

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

GPOA-3, Room No 4605, Netaji Nagar
New Delhi, 31st July 2026

NOTICE

Subject: Stakeholders consultation on Draft Guidelines for preparation of Mining Plan and Mine Closure Plan for Coal and Lignite Mines, 2026.

The Guidelines for preparation of Mining Plan and Mine Closure Plan for Coal and Lignite Blocks, 2025 dated 31.01.2025 may kindly be referred to.

In this regard, it is stated that these guidelines are being revised and new guidelines has been drafted as **Guidelines for preparation of Mining Plan and Mine Closure Plan for Coal and Lignite Mines, 2026**. These draft guidelines are available on the website of the Ministry of Coal and Coal Controller's Organization.

2. Requisite suggestions/comments, if any, may be furnished to Ministry of Coal on email id : **socrc.moc@nic.in** within 15 days, in the following format :

S.No.	Clause No.	Suggested modification	Rationale

Encl: as above

Digitally signed by
ALOK VERMA
Date: 31-07-2026
18:36:28

(Alok Verma)
Under Secretary to the Government of India
Email: alok.verma07@gov.in

To

1. Secretary, Ministry of Environment, Forest & Climate Change
2. DG, DGMS
3. CMDs of CIL/SCCL/NLCIL
4. Coal Controller, New Delhi
5. Director (Nominated Authority)- For circulation to all coal companies except CIL/SCCL/NLCIL

Copy to:

1. NIC- with request to upload the above document on the website of the Ministry of Coal.
2. Coal Controller Organization - with request to upload the above documents

on the website of CCO.

3. DS (Admin), MoC- with request to issue a small public notice in newspapers informing that the document is available at the website for comments.



Draft Mining Plan Guidelines
for
Coal and Lignite Mine
2026

List of Abbreviations

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

**Government of India
Ministry of Coal
[MPS Section]**

**Shastri Bhawan, New Delhi
July, 2026**

OFFICE MEMORANDUM

Subject: Guidelines for preparation of Mining Plan and Mine Closure Plan for Coal and Lignite Mines, 2026.

**Chapter-I
Preliminary**

1.1. Short title and commencement. - (a) These guidelines may be called the “**Guidelines for preparation of Mining Plan and Mine Closure Plan for Coal and Lignite Mines, 2026**”.

(b) These Guidelines shall come into force 30 days from date of issue of these guidelines.

Provided that the Mining Plans uploaded on SWCS portal (<https://swcs.coal.gov.in>) before coming into force of these guidelines shall continue to be governed by the guidelines dated 31.01.2025.

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

(d) “Guidelines for preparation and approval of Mining Plan for Coal and Lignite Blocks/Mines for Underground Gasification 2026” as amended from time to time shall be an integral part of this guideline.

1.2. Objectives: (a) To optimize the extraction of coal and lignite resources 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 local communities, to promote upgradation of 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 by incorporating restoration, remediation, and regeneration measures into mining plans for sustainable management of natural resources.

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

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

(a) “Abandoned Mine” means such mine as has been abandoned with no intention of working in the future;

(b) “Discontinued Mine” means such mine as has been discontinued for any reason and are inaccessible or rendered inaccessible but are likely to be worked again.

- (c) “Escrow account” means an account opened by the project proponent in a scheduled commercial bank, facilitating the deposition and withdrawal of funds for mine closure purposes;
- (d) “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. It shall also include direct coal transfer to the consumer through conveyors, rails or any other mechanized means;
- (e) “Leased Area” shall have the same meaning as defined in Section 3 (ac) of MMDR, Act, 1957;
- (f) “Life of the Mine” means the period starting from the date of receiving mine opening permission and till end of post closure monitoring period;
- (g) “Mine closure” means the comprehensive process of closing and securing a mine during development and production period and upon completion of post closure monitoring period;
- (h) “Mine Closure Plan” means a document that includes financial provisions and activities to be implemented towards mine closure during development and production period and till final mine closure;
- (i) “Minor Changes” shall have the same meaning as prescribed in sub-rule (2) of Rule 22-E of the Mineral Concession Rules, 1960 as amended from time to time;
- (j) “Post closure monitoring period” means the period of 2 (two) years after completion of the post mining closure period;
- (k) “Post mining closure period” means the period of 3 (three) years after cessation of the production activities;
- (l) “Production Life of the Mine” means the period of development and production years as given in the calendar plan; and
- (m) “Project Area” means the total area of the mine (as defined in the Occupational Safety, Health and Working Conditions, Code, 2020) specified in the mining plan and includes the area required for overburden dumping and associated infrastructure such as office premises, residential areas, R&R colonies, outside the mining lease area;

1.4. Requirement and Applicability:

- (a) These guidelines supersede all previous guidelines including “Guidelines for preparation of Mining Plan and Mine Closure Plan for Coal and Lignite blocks, 2025” dated 31.01.2025. Provided that the “Guidelines for the Management of discontinued/abandoned/closed mines before the year 2009” dated 28.10.2022 shall continue to remain valid.
- (b) Every coal or lignite mine shall have a Mining Plan approved by the Coal Controller based on which mining operations shall be carried out .
Provided that the Mining Plan of coal/lignite mines of Central Public Sector Undertakings, the State Public Sector Undertakings, Damodar Valley Corporation and SCCL, when the same is prepared by CMPDIL, may be approved by the respective Board.
Provided further that Mining plans not required to be approved by the Coal Controller, shall be uploaded on SWCS portal within one month of approval by respective Boards.
- (c) No coal or lignite block shall be operational without an approved Mining Plan.
- (d) The approved Mining Plan shall be valid for the life of the mine.

Provided that the competent authority may approve any revision(s) or modification(s) of the Mining Plan, and upon such approval, the revised or modified Mining Plan, as the case may be, shall remain valid for remaining part of the life of the mine.

- (e) These guidelines shall apply to all coal and lignite mines including sand mining for use of stowing in mines and Mining Plans for sand mining for the cited use shall be prepared in accordance with the norms prescribed by the respective states.

Provided that in the event that a state has not formulated such norms, a sample format for preparation of Mining Plan and submission of information to the Coal Controller is attached at **Appendix-I**. The process for approval of such Mining Plan shall be as at Chapter-IV of the guidelines.

- (f) All abandoned mines and discontinued mines since 27th August 2009 shall achieve mine closure as per provisions of these guidelines.
- (g) All discontinued mines, abandoned mines and closed mines upto 26th August 2009 shall achieve mine closure as per provisions of “Guidelines for the Management of discontinued/abandoned/closed mines before the year 2009” dated 28.10.2022.
- (h) All Mining Plans approved under provisions of previous guidelines shall be deemed to have been approved under these guidelines.

Provided that any modification or revision in approved Mining Plans shall be in accordance with provisions of these guidelines.

- (i) A Mining Plan may be formulated for multiple leased areas, or a leased area may have multiple Mining Plans.

Chapter-II

Mining Plan (excluding mine closure plan)

- 2.1.** The Mining Plan shall be formulated as per approved Geological Report. The geological report shall take into account the prevailing ISP norms and guidelines/ directives issued by the Central Government.

2.2. Components of Mining Plan:

2.2.1. General:

- (a) The Mining Plan will take into account the project's location, detail of allotment or allocation, previous approval of the Mining Plan (if any), surface features of the block/mine, brief socio-economic information.
- (b) In case of unexplored/ partially explored blocks, the project proponent shall decide the appropriate Mining Method (Opencast or Underground or Mixed Mining and/or Underground Coal Gasification) and suitable technology to carry out mining operations so as to achieve optimum extraction of coal or lignite while ensuring safe and sustainable resource management. The project proponent may provide an analysis as regards arriving on appropriate mining method.
- (c) Mining Plan shall contain year-wise calendar plan and indicative production of coal or lignite as well as removal of overburden along with stage plan for critical years such as 1st year, 5th

year, the year of achieving rated capacity of the mine, 10th year, 30th year and the final year (i.e. at the end of mine life).

Provided that a block/mine may increase annual coal production upto rated capacity ahead of the schedule, irrespective of approved calendar plan.

Provided further that a block/mine may modify the annual coal production downwards with prior recommendation of competent authority, by providing proper justification.

Provided also that the Mining Plan shall include the action plan for the unexplored part of the block, if any, and liquidation of remaining resources to be projectized.

- (d) The project area envisaged in the Mining Plan must be restricted to the allotted or vested geological block boundary or existing mining lease. A certificate to this effect shall be provided by the Qualified Person (QP) or accredited Mining Plan Preparing Agency (MPPA) that has prepared the Mining Plan.

Provided that with permission of the concerned land owner (Central Government or State Government or an individual or any other entity), the project proponent may carry out its activities beyond the allotted or vested geological block boundary or existing mining lease.

- (e) If any part of an allocated/vested block area cannot be included in the Mining Plan due to constraints such as presence of dense forest (in terms of the Forest Survey of India), dense habitation, rivers, railway lines and other areas that require special permission, such area may be excluded from the Mining Plan.

Provided that in case such constraints are removed subsequently, a revised Mining Plan may be submitted for approval.

2.2.2. Safety

The project proponent shall ensure that due consideration is paid to safety aspects while preparing and submitting the Mining Plan.

2.2.3. Mechanization:

- (a) All mines having peak rated capacity of 2 MTPA or more, shall ensure evacuation of coal/lignite through means of transport other than road, within 5 years of commencement of coal production, in case distance between mine and railway siding/ end user is less than 25 km. Provided that in case transportation by road is not avoidable or the distance is more than 25 km and the same is certified by the concerned District Collector(s), the project proponent may construct dedicated road with minimum involvement of public road.
- (b) All mines shall ensure that the loading infrastructure is mechanized within 5 years of commencement of coal production.

The project proponent may choose mining method involving drilling and blasting in coal extraction (excluding overburden removal) only when blast-free technology is not technically feasible or is commercially unviable and shall provide justification for the same.

2.3. Annexures: Along with the Mining Plan, the project proponent shall submit the following documents (as annexures) at the time of submission of the application on the portal:

- (a) Copy of allotment letter or ownership record.
- (b) Copy of approval of Board of the company towards submission of Mining Plan.

- (c) Copy of certificate as regards preparation of Mining Plan by QP/MPPA along with certificate issued for accreditation by QCI-NABET.
 - (d) Copy of approval of Geological Report.
 - (e) Certificate of QP/MPPA to the effect that the Mining Plan has been prepared within the allotted or vested geological block boundary or existing mining lease area.
 - (f) Copy of analysis as regards deciding on appropriate mining method.
 - (g) Preliminary assessment report in case height of mine openings exceeds 3 metres and/or width exceeds 4.8 metres.
 - (h) Justification for not choosing blast-free technology.
- 2.4.** The format for formulation of the Mining Plan of Coal/ Lignite is at **Appendix—II.**

Chapter-III

Mine Closure Plans

- 3.1.** Mine Closure Plan aims to ensure scientific mine closure and rehabilitation of mining sites, minimising environmental degradation, safeguarding public health, and promoting sustainable development by restoring the land to a condition suitable for future use or returning it to its near-original state or better, while also holding project proponents accountable for their closure obligations.
- 3.2.** Mine closure includes activities such as replanting native or suitable vegetation, restoring water bodies, rehabilitating wildlife habitats and activities related to 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.
- 3.3.** Backfilling of mine void may form part of mine closure activity only where it is carried out specifically for the purpose of mine closure and not as part of regular mining operation.
- 3.4.** Activities undertaken towards just transformation may be audited by third-party agencies appointed by the Central Government (list available at clause 3.14 (vi)).
- 3.5.** Mine Closure Plan shall comprise of (a) Progressive Mine Closure Plan, updated every five years, and (b) Final Mine Closure Plan.
 Provided that five years before cessation of mining operations, the project proponent shall submit a revised final mine closure plan that shall include operational history of the mine, scientific findings, maps/drawings, monitoring data and expenditure from the escrow account. Provided further that while submitting the revised Final Mine Closure Plan, the project proponent shall submit details of the updated cost estimate for various mine closure activities and balance amount in the escrow account.
- 3.6.** The Action plan for carrying out all mine closure operations (progressive mine closure as well as final mine closure) should be furnished in the format specified in **Appendix-III.**
- 3.7.** The Final Mine Closure Plan starts towards end of mine life and covers restoring land to its near-original state, repurposing and community development. It includes closure of mine,

dismantling and demolition of structures, removal of machinery, plantation, landscaping, specified post-environmental monitoring, protective and restoration measures, barbed wire fencing, and related activities.

3.8. Final Mine Closure Plan shall contain a completion report containing operational history, past investigation/study/scientific findings and further action taken, if any; mine working maps, images 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.

3.9. The Final Mine Closure shall end with post closure monitoring period.

3.10. Surrender of mine after partial extraction:

- (a) In case of surrender of mine after partial extraction, the CMPDIL shall, within a period of 45 days from receiving intent of such surrender, prepare a temporary mine closure plan for which the cost shall be borne by Project Proponent.
- (b) The purpose of such temporary mine closure plan is limited to securing the exposed and mined area from safety point of view taking into account the already approved progressive mine closure plan.
- (c) The project proponent shall carry out activities mentioned in the Temporary Mine Closure Plan prepared by CMPDIL. For this purpose, the project proponent shall not be allowed to utilize the amount available in the escrow account.
- (d) The project proponent shall be the custodian of the mine until it is reopened or for a period of five (5) years, whichever is earlier.
- (e) If the mine is not allotted within five (5) years, final mine closure activities shall be undertaken by CMPDIL utilizing the amount available in the escrow account.

3.11. Components of Mine Closure Plan:

3.11.1. A zone of impact should be identified in the project area and buffer zone of 10 km from project boundary to address livelihood and income effects due to mine closure.

3.11.2. Project proponent shall engage local communities and self-help groups through structured consultations and collaborative decision-making to incorporate their perspectives and develop sustainable solutions.

3.11.3. After the closure of mining operations, all social amenities and infrastructure created like hospitals, schools, community centers, office and other buildings should be handed over to the Government or local authorities in consultation with district collector.

3.12. Mine Closure Cost: The project proponent shall deposit amount in the escrow account towards mine closure cost as per calculation indicated at 3.13. The project proponent shall indicate breakup of cost towards individual activities (Appendix--III) of progressive mine closure as well as final mine closure.

3.13. Escrow Amount:

- (a) The Project Proponent shall open an escrow account in a scheduled commercial bank followed by a tripartite agreement involving CCO before starting mining operations and shall deposit its contribution towards mine closure for that financial year.

- (b) The annual rate for deposition towards the escrow account is ₹ 14,00,000 (Fourteen Lakhs per hectare) for opencast mines and ₹ 2,00,000 (Two Lakhs per hectare) for underground mines. These rates shall be the Base Rate as of May 2024 to be escalated on the latest Wholesale Price Index (WPI).

Provided that the annual rate for deposition may be revised by the Ministry of Coal.

- (c) The amount for the first year to be deposited in the escrow account shall be computed by considering the project area multiplied by the escalated rate and dividing the same by the balance production life of the mine in years.
- (d) The amount as calculated at clause 3.13 (c) shall be compounded @5% annually.

Illustration (For OC mines):

<i>Total Project Area (Ha)</i>	535.72
<i>Mine Closure Cost per Ha (May 2024)</i>	1400000
<i>WPI as on May 2024 (assumed)</i>	100
<i>Latest WPI available as on date of signing of escrow agreement (assumed)</i>	110
<i>Total Cost (Cr)</i>	$(110/100 * 535.72 * 1400000) = 82.5$
<i>Production Life of Mine</i>	30
<i>Amount to be deposited in the first year (Cr)</i>	$82.5/30 = 2.75$
<i>Amount to be deposited in the second year (Cr)</i>	$2.75 * 1.05 = 2.89$
<i>Amount to be deposited in the third year (Cr)</i>	$2.75 * 1.05 * 1.05 = 3.03$

- (e) The project proponent shall deposit the annual amount for 2nd year onwards in the escrow account for each financial year by 30th September of that year.

Provided that an interest @ 1 percent/month shall be charged for the delay in deposition of the amount for every delayed month.

Provided further that if project proponent fails to deposit the amount within 30th September of subsequent year, the Coal Controller shall suspend Mining Plan and communicate the same to Ministry of Coal, DGMS, MoEF&CC and the respective State Government.

Provided also that once the dues are paid, the suspension order shall be revoked and mining operations may restart.

Provided also that upon lapse of six months after the suspension order, if project proponent fails to clear the dues, the Central Government may, on recommendation of the Coal Controller, withdraw approval of the Mining Plan.

3.14. Reimbursement from Escrow Account:

- (i) Claim for reimbursement from the escrow account may be made by the project proponent up to 50% of the total deposited amount in the previous year (excluding interest accrued) based on work done towards progressive mine closure.
- (ii) Such claim shall be based on self-certification by authorized official of the company and shall be submitted on or before 31st March of subsequent financial year.
- (iii) While submitting the claim, videos and georeferenced images of the work done shall be submitted to the office of the Coal Controller for records.

- (iv) The coal controller shall, within one month of receipt of claim from the project proponent, allow withdrawal of amount.
- (v) Every sixth year, eleventh year, sixteenth year and so on, reimbursement from the escrow account may be made to the project proponent up to 50% of the total accumulated amount (excluding interest accrued) based on work done towards progressive mine closure.
Provided further that in such years, no annual reimbursement in terms of sub clause 3.14. (i) will be applicable.
- (vi) Before submission of claim for withdrawal from the escrow account in terms of sub clause (v) above, the project proponent shall get the same verified through one of the following agencies:
 - a. Central Mine Planning and Design Institute (CMPDIL)
 - b. Indian Institute of Technology(ies) or National Institute of Technology (ies) or Engineering colleges controlled by central/state government offering graduate/post-graduate degrees in mining or environmental science
 - c. National Environmental Engineering Research Institute (NEERI)
 - d. Any other agency authorized by the Central Government from time to time.
- (vii) These agencies shall also scrutinize the claim of the project proponent by comparing with Mining Plan.
- (viii) After submission of claim by project proponent, the steps enumerated at sub clauses 3.14 (ii, iv) above shall be followed.
- (ix) An illustration as regards the deposition of funds in the escrow account and withdrawal thereof is attached in Appendix-IV.
- (x) Submission of claims, uploading of report on verification and scrutiny by authorized agencies (3.14(vi)) and intimation about scrutinized amount to the project proponent by coal controller shall be done through the dedicated portal.
- (xi) A minimum of 25% of the balance amount in the escrow account every five-yearly period shall be utilised for community development and livelihood-related activities. An indicative list of activities has been is given in Appendix-V.
For Mining Plans already approved, the coal controller shall issue modification to the existing Mining Plans in terms of clause (d) of para 5.1.
- (xii) 90 percent of the balance amount in the escrow account at the end of the post-closure monitoring period shall be released to the project proponent on completion of all activities of mine closure. 10 percent of the balance deposited amount from final mine closure cost is to be spent towards Just Transformation, in consultation with district administration, local authority and stakeholders for skill development, sustained livelihood and employment generation etc.
- (xiii) If the Coal Controller has reasonable grounds for believing that the measures envisaged in the approved mine closure plan will not be carried out, the Coal Controller shall give the Project Proponent a written notice of intention to forfeit the amount in the escrow account.
Provided that the decision on such forfeiture shall be made only with the approval of the Central Government.

(xiv) The Project Proponent may re-appropriate funds amongst approved mine closure activities with prior intimation to the Coal Controller.

3.15. Mine Closure Certificate: CCO shall issue the mine closure certificate after the post-closure monitoring period based upon the undertaking by the project proponent and third-party audit report (appointed by the project proponent from a list of agencies as indicated at clause 3.14 (vi)) within a period of 30 days of receipt of such report.

Provided that the third-party auditor shall verify that the mine has been closed in all respects as per the Final Mine Closure Plan.

Chapter-IV

Formulation, submission, scrutiny, approval, revision, and timelines

- 4.1. Project Proponent shall ensure that the Mining Plan has been prepared by the Qualified Person/ Accredited Mining Plan Preparing Agency recognised under section 22B of the Mineral Concessions Rules, 1960, as amended from time to time.
- 4.2. Every Mining Plan submitted for approval or revision shall be accompanied by a non-refundable application fee of ₹ 1,00,000 (One Lakh Rupees), which may be revised by the Central Government from time to time.
- 4.3. Vide notification no. CG-DL-E-01062020-219668 dated 29th May 2020 of the Ministry of Coal, the Coal Controller has been authorised to approve 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).
- 4.4. For carrying out its functions as required under clause 4.3, the Coal Controller shall be assisted by a Technical Committee that shall scrutinise and examine the Mining Plan submitted by the project proponent. After the scrutiny and examination, the committee shall recommend the Mining Plan to the Coal Controller for "Approval" or "Rejection".
- 4.5. The Technical Committee shall consist of:
 - a) Deputy Coal Controller - Member Secretary (In case of vacancy, the Coal Controller may designate a suitable officer)
 - b) Director (Technical), MPS, Ministry of Coal- Member
 - c) One officer nominated by Coal Controller. No officer shall serve as member of the committee for more than a year- Member
 - d) An officer not below the rank of General Manager from CMPDIL (nominated by CMD, CMPDIL) in case Mining Plan is not prepared by CMPDIL. No officer shall serve as member of the committee for more than a year- Member
- 4.6. The members of the Technical Committee shall scrutinise the Mining Plan and submit comments thereof within fifteen (15) days of submission of the Mining Plan on the portal. Non-submission of comments by a member within such period shall imply that the member has no comments to offer.

- 4.7. On receipt of the comments, the project proponent may consider incorporating the same in the Mining Plan and shall resubmit the modified Mining Plan, within a period of 30 days of expiry of the period mentioned in clause 4.6.

Provided that in case the modified Mining Plan, considering the suggestions of members of the Technical Committee, is not resubmitted within such period, the Technical Committee may recommend rejection of the application.

Provided further that an opportunity of being heard shall be given to Project Proponent before rejecting application for approval of Mining Plan.

- 4.8. After the modified Mining Plan has been submitted, a meeting of the Technical Committee shall be convened within 15 days of submission under clause 4.7, wherein the project proponent shall make a presentation before the Technical Committee.
- 4.9. Technical Committee shall circulate the approved minutes within 7 days of the meeting under clause 4.8.
- 4.10. The Project Proponent shall incorporate decisions communicated as per minutes of the meeting of Technical Committee and resubmit the Mining Plan within 15 days of issue of minutes of the meeting.
- 4.11. After final submission of the Mining Plan, a virtual/physical meeting of the Technical Committee may be convened to recommend the approval or rejection of the Mining Plan, taking into consideration the recommendations contained in minutes of the meeting.
- 4.12. In case of recommendation for rejection, the Technical Committee shall accord the project proponent an opportunity of being heard before its recommendation. The Technical Committee shall record reasons for the rejection.
- 4.13. After the Technical Committee recommends approval/rejection of the Mining Plan, the Coal Controller shall communicate its decision within 5 days of such recommendation.
- 4.14. **Circulation of Approved Mining Plan:** CCO shall circulate a soft copy of the approved Mining Plan along with the approval letter to the Ministry of Environment, Forest and Climate Change, DGMS, CGWB, State Directorate of Geology and Mining department and District Administration.
- 4.15. Any person aggrieved by any orders made or directions issued in respect of the Mining Plan by the Coal Controller may apply to the Secretary, Ministry of Coal, for revision of such order made or directions issued thereon.
- Provided that such application shall be made within a period of 30 (thirty) days of such order made or such direction issued.

Chapter-V

Miscellaneous

5.1. Modification or Revision of the Mining Plan:

- (a) Modifications (minor changes) can be done with the approval of the Board of the respective company.

Provided that any such modifications shall be communicated to the Coal Controller within 30 days of such approval.

- (b) Revisions (other than minor changes), based on the application in this regard by the project proponent, shall be done only after approval of the Coal Controller.

Provided that no revisions shall be approved by the Coal Controller without prior approval of the Nominated Authority if such revisions result in changes in the terms & conditions or efficiency parameters mentioned in CMDPA/CBDPA/LBDPA.

- (c) An application for Revision of the Mining Plan shall be accompanied by an undertaking to the effect that there have been no violations during the course of mining operations as regards safety, environment and lease-related matters.

Provided that in case of violations related to safety (as reported by DGMS), leased area (as reported by State Government authorities), Environment (as reported by Central/State environment authorities), the Project Proponent shall ensure that mitigative measures for such violations are proposed by the project proponent in the application.

Provided further that the Coal Controller or the Technical Committee may require the Project Proponent to make a presentation explaining the Revisions.

- (d) Notwithstanding anything contained in clause 5.1. (a), (b) & (c), the Coal Controller may modify or revise Mining Plan based on directions issued by the central government.

- 5.2.** A report shall be submitted by the project proponent with respect to compliance with the Mining Plan, including deviations, if any, annually to the Coal Controller.

- 5.3.** Through a joint application of project proponents of adjoining mines, a proposal may be submitted for extraction of barrier coal.

- 5.4.** Through mutual agreement, one mine may utilize void/ land of some other mine for purpose of handling overburden, subject to requisite approvals/clearances.

- 5.5. Mine Repurposing Advisory Committee:** A Mine Repurposing Advisory Committee will be set-up in every district where mining operations are carried out in order to oversee implementation of community development and livelihood plan. The Committee shall consist of:

- a) District Collector, or District officer (as authorised by D.C.) - Chairperson
- b) Sarpanch/Secretary of Local Gram panchayat – Member
- c) Representative of reputed NGO (in consultation with D.C.) – Member
- d) Nodal Officer (Mine Closure) of concerned coal mining company – Member
- e) Agent of the mine – Member
- f) Chairperson may nominate two other members, one of which shall be a forest official.

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.
- 5.6.** The district administration may create market mapping of skills, merge income-generating schemes and utilise the District Mineral Fund (DMF).
- 5.7.** Though not mandatory, the project proponent may incorporate the following in the Mining Plan:
- (a) Make in India: Place a strong emphasis on sourcing indigenous machinery or equipment featuring locally manufactured components.
 - (b) Green Energy and Emission Reduction: Actively strive to meet emission reduction in annual greenhouse gas emissions through renewable sources.
 - (c) Clean Mobility in Mining Operations: Actively promote deployment of electric vehicles (EVs) and gas-based vehicles within coal mine operations.
 - (d) Automation: Look toward the future of mining by exploring and integrating autonomous Heavy Earth Moving Machinery (HEMM) within their sites.
 - (e) Use of blast-free mining technologies (such as longwall/continuous miner) in underground mines.
- 5.8. Removal of difficulties:** Interpretation of the Ministry of Coal as regards provisions of the Guidelines shall be final and binding.
- 5.9.** In the interest of the development of the coal or lignite blocks, the Ministry of Coal may relax or modify any of the provisions of these guidelines.
- 5.10.** In the event of any inconsistency or ambiguity between the provisions of these Guidelines and the Appendices annexed hereto, the provisions of these Guidelines shall prevail and shall be binding to the extent of such inconsistency or ambiguity.
- 5.11.** These Guidelines are without any prejudice to any other relevant rules and regulations issued by concerned government authorities.

SAMPLE FORMAT FOR PREPARATION OF MINING PLANS FOR SAND MINING FOR USE OF STOWING IN MINES**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. Contents

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**

(Objective, Project Details, location, & location map, 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: Geology and Exploration

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

Chapter 3: 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, Security, Post Mining Reclamation and Land Use Pattern,

Chapter 4: Blasting

Chapter 5: Mine Drainage

Chapter 6: Stacking of Mineral Rejects and Disposal of waste

Chapter 7: Use of Mineral

Chapter 8: Others

Chapter 9: Mineral Processing

Chapter 10: Progressive Mine Closure Plan

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,

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 from the Board of the company.
- d. Copy of earlier approval of Mining Plan.
- e. Replenishment Study

F. LIST OF PLATES

- a. Key Plan/Location Plan
- b. Lease Plan
- c. Surface Plan
- d. Working Plan
- e. Closure Plan
- f. Geo Referenced Cadastral Plan
- g. River Cross section Plan
- h. KML Plan

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

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

<i>Sl. No.</i>	<i>Chapters</i>	<i>Page No.</i>
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. List of Annexure

D. List of Plans/ Drawings Attached enclosed as Plates

E. List of Abbreviations used.

CHECKLIST

<i>Details</i>		(✓/✗)
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 letter or ownership record	
Annexure-II	Copy of approval of Board of the company towards submission of Mining Plan.	
Annexure-III	Copy of certificate as regards preparation of Mining Plan by QP/MPPA along with certificate issued for accreditation by QCI-NABET.	
Annexure-IV	Copy of approval of Geological Report.	
Annexure-V	Certificate of QP/MPPA to the effect that the Mining Plan has been prepared within the allotted or vested geological block boundary or existing mining lease area.	
Annexure-VI	Copy of analysis as regards deciding on appropriate mining method.	
Annexure-VII	Preliminary assessment report in case height of mine openings exceeds 3 metres and/or width exceeds 4.8 metres	
Annexure-VIII	Justification for not choosing blast-free technology	
Annexure-....	Other document (if any)	

<i>Details</i>		(✓/✗)
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.	

<i>Details</i>		(✓/X)
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). Provided that with permission of the concerned land owner (Central Government or State Government or an individual or any other entity), the project proponent may carry out its activities beyond the allotted or vested geological block boundary or existing mining lease. (iii) Plan showing, if any part of an allocated/vested block area cannot be included in the Mining Plan due to constraints such as presence of dense forest (in terms of the Forest Survey of India), dense habitation, rivers, railway lines and other areas that require special permission. Such area may be excluded from the Mining Plan.	
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. <u>Note:</u> 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)	
Plates	Cross-section showing coal/lignite seam(s)	
Plates	Plan showing existing and proposed surface layout(s)	

<i>Details</i>		(✓/X)
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	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	Linked End Use Plant	
1.1.4	Distance of End use plant from the pit head of the project in "km"	
1.1.5	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	<u>Regd. Office</u>	<u>Principal Place of Business</u>	
1.3.4	Name of the Previous Allottee of the Block			
1.3.5	Date of Mining Opening permission			
1.3.6	Rated Capacity as per Coal Mines Development & Production Agreement			
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	Approval Reference, with Date			
1.4.3	Conditions, if any, and compliance	Sl. No.	Conditions	Compliance
		1.		
		2.		
1.4.4	Scheduled year of start of production			
1.4.5	Proposed year of achieving the targeted production			
1.4.6	Date of actual commencement of mining operations, if operations already started			
1.4.7	Likely date of mining operations, if operations not yet started and reasons for non-commencement of operations			
1.4.8	Planned production and actual levels 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	Year	Coal "Mt" UG	OB "MM³"
		Year 1, Planned		
		Year 1, Actual		
		Year 2, Planned		
		Year 2, Actual		
		Year 3, Planned till base date		
		Year 3, Actual till base date		
1.4.9	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"		

	Parameters	Approved Mining Plan	Proposed Mining Plan
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,)		
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		
1.5.25	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 Skilled/Semi Skilled /Unskilled persons profession wise, gender wise, age wise and location wise	
1.6.3	No. of persons in Vulnerable Groups (Women, Children, Handicap etc.)	

	Parameters	
1.6.4	Repurposing of land proposed	
1.6.5.	Tentative measures to curtail GHG emissions	

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

	Parameters	Details												
2.1	DETAILS OF THE BLOCK													
2.1.1	Name of the Geological Report with month and year of preparation,													
2.1.2	Particulars of adjacent Area/ blocks: North, South, East, West	North : South: East: West:												
2.1.3	Area of the geological block projectised "in Ha" (Area of the geological block considered for liquidation of coal resource)													
2.1.4	Balance area yet to be projectised "Ha"													
2.1.5	Likely geological Resource in the area yet to be projectised "MTPA"													
2.1.6	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.	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> <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>	ID	Latitude	Longitude	1			2					
ID	Latitude	Longitude												
1														
2														
2.1.7	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	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>	ID	Latitude	Longitude	1			2					
ID	Latitude	Longitude												
1														
2														
2.1.8	KML file of the Proposed lease area, Project Area and geological block.	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.												

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

	<i>Parameters</i>	<i>Details</i>
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, 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
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		• 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, 5th year, 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	The calendar year from which the production will start							
3.1.5	Year of Achieving rated production							
3.1.6	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.							

3.1.7	Rated Capacity “MTPA”	
	- By OC	
	- By UG	
	- Overall	
3.1.8	Life of the mine: “Years”	
	- By OC	e.g., 30 years (From 1 st year to 30 th year)
	- By UG	e.g.,20 years (From 31 st year to 50 th year)
	- Overall	e.g.,50 Years
3.1.9	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	Type of Equipment/HEMM proposed	

Chapter 5: Infrastructure Facilities

	<i>Parameters</i>	<i>Details</i>																											
5.1	Mine infrastructure required e.g., Equipment maintenance planning, Office buildings, Workshop, Power supply arrangement, Water supply etc.	(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> </table>	Sl. No.	Facilities/ infrastructure to be retained	Area, Ha	1.			2.			3.				Total		Sl. No.	Facilities/ infrastructure to be Dismantled	Area, Ha	1.			2.			3.		
Sl. No.	Facilities/ infrastructure to be retained	Area, Ha																											
1.																													
2.																													
3.																													
	Total																												
Sl. No.	Facilities/ infrastructure to be Dismantled	Area, Ha																											
1.																													
2.																													
3.																													

		Total	
5.2.	Power supply and illumination.	(Max 500 Words) (Location to be shown in Plates)	
5.3	Drainage and Pumping: Assessment of Volume of Water for Pumping, Pumping Capacity and Pump Selection	(Max 500 Words) (Location to be shown in Plates)	
5.4	Coal Handling Arrangement: Brief detail of the CHP/ Mode of Dispatch, Coal quality and Coal staking and handling arrangement	(Max 500 Words) (Location to be shown in Plates)	
5.5	Coal washing and the proposed handling/ disposal of rejects.	(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	

Chapter 6: Land Requirement

	<i>Parameters</i>	<i>Details</i>	
6.1	LAND REQUIREMENT		
6.1.1	Total Land requirement for the mine in "Ha"	<i>Break up of pre-mining land type (indicative) and source of data.</i>	
6.1.2	During mining Land use details:		

	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
	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	No. of villages/Houses to be shifted									
6.1.4	Population to be affected by the project									
6.1.5	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

	<i>Parameters</i>	<i>Details</i>
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

	<i>Parameters</i>	<i>Details</i>
8.1	<i>Land Degradation and restoration Schedule</i>	
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	Backfil l/Stowi ng	Dump (Extn+ + Top Soil)	Others	Total
Up to Base year *								
Y-1								
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-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 MM³) (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-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, 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 MM³)

Year/Stage		Top Soil Removal Plan	Top Soil Used				Total Utilised
			Spreading Over Embankment	Spreading over Backfill area	Spreading over External OB Dump area	Used in Green Belt area	
Up to Base year							
Y-1							
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, 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	<u>Mine Closure Cost:</u>					
	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 Infrastructure and Disposal/ rehabilitation of Mining machinery	Dismantling of Workshop	LS			
		Dismantling of CHP	LS			
		Dismantling of mine structures				
		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			
		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				
	Technical and Biological Reclamation of Mined out of land and OB dump	Filing of Void	Mm3			
		OB Rehandling for backfilling	Mm3			
		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)				
		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				

Indicative (not exhaustive) list of activities under mine closure											
S. No .	Heads	Activities	Progressive Mine Closure Activities				Final Mine Closure activities			Post closure monitoring	
			Y1	Y 2	Y 3	Y 5	Y 1	Y 2	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											
16		Any other if any									
		Sub Total									
Final Closure Activities											
1	Dismantling of Infrastructure, disposal of mining machinery	Dismantling of workshop									
2		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		Barbed wire fencing around mine (Pit and dumps)					
2		Concrete wall with masonry / concrete pillars around the pit					
3		Securing entries (shaft/inclines)					
4	Safety and security	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		Filing of Void					
2		OB Rehandling for backfilling					
	Technical and Biological reclamation of mined out land and OB dump	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	power cost					
2		post mining water quality management					
3		post mining air and soil quality management					

4	supervision	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 –IV

Illustration: Yearly and 5 Yearly Reimbursement of escrow amount

<i>Total Project Area (Ha)</i>	535.72
<i>Mine Closure Cost per Ha</i>	1400000
<i>Total Cost (Cr)</i>	$535.72 \times 1400000 = 75$
<i>Production Life of Mine</i>	30
<i>Cost Per Annum (Cr)</i>	$75/30 = 2.5$
<i>Interest assumed per annum</i>	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.

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.