**
A. Progressive Mine Closure	Barbed wire fencing around the mine (Pit and Dump)	m			
	Waste Management	MCum			
	Filing of Void - Rehandling of Dump (Not carried out as part of regular mining operation)	MM3			
	Top soil Management	MM3			
	Technical and Biological Reclamation of mined out land and OB Dump.	Ha			
	Plantation over Virgin Area including green belt	Ha			
	Manpower Cost and supervision				
	Toe wall around the dump	m			
	Garland Drain	m			
	Stowing				
	Subsidence Monitoring and Management				
	Isolation Stoppings				
	Any other activities				
	Sub Total (A)				
B. Post Closure Activities					
	Dismantling of Workshop	LS			
	Dismantling of CHP	LS			
	Dismantling of mine structures				

	Dismantling of Infrastructure and Disposal/ rehabilitation of Mining machinery	Dismantling of Civil structures	LS			
		Rehabilitation of dismantled facilities	LS			
		Dismantling of pumps and Pipes/ other facilities	LS			
		Dismantling of stowing bunkers, provisioning of pumps for bore well pumping arrangement				
		Dismantling of UG equipment	LS			
		Rearranging wate pipeline to dump top park Agricultural land	LS			
		Dismantling of Power lines	LS			
		Sub total				
	Safety and Security	Barbed wire fencing around mine (Pit and dumps)	m m m			
		Concrete wall with masonry / concrete pillars around the pit	m			
		Securing entries (shaft/inclines)	Nos.			
		Securing of Inclines	Nos.			
		Appropriate fencing around the water body	m			
		installation of bore well pump				
		Stabilisation| viz., benching, pitching et) of side walls of the water body	LS			
		Toe Wall around the dump	m			
		Garland drain	m			
		Drainage Channel from main OB dump	m			
		Sub total				
		Filing of Void	Mm3			
		OB Rehandling for backfilling	Mm3			

	Technical and Biological Reclamation of Mined out of land and OB dump	Terracing, blanketing with soil and vegetation of Extremal OB Dump	Ha			
		peripheral road, gates, view point, cemented steps on bank				
		Expenditure on development of Agricultural land				
		Landscaping and Plantation				
		Sub total				
	Post Closure Monitoring and supervision	Power Cost				
		Post Mining Water quality management				
		Post Mining Air quality management				
		Subsidence monitoring for 5 years				
		Manpower Cost and supervision				
		Sub total				
	Sustainability	Skill Development and Trainings (Alternative Source of livelihood)				
		Fruit bearing, medicinal & local species plantation / Afforestation				
		Agriculture and other Allied Activities				
		Eco-Tourism Development				
		Flora and fauna Conservation/Wildlife conservation				
		Water Resource Management/Conservation				
		Clean Energy Projects				
		Art and Culture				
		Women Empowerment				
		Welfare of aged and disabled people				
		Sustainable Living				

		Sanitation				
		Sub Total (B)				
	Grand Total (A+B)					

8.10.2	**<u>Financial Assurance:</u> Amount to be deposited in Escrow account as a security against the mine activities to be carried out for the closure of the mine**

Latest WPI Available	Sep-24		156.40
WPI as on base date	May-24		153.50
Escalation rate of Financial assurance			1.018
		UG	OC
The base Rate of Financial assurance amount " ₹Crs./Ha"		0.02	0.14
Financial assurance amount "₹. Crs/Ha"		0.0203	0.1426
Project Area			
Amount to be deposited into Escrow Account “(₹) in Crs”			
The amount already deposited into Escrow Account “(₹) in Crs”			
Net Amount to be deposited into Escrow Account “(₹) in Crs”			
Rate of compounding of Annual Financial assurance amount			
Balance production Life of the project "in Yrs"			
Annual Financial assurance amount			
Amount to be deposited into Escrow Account after compounding @ of 5% (₹ in Crs)			

* ***Base date considered is 31.05.2024 and life of the mine considered is … years from 20..-..***

Amount to be deposited into Escrow Account annually (“₹ in Crs”**)**				
Year	**OC**	**Year**	**UG**	**Total**
1				
2				
3				
Total				

ANNEXURES

	Parameters	***Details***	
I	Copy of allotment order /Vesting order.	**Mandatory Document**	**Annexure - I**

II	Certificate of Qualified person (QP) / Accredited Mining Plan preparing agency (MPPA) if the project area is confined within the vested/allotted block boundary/ existing mining lease area. Where the project area extends beyond the block boundary, a certificate of Qualified person or Accredited Mining Plan preparing agency (MPPA) should be supported with a certificates i) As the State government is the custodian of exploration data under provisions of Rule 16 of MCR 1960, a No Objection Certificate from Mines and Geology Department of concerned State Government (ii) A certificate in proof of the non-existence of coal or lignite in the area beyond the vested or allocated boundary from CMPDIL (iii) In case of existence of coal or lignite, a certificate of technical-viability issued or certified by CMPDIL (iv) In case of Coal bearing area, an undertaking or Affidavit by the project proponent that they will rehandle the OB in a specified time period.	**Mandatory Document** **Note:** Certificate should be given on conceptual plan envisaged in the proposed mining plan depicting OB area, infrastructure locations and geo-reference co-ordinates of the lease area, block area, and project area; In case the project boundary extends beyond the allotted geological block boundary certificate of non-occurrence/ technical-viability of coal should be clearly shown. The certificate should envisage that the Cardinal Point Co-ordinates considered for preparation of the Mining plan is in line with the Vesting/allotment order and do not encroach any other adjacent block, and non-coal bearing/coal bearing certificate of the area in case any proposed infrastructure or OB dump is outside the block area; The Project area,Lease area and geological block area in "Ha" shall also be mentioned.	**Annexure - II**
III	**Approval of the Company Board**	Approvals of Mining Plan form the Board of the company giving an undertaking for the correctness of data used in the preparation of Mining Plan; Details of the Qualified Person (QP)/ Accredited Mining Plan preparing agency (MPPA) with certification that the eligibility of the Qualified person /Accredited Mining Plan preparing agency has been verified. Acceptance of the Mining Plan by the company board with a recommendation for approval;	**Annexure - III**

		Undertaking that the mine will be developed as per the approval of the mining plan from the Ministry of coal and all other approvals, as required will be obtained from relevant authorities Commitment that the entire mining operation will be carried out as per the statutory provision given under Mines Act 1952, Coal Mine Regulation 2017, EP Act 1986 and FC Act 1980 and wherever specific permission will be required the company will approach the concerned authorities. Financial Assurance for implementation Undertaking that the reclamation and rehabilitation work shall be carried out in accordance with the approved Mine Closure Plan and any modification /amendments that may be made in the Mine Closure Plan by the Ministry of Coal, from time to time. Undertaking that the protective measures contained in the mine closure plan including reclamation and rehabilitation works will be carried out in accordance with the approved mine closure plan and final mine closure plan and undertake to submit a yearly report before 1st July of every year to the Coal Controller setting forth the extent of protective and rehabilitative works carried cut as envisaged in the approved mine closure plans (Progressive and Final Closure; Undertaking that they will obtain a mine closure certificate from the Coal Controller to the effect that the protective, reclamation and	

		rehabilitation works carried out in accordance with the approved mine closure plan/final mine closure plan and will surrender the reclaimed land to the State Government concerned.	
IV	Copy of earlier approval of mining plan.	**Mandatory Document**	**Annexure - IV**
V	Plan/chartshowing schedule of Implementation of Mine closure activities (progressive and final closure) with duration of important activities	**Mandatory Document**	**Annexure - V**
VI	Non-refundable Application Fee	**Proof of the payment**	**Annexure - VI**
VII	Expert-Review Report	**Carried out by Accredited Mining Plan Preparing Agency (MPPA)**	**Annexure - VII**
VIII	Other document (if any)		**Annexure-…..**

PLANS/ PLATES

I	Location plan	
II	Plan certified by Qualified person (QP) / Accredited Mining Plan preparing agency (MPPA)if the project area is confined within the vested/allotted block boundary and Where the project area extends beyond the block boundary, a Plan certified by Qualified person (QP) / Accredited Mining Plan preparing agency (MPPA) should be supported with a plan with cardinal point co-ordinates duly certified by the State Government mines and Geology department. **Plan in support of Annexure - II**	**Plan in support of Annexure - II** **Note:** Certificate should be given on conceptual plan envisaged in the proposed mining plan depicting OB area, infrastructure locations and cardinal Point co-ordinates of the lease area, block area, and project area; In case the project boundary extends beyond the allotted geological block boundary certificate of non-occurrence/ technical-viability of coal should be clearly shown. The certificate should envisage that the Cardinal Point Co-ordinates considered for preparation of the Mining plan is in line with the Vesting/allotment order and do not encroach any other adjacent block, and non-coal bearing/coal bearing certificate of the area in case any proposed infrastructure or OB dump is outside the block area;
III	KML file of the Proposed lease area, Project Area and geological block.	**Note:** A printed copy of the KML file superimposed in the recent (not older than one year from the base date) dated satellite Image duly certified by Accredited Agency should also be attached. The soft copy of the KML file shall also be part of the Soft copy of the mining Plan.
IV	Cadastral plan showing approved block boundary vis-à-vis proposed/existing mining lease and Mine boundary superimposed over it in distinct colour, showing land use and infrastructure etc.	
V	Geological planshowing all the boreholes drilled and proposed to be drilled showing allotted block boundary and required lease area	
VI	Graphic Litholog	
VII	Surface Plan showing drainage system, Contour, at minimum 3m interval, location of BH	
VIII	Conceptual plan showing infrastructure facilities including colony, boundary of mining area, mine entries, roads including road diversion alignment etc	

<table>
<tr><td>IX</td><td>Tentative land use plan showing land type (Govt., forest and tenancy land) with its data source</td><td></td></tr>
<tr><td>X</td><td>Floor contour plan and seam folio plan, ISO-grade plan</td><td><table><tr><td>Seam</td><td>Floor Contour</td><td>Seam Folio</td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table></td></tr>
<tr><td>XI</td><td>X-section showing coal/Lignite seams</td><td></td></tr>
<tr><td>XII</td><td>Plan showing existing and proposed surface layout</td><td></td></tr>
<tr><td></td><td>OPENCAST (OC) MINES</td><td></td></tr>
<tr><td>XIII</td><td>Plan showing total coal thickness and overburden thickness and stripping ratio</td><td>OC</td></tr>
<tr><td>XIV</td><td>Final stage quarry plan showing haul road alignment</td><td>OC</td></tr>
<tr><td></td><td>UNDER GROUND (UG) MINES</td><td></td></tr>
<tr><td>XV</td><td>Plan showing mode and location of entries and surface layouts</td><td>UG</td></tr>
<tr><td>XVI</td><td>Layout of the panel for each system (like Longwall, Continuous Miner, Bord and Pillar, road header etc.)</td><td>UG</td></tr>
<tr><td>XVII</td><td>Layout of pillar extraction</td><td>UG</td></tr>
<tr><td>XVIII</td><td>Support system</td><td>UG</td></tr>
<tr><td>XIX</td><td>Haulage and transport system</td><td>UG</td></tr>
<tr><td></td><td>CLOSURE PLAN</td><td></td></tr>
<tr><td>XX</td><td>Post mining land use plan</td><td></td></tr>
<tr><td>XXI</td><td>Progressive mine closure plan/ stage plan indicating stages at 1st,3rd, 5th, 10th year of achieving rated capacity of the mine and end of life (showing area, volume, dump height etc. for OC and seam-wise layout projects and ventilation system in UG)</td><td><table><tr><td>Year</td><td>Plate No.</td></tr><tr><td>1st</td><td></td></tr><tr><td>3rd</td><td></td></tr><tr><td>5th</td><td></td></tr><tr><td>PRC</td><td></td></tr><tr><td>End of Life</td><td></td></tr></table></td></tr>
<tr><td>XXII</td><td>Year 30 Stage Plan</td><td></td></tr>
<tr><td>XXIII</td><td>Reclamation plan for which detailed planning has been done</td><td></td></tr>
</table>

Appendix -II

SAMPLE FORMAT FOR PREPARATION OF MINING PLANS FOR SAND FOR STOWING

A. Cover Page

The Cover page should contain the following information:

I. Name of the Mining Plan and Mine Closure Plan
II. Mineral Type: Sand for Stowing,
III. Planned Production:
IV. Block area/Project area/Proposed area
V. Name of Village, District and State

B. Index

S. No	Subject	Page No.
1	Index	
2	Abbreviations	
3	Index for Main Text	
4	List of Annexures	
5	List of Plates	
6	Check List	
7	Sustainable sand mining management guidelines 2016 Checklist	
8	Summarized Data	
9	Text	

C. Abbreviations Used

D. MAIN TEXT IN TABULAR FORM

Chapter 1: Introduction

(Motto, Project Details, Positive Impact of Cleaning the river bed by lifting the sand in the coal mining area, Historical Background of Sand Mining Lease, Status of Statutory Clearances, Relevance to MOEF and CC Sustainable Sand Mining Guidelines 2020, Name of applicant, Status of Applicant, Mineral which is occurring in the area and which is to be mined, Period for which the Mining lease is granted, Name of QP/MPPA preparing the Mine plan, Infrastructure, Location and approach, Name of prospecting agency, Date of grant of Lease from the state Government)

Chapter 2: Location and Accessibility

(Detail of Lease area, Location Map)

Chapter 3: Geology and Exploration

(Geomorphological Study, General Profile of Last 50 Years, Annual Deposition Factor, Replenishment, Geological Reserve and Grade, Anticipated Life of Mine)

Chapter 4: Mining

(Year wise development plan, Year wise Production, Proposed Rate of Production when mine is fully developed, Mineable reserve and anticipated life of mine, Proposed mining method, Dry Pit Channel Mining as per MoEFCC Guidelines, Underground Working, Extent of Mechanization, Manpower Planning, Security, Post Mining Reclamation and Land Use Pattern, Post Mining reclamation and Land Use Pattern)

Chapter 5: Blasting

Chapter 6: Mine Drainage

Chapter 7: Stacking of Mineral Rejects and Disposal of waste

Chapter 8: Use of Mineral

Chapter 9: Others

Chapter 10: Mineral Processing

Chapter 11: Environmental Management Plan

(Existing land use pattern, Air Environment, Noise Environment, Water Environment, Land Environment, Biological Environment, Socio-Economic Environment, Environment Management)

Chapter 12: Progressive Mine Closure Plan

(Reason for Mine Closure, Statutory Obligation, Closure Plan Preparation, Mined out land, Water Quality Management, Air Quality Management, Waste Management, Top Soil Management, Tailing Dam Management, Infrastructure, Disposal of Mining Machinery, Safety and security, Disaster Management and Risk Assessment, Care and Maintenance during temporary discontinuance, Economic repercussion of closure of mine and manpower retrenchment, Time Schedule of abandonment, Abandonment, Financial Assurance)

E. LIST OF ANNEXURES

a. Copy of allotment order Vesting order.
b. Certificate that the project boundary considered for the Mining plan is in coherence with the block boundary vested with the allottee.
c. Approvals of Mine Closure plan form the Board of the company.
d. Copy of earlier approval of mining plan.
e. Replenishment Study
f. Other Documents

F. LIST OF PLATES

a. Key Plan/Location Plan

b. Lease Plan
c. Surface Plan
d. Geological Plan
e. Working Plan
f. Closure Plan
g. Environment Plan
h. Lease Boundary certification by State Govt.
i. Geo Referenced Cadastral Plan
j. Satellite Image Plan
k. River Cross section Plan
l. KML Plan
m. Others

Appendix -III

F. No. CPAM-34011/28/2019-CPAM-Part (2) [359539]
Government of India
Ministry of Coal
(MPS Section)
*****

Room No. 622-A, Shastri Bhawan, New Delhi
Dated: the 29th May, 2024.

To

Chairman, Coal India Ltd.

Subject: Approval of Mining Plan/Mine Closure Plans of Coal/Lignite projects-reg.

I am directed to refer to the above subject and to state that Mining Plans/Mine Closure Plans of Coal India Limited [CIL] and its subsidiaries are not required to be approved by the Coal Controller under Guidelines for preparation, Formulation, Submission, Processing, Scrutiny, Approval and Revision of Mining Plan for the coal and lignite blocks dated 29.05.2020 for obtaining lease in case of areas of Nationalized mines acquired under Coal Bearing Areas [Acquisition and Development] Act. 1957.

2. Mining Plans of projects of CIL, its subsidiaries are thus prepared by CMPDIL and the project reports subsequently prepared and approved by the Board of CIL/ Coal comapnies or Ministry of Coal as per delegated powers.

3. CIL, its subsidiaries, NLC India Ltd. and Singareni Collieries Company Limited [SCCL] are required to prepare Mining Plans for obtaining leases/renewal of mining leases for areas acquired under LA Act for non-nationalized areas under MC Rule, 1960 and obtaining the approval of Coal Controller.

4. Mining plans of MDOs and Revenue sharing projects of CIL prepared by Mining Plan Preparing Agencies [MPPAs] may be approved by CIL/ its Subsidiaries after due scrutiny, vetting and recommendation by CMPDIL. These need not be submitted to CCO for approval.

5. This order will supersedes all earlier orders issued in this regard.

This issues with the approval of the competent authority.

Encl.: As above

(Sanjeev Ranjan)
Under Secretary to Govt. of India, Ministry of Coal

Appendix -IV

LIST OF HEMM COMBINATION (INDICATIVE)

S. No.	Type of Equipment	Standardized sizes/Capacity	
1.	Dragline	The size will depend on the specific geo-mining conditions. Newer and larger models can be introduced depending on the specific requirement	
2.	Rope Shovels	20 M3	
3.	Hydraulic Excavators	Face Shovels	Backhoe
		5.5 – 6.5m^3	5 -6 m^3
		10-12 m^3	10-12 m^3
		20-23 m^3	20-23 m^3
4.	Rear Dumper	60 T (US Ton)	
		100 T (US Ton)	
		200 T (US Ton)	
5.	Drills	160 mm	
		250 mm	
		311 mm*	
6.	Crawler Dozers	310-330 HP	
		400-420 HP	
		850-900 HP	
7.	Wheel Dozers	450-500 HP	
8.	Wheeled Loaders	6-7 m^3	
		10-12 m^3	
9.	Motor Graders	270-290 HP	
		500-550 HP	

***** Subject to techno-economical study considering cost of equipment, expected utilization, explosive consumption/powder factor.

A typical combination presented above, however not limited to.

$ The above indicative combination of HEMM is as per CIL/CMPDIL guidelines

Indicative criteria for Technical viability under Para 2.7 (c) of the Guidelines

All coal resources outside the coal block shall be analyzed for both opencast and underground mining methods. For which the following criteria of technical viability may be considered:

Opencast:

Any coal seam or section of the coal seam may be defined as technically viable by the opencast mining method if at least one of the following conditions is fulfilled.

1. The ratio of average depth to average combined thickness is more than 25 for good grade coal and >15 for poor grade coal. For the purpose of classification of grade, coking coal and non- coking coal of G-8 and better can be considered as "Good Grade" and other grades as "Poor Grade".
2. Coal resource which is not considered for geological resource estimation as per ISP norms 2022.

Underground:

Any coal seam or section of the coal seam may be defined as non "workable" by underground mining method if at least one of the following conditions is fulfilled.

1. Seams/ section with thickness less than 1.2 m.
2. Patchy seams/sections where panels of reasonable size cannot be formed or will require extensive drifting.
3. If the seam thickness is less than 2 m with a gradient steeper than [1:3.5].
4. Coal resources are classified as Jhama formation of non-commercial value.

Note: This is an indicative criterion. CMPDIL may form his own criteria for deciding technical viability.

Appendix -VI

FORMAT FOR COMPLIANCE REPORT UNDER PARA 2.8 OF THE GUIDELINES

(Shall be submitted within 180 days of completion of 5 years of the previous report)

A. Cover Page

The Cover page should contain the following information:

(i) Compliance report No. _____ (Dated _____)

(ii) Name of the Mining Plan and Mine Closure Plan /Final Mine Closure Plan

(iii) Date of Approval of the Mining Plan

(iv) Name of the Coalfield, District(s) and State(s)

(v) Name of the Applicant and address with phone numbers and email.

(vi) Rated capacity as per AMP _____ MTPA

(vii) Peak Capacity as per AMP @ 150% of the rated capacity _____ MTPA,

(viii) Increased rated capacity by the Company's Board (if any, within the Peak Capacity of AMP) _____ MTPA

B. Index

Sl. No.	Particulars	Page Nos.
Text		
1		
Annexures		
1		
2		
3		
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11		
12		
13		
….		
Plates		
1		
2		
3		
4		
…		

<table>
<tr><th></th><th>Parameters</th><th>Details</th></tr>
<tr><td colspan="3">Text</td></tr>
<tr><td>1.</td><td>Name of Coal/ Lignite mine or block</td><td></td></tr>
<tr><td>2.</td><td>Name of Coalfield/ Lignite field</td><td></td></tr>
<tr><td>3.</td><td>Name of the Allottee</td><td></td></tr>
<tr><td>4.</td><td>Address of the applicant</td><td></td></tr>
<tr><td>5.</td><td>Details of allotment/ vesting order</td><td>No. _____; Date _____
(Copy at Annexure 1)</td></tr>
<tr><td>6.</td><td>Title of the Latest Approved Mining Plan (AMP)</td><td></td></tr>
<tr><td>7.</td><td>The latest AMP Approval Reference</td><td>No. _____; Date _____
(Copy at Annexure 2)</td></tr>
<tr><td>8.</td><td>Status of Mining Lease</td><td></td></tr>
<tr><td>9.</td><td>Peak capacity as per AMP</td><td></td></tr>
<tr><td>10.</td><td>Rated capacity as per AMP</td><td></td></tr>
<tr><td>11.</td><td>Increase of rated capacity, if any
(Not to exceed the approved Peak capacity)</td><td></td></tr>
<tr><td>12.</td><td colspan="2">Conditions with approval of Mining Plan if any, and compliances
<table>
<tr><th>Sl. No.</th><th>Conditions</th><th>Compliance</th></tr>
<tr><td>1.</td><td></td><td></td></tr>
<tr><td>2.</td><td></td><td></td></tr>
<tr><td>3.</td><td></td><td></td></tr>
<tr><td>4.</td><td></td><td></td></tr>
<tr><td>…</td><td></td><td></td></tr>
</table></td></tr>
<tr><td>13</td><td colspan="2">Planned production and achieved in last 5 financial years
<table>
<tr><th rowspan="2">Previous Financial Years (For Example)</th><th colspan="4">As per AMP</th><th colspan="4">As per AMP</th></tr>
<tr><th colspan="3">Coal "Mt"</th><th>OB "M Cu.m"</th><th colspan="3">Coal "Mt"</th><th>OB "M Cu.m"</th></tr>
<tr><th></th><th>UG</th><th>OC</th><th>Total</th><th></th><th>UG</th><th>OC</th><th>Total</th><th></th></tr>
<tr><td>Till 2019-20</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>2020-21</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>2021-22</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>2022-23</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>2023-24</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>2024-25</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Total</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table></td></tr>
<tr><td rowspan="2">14.</td><td>Minor modifications made since Mining Plan approval, (as empowered to the Company’s Board) under 2.9(b) of the Guidelines</td><td>If yes, attach reference communications with the CCO, and a brief description of the modifications with relevant plates in the Annexures.
(Annexures: 3, 3.1, 3.2, 3.3…)</td></tr>
<tr><td>i. Changes in land type within the total leased area.</td><td>Yes/ No</td></tr>
</table>

	Parameters	Details
	ii. The land required for M-sand plant (overburden to sand plant) installation	*Yes/ No*
	iii. Changes in location and type of infrastructure within the project area e.g. mine openings, box cut for opencast workings, access and egress like shaft and incline for underground workings, and office premise within the project area.	*Yes/ No*
	iv. Change in type of ingress and egress from shaft to incline or incline to shaft.	*Yes/ No*
	v. Increase in rated production within sanctioned peak capacity	*Yes/ No*
	vi. Changes in the specification or configuration of equipment and Changes in HEMM deployment plan.	*Yes/ No*
	vii. Change in technology within the method of mining for more mechanisation (e.g. Shovel dumper to surface miner, semi-mechanized to continue coal cutting technologies etc.)	*Yes/ No*
	viii. Depillaring with caving to depillaring with stowing/paste filling without change in mining method.	*Yes/ No*
	ix. Highwall mining, if introduced in opencast mines.	*Yes/ No*
	x. Change in sequence of extraction (of different seams) in underground mining without jeopardizing the safety and conservation of minerals as defined in the approved mining plan.	*Yes/ No*
	xi. Use of land for repurposing including installation of solar plant, Pump Storage Projects, gasification, renewable, washery etc subject to relevant statutes.	*Yes/ No*
15	Seam Wise Extractable Reserves	

Seams	**Extractable Reserve as per AMP "Mt"**			**As on date _____ "Mt"**						
				Depletion of Reserve			**Balance Reserve**			
	UG	OC	Highwall	UG	OC	Highwall	UG	OC	Highwall	Total
Total										

16	Present Grade of Coal	
17	Additional Exploration If Any	*If Yes, Describe within 200 words*
18	A Brief Description of the Present Status of the Mine and Infrastructure	*Maximum 1000 words*
19	Mode of Coal Despatch	
20	Coal washing and the proposed disposal of rejects	
21	Mining Method	*Maximum 200 words (Equipment List at Annexure 5)*
22	Balance Life of the Mine	
23	Yearly Production Program for the Balance Life	

	Parameters	Details

Balance Year		Coal Production, Mt			OB "MM3,	SR Cu.m/t
		UG	OC	Total		
Till the Previous Financial Year						
Y-1	2025-26					
Y-2						
Y-3						
…	…	…	…	…	…	…
Y-31*						
Sub-Total (From First Year)						
Total						

** Considering the first year as 2025-26 and a balance life of 31 years in this case.*

24 Tentative Land Degradation and Technical Reclamation (Commutative Area "Ha")

Balance Years/Stages		Land Degraded				Technically Reclaimed Area			
		Excavation	Dump (Extn + Top Soil)	Infra/ others	Total	Backfill/ Stowing	Dump (Extn+ Top Soil)	Others	Total
Till the Previous Financial Year									
Y-1	2025-26								
Y-3									
Y-5									
…									
Y-30									
Post Mining Closure									
Y-33									
Post Closure monitoring									
Y-35									

** Considering the first year as 2025-26 and a balance life of 35 years in this case.*
Stages at 1st, 3rd, 5th and subsequently every five years (till 30th year), end of mining and Post mining closure (3 years).

25 Tentative Biological Reclamation (Cumulative in "Ha")

Balance Years/ Stages	Biologically Reclaimed Area					Forest land (Return)	Un Disturbed/ To be left for Public/ company Use	Total
	Agriculture	Plantation	Water Body	Public/ Company Use	Total			

	Parameters									Details
	Till the Previous Financial Year									
	Y-1	2025-26								
	Y-3									
	Y-5									
	…									
	Y-30									
	Post Mining Closure									
	Y-33									
	Post closure monitoring									
	Y-35									

** Considering the first year as 2025-26 and a balance life of 35 years in this case.*
Stages at 1st, 3rd, 5th and subsequently every five years (till 30th year), end of mining and PMC (3 years).

26 Waste Management, (Tentative for the balance life) (Cumulative in in Mm^3)

Balance Years/ Stages		OB Removal			External Dump		Internal Backfilling		Emban	
		Top Soil	*OB*	*Total*	*Top Soil*	*OB*	*Top Soil*	*OB*	*Top Soil*	*OB*
Till the Previous Financial Year										
Y-1	2025-26									
Y-3										
Y-5										
…										
Y-30										
Post Mining Closure										
Y-33										
Post Mining Closure										
Y-35										

** Considering the first year as 2025-26 and a balance life of 35 years in this case. Stages at 1st, 3rd, 5th and subsequently every five years (till 30th year), end of mining and PMC (3 years).*

27 Top Soil Management — (Tentative for the balance life) (Cumulative in Mm^3)

Balance Years/ Stages		Top Soil Removal Plan	Top Soil Used				
			Spreading Over Embankment	*Spreading over the Backfill area*	*Spreading over External OB Dump area*	*Used in the Green Belt area*	*Total Utilised*
Till the Previous Financial Year							
Y-1	2025-26						

	Parameters	Details
	Y-3 | | | | | | | | Y-5 | | | | | | | | … | | | | | | | | Y-25 | | | | | | | | Y-30 | | | | | | | | Post Mining Closure Y-33 | | | | | | | | Post Closure Monitoring Y-35 | | | | | | | | ** Considering the first year as 2025-26 and a balance life of 35 years in this case. Stages at 1st, 3rd, 5th and subsequently every five years (till 30th year), end of mining and PMC (3 years).*	
28	Revised calculation of Mine closure activities with respect to revised balance life.	*Refer to para 8.10.1 of Appendix-I of the Guidelines. (Schedule Chart at Annexure-6)*
29	Revised Calculation of Escrow Amount with respect to revised balance life.	*Refer to para 8.10.2 of Appendix-I of the Guidelines.*
Annexures		
1	Copy of the Allotment/ Vesting order	Annexure 1
2	Copy of Mining Plan Approval	Annexure 2
3	Changes made during implementation w.r.t. approved Mining Plan in tabular mode and references of communications with the CCO.	Annexures: 3, 3.1, 3.2, 3.3…
4	Proposed minor changes if any,	Annexure 4
5	List of Major equipment with nos. and capacities	Annexure 5
6	Plan/ chart showing the schedule of Implementation of Mine closure activities (progressive and final closure) with duration and cost of important activities	Annexure 6
7	Safety Audit Report as per the Safety and Health Management System Audit Guidelines, 2023 of the Ministry of Coal	Annexure 7
8	Details of any further exploration carried out	Annexure 8
9	Details of any further scientific done	Annexure 9
10	A certificate of Qualified Person/ Accredited Mining Plan preparing Agency, that has the approval of the respective Company Board	Annexure 10 *The changes made in this report conform with the mining plan guidelines and other relevant rules and regulations*
11	A certificate of the Project Proponent	Annexure 11 *No changes have been made to the approved mining plan other than those submitted in the report.*
12	Approval of the Compliance Report by the Company's Board	Annexure 12
13	Other documents (if any)	Annexure 13
Plates		
1	Conceptual Plan as per AMP showing infrastructure facilities including colony, Block Boundary, ML, Project Area, mining area, mine entries, roads including road diversion alignment etc.	Plate 1

	Parameters	Details
2	Existing mine Plan showing infrastructure facilities including colony, the boundary of the mining area, present workings, mine entries, roads including road diversion alignment etc.	Plate 2
3	Next 5th year stage Plan	Plate 3
4	Next 10th Year Stage Plan	Plate 4

To be Signed by the Signatory Authorized by the Company's Board

Appendix -VII

Agencies for Assessment and Certification of works done of Mine Closure Activities of coal and lignite mines as per approved Mine Closure Plan (Progressive and Final)

1. Central Mine Planning and Design Institute (CMPDIL)
2. National Environmental Engineering Research Institute (NEERI)
3. Indian Institute of Technology- Indian School of Mines, Dhanbad (IIT-ISM)
4. Indian Institute of Technology Kharagpur
5. Indian Institute of Engineering Science and Technology, Shibpur (IIEST, Shibpur)
6. Any other agencies authorized time to time by the Central Government.

Appendix –VIII

Illustration: Yearly and 5 Yearly Reimbursement of escrow amount

Total Project Area (Ha)	*535.72*
Mine Closure Cost per Ha	*1400000*
Total Cost (Cr)	*75*
Life of Mine	*30*
Cost Per Annum (Cr)	*2.5*
Interest assumed per annum	*7 %*

Amount in Crores

Year	**Deposition**	**Yearly Reimbursement**	**Balance with Interest at the end of year**	***5 yearly release (50 % of Balance after yearly release)***
Year 1	2.50	No yearly Reimbursement	2.50	
Year 2	2.63	1.25	4.05	
Year 3	2.76	1.31	5.78	
Year 4	2.89	1.38	7.70	
Year 5	3.04	1.45	9.83	
Year 6	3.19	No yearly Reimbursement	8.45	**(50 percent of 9.83 Cr) = 4.91**
Year 7	3.35	1.60	10.80	
Year 8	3.52	1.68	13.39	
Year 9	3.69	1.76	16.27	
Year 10	3.88	1.85	19.44	
Year 11	4.07	No yearly Reimbursement	14.47	**(50 percent of 19.44 Cr) = 9.72**
Year 12	4.28	2.04	17.72	
Year 13	4.49	2.14	21.32	
Year 14	4.71	2.24	25.28	
Year 15	4.95	2.36	29.64	
Year 16	5.20	No yearly Reimbursement	21.05	**(50 percent of 29.64 Cr) = 14.82**

Year 17	5.46	2.60	25.39	
Year 18	5.73	2.73	30.16	
Year 19	6.02	2.87	35.43	
Year 20	6.32	3.01	41.22	
Year 21	6.63	No yearly Reimbursement	28.68	**(50 percent of 41.22 Cr) = 20.61**
Year 22	6.96	3.32	34.34	
Year 23	7.31	3.48	40.58	
Year 24	7.68	3.66	47.44	
Year 25	8.06	3.84	54.98	
Year 26	8.47	No yearly Reimbursement	37.88	**(50 percent of 54.98 Cr) = 27.49**
Year 27	8.89	4.23	45.19	
Year 28	9.33	4.44	53.24	
Year 29	9.80	4.67	62.10	
Year 30	10.29	4.90	**71.84**	
Total	166.10			

Note:- Calculation is just for illustration purposes.

The calculation of interest is tentative.

Appendix –IX

Indicative list for community development and livelihood related activities

Sl. No.	Major Head	Activity (Not covered under any other statutory obligations)
1.	Skill Development and Trainings (Alternative Source of livelihood)	Offer skills, resources and knowledge development and training in alternative livelihoods like agriculture, handicrafts, poultry farming, tailoring, entrepreneurship or IT skills. Support project affected person /families to develop skills and set up business.
2.	Fruit bearing, medicinal & local species plantation / Afforestation	Promote horticulture, apiculture, plantation through Miyawaki technique, permaculture, Social Forestry, Livelihood-oriented plantation, community-based tree plantation in and around project area.
3.	Agriculture and other Allied Activities	Promote sustainable agriculture, organic farming, and agroforestry by improving irrigation and providing high-quality seeds in and around project area. Develop & use new scientific methods of agriculture and farming. Support Animal Husbandry.
4.	Eco-Tourism Development	Convert mined-out areas into eco-tourism hubs with activities like boating, trekking, or cultural tourism in and around project area.
5.	Flora and fauna Conservation/Wildlife conservation	Reforestation, Eco-parks and Biodiversity Projects [in and around project area]: Reclaim mined land with native species and develop biodiversity parks. Promote pisciculture spaces.
6.	Water Resource Management/Conservation	Supply clean water and irrigation facilities in and around project area. Rehabilitate and rejuvenate water bodies affected by mining activities.
7.	Clean Energy Projects	Implement solar or biogas projects to provide affordable energy to local communities in and around project area.
8.	Art and Culture	Promote indigenous and local know-hows including promoting traditional practices related to arts, culture and heritage in and around project area.
9.	Women Empowerment	Initiatives to support women empowerment in and around project area.
10.	Welfare of aged and disabled people	Special program for welfare of aged and disabled people in and around project area.

11.	Sustainable Living	In and around project area: Outsourcing of Operation and Maintenance of created assets/ public spaces under mine closure to local communities, self-help groups and project affected person/families. Teach communities about sustainable practices, waste management, and renewable energy.
12.	Sanitation	In and around project area: Collection, transportation & disposal of waste, cleaning of public places, provision of proper drainage & Sewage Treatment Plant, provision for disposal of fecal sludge, provision of toilet and other related activities.
13.	Any other community development project related to mine closure as approved by Mine Closure Advisory Committee.	

Note: Claim for expenditure towards any one project shall not exceed one third of the five yearly total escrow amount earmarked exclusively to be spent on mine closure activities under the head.

Appendix -X

Bar Chart (Target)											
S. No.	**Heads**	**Activities**	**Progressive Mine Closure Activities**				**Final Mine Closure activities**			**Post closure monitoring**	
			Y1	Y2	Y3	Y5	Y1	Y2	Y3	Y1	Y2
1	**Progressive Mine Closure Activities**	Barbed wire fencing around the Mine (Pit and Dump)									
2											
3											
4		Waste Management									
5		Top soil management									
6		Technical and biological reclamation of mined out land and OB dump									
7		Plantation over virgin area including Green Belt									
8		Manpower cost and supervision									
9		Toe wall around the dump									
10		Garland drain									
11		Garland drain									
12		Stowing									
13		Subsidence monitoring and management									
14		Isolation stopping									
15		Any other if any									
16											
		Sub Total									
	Final Closure Activities										
1		Dismantling of workshop									

2	**Dismantling of Infrastructure, disposal of mining machinery**	Dismantling of pumps and pipes/other facilities					
3		Dismantling of UG equipment					
4		Dismantling of power line					
5		Dismantling of mine structures					
		Sub - Total					
1	**Safety and security**	Barbed wire fencing around mine (Pit and dumps)					
2		Concrete wall with masonry / concrete pillars around the pit					
3		Securing entries(shaft/inclines)					
4		Appropriate fencing around the water body and installation of bore well pump					
5		Stabilisation| viz., benching, pitching et) of side walls of the waterbody					
6		Toe Wall around the dump					
7		Garland drain					
8		Drainage Channel from main OB dump					
		Sub - Total					
1	**Technical and Biological reclamation of mined out land and OB dump**	Filing of Void					
2		OB Rehandling for backfilling					
		Terracing, blanketing with soil and vegetation of Extremal OB Dump					
3		Peripheral road, gates, view points, Cemented steps on bank					

4		Expenditure on the development of agricultural land										
5		Landscaping and Plantation										
		Stowing										
		Sub - Total										
1	**Post closure monitoring and supervision**	power cost										
2		post mining water quality management										
3		post mining air and soil quality management										
4		Subsidence monitoring for 5 years										
5		man power cost and supervision										
		Sub - Total										
1	**Sustainability**	Skill Development and Trainings (Alternative Source of livelihood)										
2		Fruit bearing, medicinal & local species plantation / Afforestation										
3		Agriculture and other Allied Activities										
4		Eco-Tourism Development										

5		Flora and fauna Conservation/Wildlife conservation									
6		Water Resource Management/Conservation									
7		Clean Energy Projects									
8		Art and Culture									
9		Women Empowerment									
10		Welfare of aged and disabled people									
11		Sustainable Living									
12		Sanitation									
		Sub - Total									
		TOTAL COST									

Appendix -XI

CERTIFICATE OF QUALIFIED PERSON

(Sample)

This is to certify that the Project area considered for preparation of the Mining Plan including the Mine Closure Plan of ……. Block/Mine, …… District, (Name of State) is confined within the existing mining lease area. The geo-referenced Co-ordinates considered for preparation of Mining Plan of …….Block/Mine are within the allotted/vested block boundary.

Authorised Signatory - Qualified Person (QP)/MPPA

Phone No.:

Email Id:

Appendix -XII

BOARD RESOLUTION

(Sample)

Extract of the Resolution from the …….th Meeting of Board of Directors of ……(Company Name) held at ……(Time) on ……..(Date)

***

The Board after deliberation passed the following resolution:

Resolved that the approval of the Board of Directors be and is hereby accorded to accept and approve the Mining Plan and Mine Closure Plan as annexed to the Board Note, with the recommendation for approval by the Ministry of coal.

Resolved further to confirm that the data used for the preparation of the above Mining Plan and Mine Closure Plan is correct and further assure that through the funding in the form of equity from the Promoters and borrowings from Bank(s) Financial Institution(s), the Company would implement the Mining Plan and Mine Closure Plan as per the approval accorded by the Ministry of Coal.

Resolved further to authorize Shri/Smt…….as Qualified Person/MPPA for preparation of Mining Plan and Mine Closure Plan for ……..Block/Mine and …… (Consultant) for reviewing the same.

Resolved further to authorize Shri……. Director/CEO/any other, to sign the undertakings, affidavits etc., for submission to Ministry of Coal, including the undertakings as mentioned below in terms of the guidelines issued by Ministry of Coal vide communication ref. …… for the preparation of Mining Plan for Coal and Lignite and also such other documents as may be required in this regard:

a) that the mine will be developed as per the approval of the Mining Plan and Mine Closure Plan by the Ministry of Coal and that all other approvals as may be required will be obtained from the relevant authorities.
b) the entire mining operation will be carried out as per the Statutory provisions given under the Mines Act, 1952, Coal Mine Regulation, 2017, the Environment (Protection)

Act, 1986, the Forest (Conservation) Act, 1980 and that wherever any specific permission is required, the concerned authorities will be approached for the same.

c) that the Reclamation and Rehabilitation work shall be carried out in accordance with the approved Mine Closure Plan as amended by Ministry of Coal, from time to time.

d) that the protective measures contained in the Mine Closure Plan including Reclamation and Rehabilitation works shall be carried out as per the approved Mine Closure Plan including the Final Mine Closure Plan.

e) to submit a yearly report before 1st July of every year to the Coal Controller setting forth the extent of protective and rehabilitative works carried out as envisaged in the approved Progressive and Final Mine Closure Plans and obtain the Mine Closure Certificate to that effect from them and also for surrendering the reclaimed land to the Government of ……..(Name of State Government.)

Resolved further to authorize ……. of the company to effect changes in the Mining Plan and Mine Closure Plan based on the observation of the consultant ……. and Ministry of Coal.

AUTHORISED SIGNATORY

MPS/2/2022-MPS
Government of India
Ministry of Coal
(MPS Section)
*****

Room No. 622-A, Shastri Bhawan,
New Delhi, dated 28th October, 2022

Sub: Guidelines for the Management of Mines discontinued/ abandoned/ closed before the year 2009.

A large number of coal mines were discontinued/abandoned/closed before 2009 when 1st mine closure guidelines were issued by the Ministry of Coal. However, these guidelines were silent about them. There is a need to close these mines scientifically in such a manner that they provide benefit to the community, prevent illegal mining, ensure the safety and repurposing of the mined-out land. Therefore, guidelines are being issued to provide guidance to all coal companies (including lignite) having discontinued/ abandoned/ closed mines after the nationalization of coal mines till 27th August 2009 (date of issuance of first coal mines closure guidelines). Copy of the same is enclosed. The guidelines intend to only provide an overall framework for the closure of mines and the details of final implementation plans are to be finalized and approved by the respective Company Boards. The overall goal of the guidelines is to restore the mined-out land as far as possible to its pre-mining stage, bring ecological balance and purposefully reutilise the land for the benefit of the country.

2. It is requested to take further necessary action in compliance of these guidelines and submit ATR to this Ministry on Quarterly basis.

This issues with the approval of the Competent Authority.

Encl: As above

(Hitlar Singh)
Under Secretary to the Govt. of India
E-mail: hitlar.singh85@nic.in

To,

1. **The Chairman, CIL, Kolkata**
2. **CMDs of all Subsidiaries of CIL**
3. **CMD, SCCL**
4. **CMD, NLCIL**

Copy to:

1. **The Secretary, MoEF&CC, New Delhi**
2. **The Director General, DGMS, Dhanbad**
3. **The Coal Controller, New Delhi**
4. **NIC - to upload on portal of MoC**
5. **All sections of this Ministry**

F. No. MPS/02/2022-MPS
Government of India
Ministry of Coal
[MPS Section]
*****

Shastri Bhawan, New Delhi
Dated: 28th October, 2022

OFFICE MEMORANDUM

Subject: Guidelines for the Management of Mines discontinued/abandoned/closed before the year 2009

A large number of coal mines were discontinued/abandoned/closed before 2009 when 1st mine closure guidelines were issued by the Ministry of Coal. However, these guidelines were silent about them. There is a need to close these mines scientifically in such a manner that they provide benefit to the community, prevent illegal mining, ensure the safety and repurposing of the mined-out land. Therefore, the following guidelines are being issued to provide guidance to all coal companies (including lignite) having discontinued/ abandoned/ closed mines after the nationalization of coal mines till 27th August 2009 (date of issuance of first coal mines closure guidelines). The guidelines intend to only provide an overall framework for the closure of mines and the details of final implementation plans are to be finalized and approved by the respective Company Boards. The overall goal of the guidelines is to restore the mined-out land as far as possible to its pre-mining stage, bring ecological balance and purposefully reutilise the land for the benefit of the country.

1. Categorisation of non-operational mines -

In continuation to various circulars issued by DGMS and industry-accepted norms, the following categories will now be defined as specified below -

1.1. Discontinued Mines: Discontinued mines mean such working in a mine as have been discontinued for any reason and are inaccessible or rendered inaccessible but are likely to be worked again. These mines can be re-opened as per provisions of CMR (Reg.-6) and Colliery Control Amendment Rule-2021 (Rule no.9 (ii)).

1.2. Abandoned Mines: Abandoned mines mean such working as have been abandoned with no intention of working in the future for which the owner of the mine has already submitted a notice to the Chief Inspector of Mines, Regional Inspector, and District Magistrate about abandonment in the prescribed format (Reg. no. 5 of CMR, 2017).

1.3. Closed Mines: Closed mines are those mines for which the owner/agent/manager has submitted notice of closure in the prescribed format (under CMR-2017, Reg.-5) to the Chief Inspector of Mines, Regional Inspector and District Magistrate and has also obtained the mine closure certificate from Coal Controller (As per mine closure guidelines-2020).

However, prior to the implementation of Mine Closure guidelines-2009, closed mines may be considered as those mines for which the owner of the mine has already submitted a notice to the Chief Inspector of Mines, Regional Inspector and District Magistrate about the closure in the prescribed format (Form-1 of Regulation – 6 of CMR-1957), and the extractable reserve as per mining plan has been exhausted.

2. Steps to be taken by mine owners to manage the non-operational mines -

2.1. Discontinued/Abandoned mines -

2.1.1. Mine re-operationalization: The owner of the mine shall explore possibilities to operationalize the concerned mines through various models, additional exploration if required and prepare a detailed action plan after due consultation ensuring transparency and objectivity. EC if required may be obtained following the guidelines of MoEFCC for reopening the mines.

2.1.2. Approval of the re-operationalization plan: The re-operationalization plan must be approved by the company board.

2.1.3. Modification in Mining Plan: Concerned Coal Company will modify the mining plan within 1 year of coming into force these guidelines if required.

2.1.4. Temporary mine closure plan: If the mine cannot be operationalized after initiatives taken under Para 2.1.1, then the owner of the mine shall prepare a temporary mine closure plan. A temporary mine closure plan would contain the mine closure activities such as protective works, safety measures, and any other required activity as per Para 8.10.1. of the Guidelines of preparation of Mining Plan & Mine Closure Plan dated 29th May 2020, in such a manner that if technology permits in the future, mining can be restarted. Mine owners should include short-term economic activities in the temporary closure plan without damaging the seams/reserves available.

2.1.5. Approval of temporary mine closure plan: The temporary closure plan must be approved by the company board. Also, the plan must include details of efforts undertaken to operationalize mine as per Para 2.1.1. The coal mine owners are required to obtain the approval for Temporary mine closure plan within one year from the date of issuance of these guidelines. In case temporary mine closure plan is not prepared by CMPDI, then it may be vetted by a third-party expert agency approved by the central government, like Central Mine Planning and Design Institute Ltd. (CMPDI), National Environment Engineering Research Institute (NEERI), Indian Institute of Technology (IIT-ISM) etc. before submitting it to the Company Board.

2.1.6. Implementation of temporary closure plan: After the approval of the mine closure plan, the owner of mine will carry out mine closure activities as detailed in the temporary mine closure plan within 3 years, failing which appropriate action would be taken against the mine owner.

2.1.7. The Government may at any time before the closure of the mine, require certain activities to be included in the mine closure plans, which it may consider necessary for the safety and conservation of the environment or in compliance with any modification/ amendment in the relevant legislation.

2.2. Closed Mines -

2.2.1. Final mine closure plan: In the case of closed mines, the owner of the concerned mine shall prepare a Final mine closure plan. The Final Mine closure plan should be prepared as per the Guidelines for preparing the Mining Plan & Mine Closure plan dated 29th May 2020. However, only the mine closure part is to be prepared in case of these mines.

2.2.2. **Approval of Final mine closure plan:** The Final mine closure plan has to be approved by the company board. The mine owners shall ensure mine closure as per the mine closure plan approved by the Company Board. The coal mine owners are required to obtain the approval of the Final mine closure plan within one year from the date of issuance of these guidelines. In case final mine closure plan is not prepared by CMPDI, then it may be vetted by a third-party expert agency approved by the central government, like Central Mine Planning and Design Institute Ltd. (CMPDI), National Environment Engineering Research Institute (NEERI), Indian Institute of Technology (IIT-ISM) etc. before submitting it to the Company Board.

2.2.3. **Implementation of Final mine closure plan:** After the approval of the Company Board, the owner of mine will carry out mine closure activities as detailed in the Final mine closure plan within 5 years failing which appropriate action would be taken against the mine owner.

2.2.4. **Alternate use of reclaimed Land:** After the closure of the mine, on the reclaimed land various project-specific economic repurposing activities can be carried out or reclaimed land to be leased out as per Ministry of Coal policy guidelines dated 22nd April 2022 for use of land acquired under the Coal Bearing Area (Acquisition & Development) Act, 1957.

2.2.5. The Government may at any time before the closure of the mine require certain activities to be included in the mine closure plans, which it may consider necessary for the safety and conservation of the environment or in compliance with any modification/ amendment in the relevant legislation.

3. **Social support measures -**

3.1. The air, water, and soil quality of the region surrounding 5 km of the discontinued/ abandoned/ closed mines should be monitored as per MoEFCC/CPCB defined acceptable standards and it is mandated to ensure that the closure plan must include all such activities needed to control the pollution from the concerned mines.

3.2. The health camps must be organized on monthly basis to monitor the health of the population residing within 5 km of the discontinued/ abandoned/ closed mines with a special focus on respiratory diseases such as silicosis etc. The identified patients must be linked to local health administration for further treatment if required.

3.3. A careful consideration is to be given to provide reskilling to the willing workers as per their need for their gainful employment.

4. **Financial provision-**

The financial provision for the closure activities of both temporary and final mine closure plans of the mines is to be made by the respective Coal Companies. Closure cost is to be estimated based on the required activities as per para 8.10.1 of guidelines for the preparation of the Mining Plan and Mine Closure Plan dated 29th May 2020 for implementing the approved closure plan. However, Coal India Ltd. may consider to levy additional fee on per tonne basis to be paid by the coal consumers to meet the cost of mine closure with the approval of Board and to provide funding for those subsidiaries which are not able to fund the closure of these mines.

5. **Exceptions -**

5.1. In certain cases, there are more than one mine below the same surface land. One mine may have been closed due to exhaustion of resources but other mines are running. In such cases, final mine closure activities related to surface land may have to be deferred till the closing of all the mines.

5.2. A mine can be planned and worked covering only a part of a Coal Block. The present mine can be extended to cover the remaining part of the Coal Block in the future. Hence, Final Mine Closure activities for the present mine area may be deferred.

5.3. However, progressive closure activities are to be carried out as per Mine closure guidelines 2020 for both the above cases.

6. **Maintenance of records & submission of returns -**

The owner shall maintain all the records of works done for the closure of the mine and keep them available till the final closure certificate is obtained from the competent authority. DGPS survey of Abandoned/Discontinued mines linked to the national grid to be kept available.

7. **Monitoring -**

CCO to carry out the inspection of all the mines, check the records maintained by the owner of the work done and give written observation. Concerned mine authorities should submit compliance to the observations made. Also, Coal companies are to submit a quarterly report of work done towards closure to CCO. The Ministry of Coal will do a quarterly review of the progress of the closure of mines.

8. Nothing in present guidelines shall absolve the owner of the mine from fulfilling various statutory requirements under other applicable statutes and obligations. Further, guidelines are without any prejudice to any other relevant rules and regulations, such as those issued by the state government, Ministry of environment, forest & climate change, Ministry of Labour, and employment.

28/10/22

(M. Nagaraju)
Additional Secretary to the Government of India

To,

Mine Owners

Copy to:

1. **Secretary, MoEF&CC**
2. **DG, DGMS**
3. **Coal Controller**