



**GOVERNMENT POLYTECHNIC JAJPUR**

**LECTURE NOTE  
ON MLGS-II**

**Soumya Ranjan Samal**

**{ Lecture In Mining }**

**DEPARTMENT OF MINING ENGINEERING**

## THE METALLIFEROUS MINES REGULATIONS, 1961

G.S.R. 337, dated the 18<sup>th</sup> October, 1960 – In exercise of the powers conferred by section 57 of the Mines, Act, 1952 (35 of 1952), the Central Government hereby makes the following Regulations, the same having been previously published as required by sub-section (1) of section 59 of the said Act.

### Chapter I. – Preliminary

1. Short title, extend and applications (1) These regulations may be called the Metalliferous Mines Regulations, 1961.
  - (2) They extend to the whole of India 2[\*\*\*]
  - (3) They shall apply to every mine of whatever description other than a coal or an oil mine.
2. Definitions. – In these regulations, unless there is anything [repugnant in the subject or contest –
  - (1) “Act” means the Mines Act, 1952;
  - (2) “approval safety lamp” and “approved electric torch” mean, respectively, safety lamp and an electric torch manufactured by such firm and of such type as the Chief Inspector may from time to time specify by notification in the Official Gazette;
  - (3) “Assistant Manager” means a person possessing a Manager’s Certificate appointed in writing by the owner, agent or manager to assist the manager in the control, management and direction of the mine or part thereof, and who takes rank immediately below the manager;
  - (4) “auxiliary fan” means a forcing fan or an exhausting fan, used belowground wholly or mainly for ventilating a face or faces or blind ends;
  - (5) “bankman” means a person appointed to superintend the lowering and raising of persons, tools and materials and the transmission of signals at the top of a shaft or winze;
  - (6) “blaster” means a person possessing a Manager’s, Foreman’s, Mate’s or Blaster’s Certificate and appointed by the manager in writing to perform the duties of a blaster under these regulations, and includes a shotfirer;
  - (7) “belman” means a person appointed to superintend the raising and lowering of persons, tools, materials and the transmission of signals at any landing;
  - (8) “Committee” means a committee appointed under section 13 of the Act;
  - (9) “competent person” in relation to any work or any machinery, plant or equipment means a person who has attained the 3[age of 20 years] and who has been duly appointed in writing by the manager as a person competent to supervise or perform that work or to supervise the operation of that machinery, plant or equipment, and who is responsible for the duties assigned to him, and includes a blaster;

- (10) “District Magistrate” in relation to any mine, means the District Magistrate or the Deputy Commissioner, as the case may be, who is vested with the executive powers of maintaining law and order in the revenue district in which the mine is situated;

Provided that in the case of a mine which is situated partly in one district and partly in another, the District Magistrate for the purposes of these regulations shall be the District Magistrate authorised in this behalf by the Central Government;

- (11) “explosive” shall have the same meaning as is assigned to that term in the Indian Explosive;
- (12) “face” means the moving front of any working place or the inbye end of any drive, level, crosscut, raise or winz;
- (13) “gas” includes fume or vapour;
- (14) “landing” means any floor or platform in a winze, which is an authorised stopping place of the cage or other means of conveyance, and includes a ‘plate’;
- (15) “machinery” means –
- (i) any locomotive or any stationary or portable engine, air compressor, boiler or steam apparatus which is, or
  - (ii) any such apparatus, appliance or combination of appliances intended for developing, storing transmitting, converting or utilising energy, which is, or
  - (iii) any such apparatus, appliance or combination of appliances if any power developed, stored transmitted, converted or utilised thereby is,
- used or intended for use in connection with mining operations;
- (16) “Manager” means a person possessing the prescribed qualifications and appointed in writing by the owner or agent to be in charge of a mine under the Act, and includes Mine Superintendent if appointed under section 17 of the Act;
- (17) “material”. Includes rock, debris, stone, mineral, ore or any other material;
- (18) “Metalliferous mine” includes every mine other than a coal or an oil mine;
- (19) “mine foreman” means a person possessing a Manager’s or Foreman’s Certificate and appointed by the manager in writing, under the designation whatsoever, to perform the duties of supervision or control in a mine or part thereof and includes a Shift Boss;
- (20) “mining mate” means a person possessing a Manager’s, Foreman’s or Mate’s Certificate and appointed by the Manager in writing, under any designation whatsoever, to perform the duties of a mining mate under these regulations, and includes an Overseer or Head Mestri;
- (21) “misfire” means the failure to explode of an entire charge of explosives in a shot-hole;
- (22) “month” means a calendar month;
- (23) “Official” means a person appointed in writing by the owner, agent or manager to perform duties of supervision in a mine or part thereof and includes an assistant manager, an underground manager, a mine foreman, a mining mate, an engineer and a surveyor;

- (24) “permitted explosive” means an explosive manufactured by such firm and of such type as the Chief Inspector may from time to time specify by notification in the Official Gazette;
- (25) “public road” means a road maintained for public use and under the jurisdiction of any Government or local authority;
- (26) “quarter” means a period of three months ending on the 31<sup>st</sup> March, 30<sup>th</sup> June, 30<sup>th</sup> September or 31<sup>st</sup> December;
- (27) “railway” means a railway as defined in the Indian Railways Act, 1890;
- (28) “Regional Inspector” means the Inspector of Mines in charge of the region or local area or areas in which the mine is situated or the group or class of mines to which the mine belongs, over which he exercises his powers under the Act;
- (29) “river” means any stream or current of water, whether seasonal or perennial, and includes its banks extending up to the highest known flood level;
- (30) “roadway” means any part of a passage or gallery belowground which is maintained in connection with the working of a mine;
- (31) “Schedule” means a schedule appended to these regulations;
- (32) “shaft” means a vertical or inclined way or opening leading from the surface to workings belowground or from one part of the workings belowground to another, and includes an incline;
- (33) “signalman” means a person appointed to transmit signals;
- (34) “socket” means a shot-hole or part of a shot-hole remaining after being charged with explosive and blasted, and which is not known to be a misfired shot-hole;
- (35) “Support” includes timber-work, masonry, packwalls, sandpacks, iron-work, or any other form of support;
- (36) “tub” includes a wagon, car, truck, hutch, bandy, bucket or any other vehicle for conveying material, but does not include a railway wagon;
- (37) “underground Manager” means a person possessing a Manager’s Certificate appointed in writing by the owner, agent or manager to be in charge of the whole of the underground workings or a specified portion thereof, under the direction of the manager, and is thus superior to a mine foreman and a mining mate, and includes an Underground Agent;
- (38) “ventilating district” means such part of a mine belowground as has an independent intake airway commencing from a main intake airway and independent return airway terminating at a main return airway and, in the case of mine or part thereof which is ventilated by natural means, the whole mine or part;
- (39) “Winze” or “Raise” means a small shaft, either vertical or inclined, in the workings belowground;
- (40) “working place” means any place in a mine to which any person has lawful access.

## **Chapter II – Returns, Notices and Records**

3. Notice of opening – (1) The notice required by section 16 of the Act shall be submitted in Form I or First Schedule I [and a copy thereof shall be submitted to the

Regional Inspector. The form shall be accompanied by a plan showing the boundaries of the mine and the shafts or opening of the mine, trijunction or revenue pillars and other prominent and permanent surface features :

Provided that, in respect of amine which has already been opened such a plan shall be submitted within sixty days of coming into force of the Metalliferous Mines (Amendment) Regulations, 1985:

Provided further that if the boundary of amine is changed as per sub-regulation(1) of regulation 111 a plan showing the boundary shall be submitted within seven days of the said change]

- (2) When a mine has been opened, the owner, agent or manager shall forthwith communicate the actual date of opening to the Chief Inspector and to the Regional Inspector.
4. Quarterly Returns – On or before the 20<sup>th</sup> day of January, April, July, and October in every year, the owner, agent or manager shall submit to the Chief Inspector and the Regional Inspector correct returns in respect of the preceding quarter in Form II of First Schedule.
5. Annual Returns – (1) On or before the 20<sup>th</sup> day of February in every year, the owner, agent or manager shall submit to the District Magistrate and to the Chief Inspector annual returns in respect of the preceding year in Form III of First Schedule.

(2) If a mine is abandoned or working thereof is discontinued for a period exceeding 60 days, or if a change occurs in the ownership of a mine, the returns required under sub-regulation(1) shall be submitted within 30 days of abandonment or change of ownership or within 90 days of discontinuance, as the case may be:

Provided that the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, allow such returns to be submitted up to any date not later than the 20<sup>th</sup> day of February in the year following that to which they relate :

Provided further that nothing in this sub-regulation shall be deemed to authorise the submission of any return later than the 20<sup>th</sup> day of February in the year following that to which it relates.

6. Notice of abandoned or discontinuance – (1) (a) When it is [intended to abandon a mine or to discontinue working thereof for a period exceeding four months, the owner, agent or manager shall, not less than 30 days before such abandonment or discontinuance, give to the Chief Inspector and the Regional Inspector a notice stating the reasons for the proposed abandonment or discontinuance and the number of persons likely to be affected thereby :

Provided that in the case of a mine or part thereof to which Regulation 142 applies, notice as aforesaid shall also be given whenever it is intended to abandon a district or part of the mine, or to discontinue working thereof for a period exceeding four months :

Provided further that when, on account of unforeseen circumstances, a mine or part as aforesaid is abandoned or discontinued before the notice has been given or when without previous intention the discontinuance extends beyond a period of four months, the notice shall be given forthwith.

(b) Notwithstanding anything contained in clause (a), when it is intended to abandon, or discontinue for more than four months, any workings belowground over which is situated any property vested in the Government or any local authority or any railway or any building or permanent structure not belonging to the owner, the owner, agent or manager shall not less than 30 days before the date of such abandonment or discontinuance, give notice of his intention to the Chief Inspector and the Regional.

(2) When a mine or part aforesaid has been abandoned, or working thereof has been discontinued over a period exceeding four months, the owner, agent or manager shall, within seven days of the abandonment or of the expiry of the said period, give to the Chief Inspector, the Regional Inspector and the District Magistrate notice in Form I of First Schedule.

7. Notice of reopening – (1) When it is intended to reopen a mine after abandonment, or after discontinuance for a period exceeding four months, the owner, agent or manager shall, not less than 30 days before resumption of mining operations, give to the Chief Inspector, the Regional Inspector and the District Magistrate notice in Form I of First Schedule :

Providing that in the case of a mine or part thereof to which Regulation 142 applies, notice as aforesaid shall also be given whenever it is intended to reopen a district or part of the mine after abandonment or after discontinuance for a period exceeding four months.

(2) When a mine or part as aforesaid has been reopened, the owner, agent or manager shall forthwith communicate the actual date of reopening to the Chief Inspector and the Regional Inspector.

8. Change of ownership and address etc. – (1) (a) When a change occurs in the name or ownership of a mine or in the address of the owner, the owner, agent or manager shall, within seven days from the date of the change, give to the chief Inspector and the Regional Inspector a notice in Form I of First Schedule :

Provided that where the owner of a mine is a firm or other association of individuals, a change –

- (i) of any partner in the case of a firm;
- (ii) of any member in the case of an association
- (iii) of any director in the case of a public company; or
- (iv) of any shareholder in the case of a private company

shall also be intimated to the Chief Inspector and the Regional Inspector, within seven days from the date of the change.

(b) When the ownership of a mine is transferred, the previous owner or his agent shall make over to the new owner or his agent, within a period of seven days of the transfer of ownership, all plans, sections, reports, registers and other records maintained in pursuance of the Act and of the regulations, all orders made thereunder and all correspondence relating to the working of the mine relevant thereto; and when the requirements of this clause have been duly complied with, both previous and the new owners or their respective agents shall forthwith send the Chief Inspector and the Regional Inspector a detailed list of the plans, sections, reports, registers and other records that have been transferred.

(2) When any new appointment is made of an agent, manager, assistant manager, underground manager, surveyor or an engineer, if any, or when the employment of any such person is terminated or any such person leaves the said employment, or when any change occurs in the address of any agent or manager, the owner, agent or manager shall, within seven days from the date of such appointment, termination, leaving or change, give to the Chief Inspector and the Regional Inspector a notice in Form I of First Schedule.

1[“8A. Appointment of agent. – (1) The owner of a mine shall submit in writing to the Chief Inspector and the Regional Inspector, a statement showing name and designation of every person authorised to act as an agent on behalf of the owner of a mine in respect of management, control, supervision or direction of the mine.

(2) The statement shall also show the responsibilities of every such person and the matters in respect of which he is authorised to act on behalf of the owner of a mine.

(3) The statement aforesaid shall be submitted within one month from the date of coming into force of the Metalliferous Mines (Amendment) Regulations, 1985, in the case of mines already opened or reopened as the case may be, and in other cases within one month from the date of opening or reopening of the mine.

(4) Any change, addition or alteration in the names or other particulars of the aforesaid statement shall be reported in writing to the Chief Inspector and the Regional Inspector within seven days from the date of such change, addition or alteration]

9. Notice of Accident – (1) (a) When there occurs in or about a mine –

- (i) an accident causing loss of life or serious bodily injury in connection with mining operations;
- (ii) an explosion or ignition;
- (iii) a spontaneous heating or outbreak of fire, or appearance of smoke or other indication of heating or outbreak of fire;
- (iv) an influx of noxious gases;

- (v) an occurrence of inflammable gas in a mine to which Regulation 142 does not apply;
- (vi) an irruption of water;
- (vii) a rock-burst in workings belowground;
- (viii) a premature collapse of any part of the workings;
- (ix) any accident due to explosives;
- (x) a breakage or fracture of a rope, chain, headgear pulley or axle or bearing thereof, or other gear by which persons are lowered or raised;
- (xi) an overwinding of cases or other means of conveyance while men are being lowered or raised;
- (xii) a breakage or fracture of any essential part of winding engine, crank-shaft, coupling, bearing, gearing, clutch, drum or drumshaft; or failure of emergency brake;
- (xiii) a bursting of any equipment containing steam, compressed air or other substance at high pressure; or
- (xiv) a breakage, fracture or failure of any essential part of any machine or apparatus whereby the safety of persons may be endangered;

the owner, agent or manager shall forthwith inform the Regional Inspector about the occurrence by telephone or express telegram or by special messenger; and shall also, within 24 hours of every such occurrence, give notice thereof in Form IV-A of First Schedule to the District Magistrate, the Chief Inspector and the Regional Inspector and shall simultaneously exhibit a copy of the notice on a special notice board outside the office of mine and shall ensure that the notice is kept on the board in a legible condition for not less than 14 days from the date of such exhibition.

- (b) When a n accident causing loss of life or serious bodily injury occurs in or about a mine in connection with the generation, storage, transformation, transmission, supply or use of electrical energy, the owner, agent or manager shall also forthwith inform the Electrical Inspector of Mines by telephone, express telegram or special messenger;

(2) If death results from any injury already reported as serious [under sub-regulation (1) or if an injury other than the serious injury becomes serious, the owner, agent or manager shall, within 24 hours of his being informed of the same], give notice thereof to the District Magistrate, the Chief Inspector and the Regional Inspector.

(3) In respect of every person killed or injured as above, the owner, agent or manager shall send to the Chief Inspector particulars in Form IV-B and IV-C of First Schedule, within seven days of the occurrence or 15 days of the injured person returning to duty, as the case may be.

10. Notice of disease – Where any person employed in a mine contracts any disease notified by the Central Government in the Official Gazette, the owner, agent or manager shall, within three days of his being informed of the disease, send notice thereof in Form V of First Schedule to the District Magistrate, the Chief Inspector, the Regional Inspector and the Inspector of Mines (Medical).



### CHAPTER III – Examinations and Certificates of competency and of Fitness

2[11. Board of Mining Examinations – (1) For the purposes of these regulations, there shall be constituted a Board of Mining Examinations (hereinafter referred to as the “Board).

(2) The Board shall consist of the Chief Inspector who shall be its Chairman Ex-officio and five members possessing technical qualification in mining, and

- (a) having practical experience in metalliferous mines, or
- (b) serving in an institution imparting education in mining engineering at the degree or equivalent level, or
- (c) engaged in mining research,

to be appointed by the Central Government:

Provided that the Board shall be so constituted that it shall include at least three members possessing qualifications laid down in clause (a) and at least one member possessing qualifications laid down either in clause (b) or in clause (c).

(3) Every member (other than the Chairman) of the Board shall hold office for a period of three years from the date of the notification appointing him as a member of the Board or until his successor is appointed and takes charge whichever is later :

Provided that –

- (i) a member may at any time resign his office;
- (ii) a member appointed under clause (b) or sub-regulation(2) shall cease to hold office upon his ceasing to serve in any such institution, as is referred to in that clause;
- (iii) a person appointed to fill a vacancy caused by reason of the death, resignation, or by reason of cesser of office under sub-clause (ii), of a member, shall hold office for the remaining period for which such member would have, but for such reason, continued as member.

(4) A person who holds, or who has held office as member of the Board shall, subject to the other provision of this regulation, be eligible for re-appointment to that office.

(5) A member of the Board (other than the Chairman) shall receive such remuneration as the Central Government may fix.

(6) An Inspector nominated in this behalf by the Chief Inspector shall act as the 1[Secretary to the Board hereinafter referred to in this regulation as the Secretary]

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(8)Notwithstanding anything contained in this regulation, the Central Government, may, if satisfied that it is necessary so to do in the public interest, re-

constitute to Board even though the term of office of all or any of the members thereof has not come to an end.

1[(9) Meetings of the Board shall be held as and when the Chairman considers them necessary, and unless otherwise decided by the Chairman, all meetings of the Board shall be held at Dhanbad

(10) (a) For every meeting of the Board, not less than ten clear days' prior notice intimating the time and place of the proposed meeting and signed by the Chairman or the Secretary shall be given to each members who is not absent from India.

(b) Such notice shall be delivered at, or posted to, the usual place of residence of the member, and each such notice shall be accompanied by a list of items of business to be disposed of at that meeting.

(c) Notwithstanding what is contained in clauses (a) and (b), in cases of urgency, an emergent meeting may be called for by the Chairman at any time, by intimating the members, only two days in advance, of the time and date of such meeting and the subject matter for discussion at such meeting.

(11) (a) The Chairman shall preside at every meeting of the Board.

(b) If the Chairman is absent for any reason, the members present shall elect one from among themselves to preside over the meeting; and the member so elected shall, for the purposes of that meeting; have all powers of the Chairman.

(12) No business shall be transacted at a meeting of the Board unless at least three members, including the Chairman, are present.

(13) (a) All matters which the Board is required to consider shall be considered at its meeting, or, if the Chairman so decides, by circulation of the papers, to every member who is not absent from India.

(b) When any matter is referred to by circulation as aforesaid, any member can request that it should be considered at a meeting of the Board and the Chairman may direct that it shall be so considered but when two or more members so request, the Chairman shall direct that it shall be so considered at a meeting to be held.

(14) (a) The Secretary shall place, before the Board, a list of business to be transacted at the meeting.

(b) No business which is not included in such list shall be considered unless the Chairman permits.

(15) (a) Every matter at a meeting, shall be decided by the majority of votes of the members present at such meeting.

(b) Every matter referred to the members by circulation under sub-regulation(13) shall be decided by the majority opinion of the members to whom the papers were circulated, unless the Chairman reserves it for consideration at a regular meeting to be held later.

(c) In case of equal division of votes or opinions of the members the Chairman shall have a casting vote or opinion.

(16) (a) The Secretary shall record the minutes of each meeting in a bound-page book kept for the purpose and copies of such minutes of the meeting shall be circulated to all members present in India.

(b) The minutes so recorded shall be confirmed at the next meeting of the Board and signed by the Chairman in token thereof.

(17) (a) The Chairman, in addition to any other powers and duties conferred upon him under these regulations, shall, -

- (i) present all important papers and matters to the Board as early as possible;
- (ii) issue orders for carrying out the decisions of the Board;
- (iii) have power to refer, in his discretion, any matter to the Central Government for their orders; and
- (iv) have powers generally to take such action or pass such orders necessary to implement the decisions of the Board.

(b) The Chairman may, during his temporary absence by reason of leave or otherwise, authorise any member of the Board to perform all or any of the duties of the Chairman during such absence.

(c) Unless the Chairman otherwise directs all proceedings of the Board shall be conducted in camera and be regarded as confidential].

12. Certificate granted by the Board –(1) Certificates under these regulations shall be granted by the Board.

(2) Certificates granted by the Board shall be valid throughout the territories to which these regulations extend, and shall be of the following kinds –

- (a) Manager's first class certificate of competency to manager a metalliferous mine (in these regulations referred to as a First Class Manager's Certificate);

- (b) Manager's second class certificate of competency to manage a metalliferous mine (in these regulations referred to as a Second Class Manager's Certificate);
- (c) Surveyor's certificate of competency to survey the workings of a mine (in these regulations referred to as a Surveyor's Certificate);
- (d) Mine Foreman's certificate of competency to carry out inspections and duties as required under these regulations (in these regulations referred to as a Foreman's Certificate);
- (e) Mining Mate's certificate of competency to carry out inspections and duties as required under these regulations (in these regulations referred to as a Mate's Certificate);
- 1[(f) winding engineman's I Class certificate (in these regulations referred to as a First Class enginedriver's Certificate) to drive a winding engine of any type or class or of such type or class or of such type or class or types or classes as may be specified in the certificate;
- (g) winding engineman's II class certificate (in these regulations referred to as a Second Class enginedriver's Certificate) to drive a winding engine of any type or class or of such type or class or of such type or class or types or classes as may be specified in the certificate;
- (h) Blaster's certificate of competency to fire shots in a metalliferous mine (in these regulations referred to as a Blaster's Certificate); and
- (i) Certificate of competency to test for the presence of inflammable gas (in these regulations referred to as a Gas-testing Certificate) : Provided that 2[any of the certificates aforesaid, other than an Engine Driver's Certificate and a Gas-testing Certificate] may be restricted to mines having open-cast workings only and this fact shall be endorsed on the certificate.

13. Examinations and Examiners. – (1) Certificates of competency shall be granted to successful candidates after such examination and in such form as the Board may prescribe :

3[Provided that the Board may, subject to the conditions to b specified in the bye-laws framed for the purpose, exempt any person 4\*\*\*\*\* from appearing at the examination or part thereof for the grant of a certificate referred to in regulation 12]

1[Provided further that the Board may, for a period of five years from the date of coming into force of the Metalliferous Mines (Amendment) Regulations, 1977 and subject to such conditions as may be prescribed in the bye-law made by the Board for the purpose, exempt any person, possessing such experience or such qualifications or both in

mining as may be approved by the Board in this behalf, from appearing at the examination or part thereof for the grant of a certificate referred to in regulation 12.]

(2) The examinations shall be held at such times and at such centres as may be fixed by the Board, and shall be conducted by examiners appointed by the Board.

(3) The examiners so appointed shall be subject to the orders of the Board in respect of all matters relating to the conduct of the examinations, and shall receive such remuneration as the Board, with the sanction of the Central Government, may fix.

(4) The Board may make bye-laws as to the conduct of the examinations and as to the granting of certificates of competency and of fitness as required under these regulations, and shall, so far as may be practicable; provide that the standard of knowledge required for the grant of certificates of any particular class and the standard of medical fitness shall be uniform throughout the territories to which these regulations extend. Every bye-law made by the Board under this regulation shall be published in the Official Gazette; and no such bye-law shall have effect until three months after the date on which it was so published.

14. Submission of applications – (1) Applications for an examination conducted by the Board shall be made on a form supplied for the purpose.

(2) Notice regarding the date and place of the examinations for the Manager's and Surveyor's certificates shall be published under the order of the Board, in such periodicals as the Board may direct, not less than 60 days prior to the date fixed by the Board for receiving applications. The closing date for receipt of applications shall not be less than 60 days prior to the date fixed for the examination.

15. Age and general qualifications etc. of candidates – (1) (a) No person shall be admitted as a candidate at any examination held by the Board unless he is 3[20 years of age].

(b) No person shall be admitted as a candidate at any examination for a Manager's, Surveyor's, Foreman's, Mate's or Blaster's Certificate unless he holds a valid first-aid certificate or the standard of the St. John Ambulance Association (India):

Provided that if any candidate satisfied the Board that he has not had sufficient opportunity to obtain such first-aid certificate, the Board may admit him to the examination on such conditions, if any, as it thinks fit to impose.

(d) Every application for any examination as aforesaid shall be accompanied by :-

(i) A certificate of age granted by a Gazetted Officer or by the head master of a school or a Higher Secondary or equivalent standard;

Provided that in the case of a person holding a matriculation or equivalent certificate, such certificate shall be submitted as evidence of age;

- (ii) a medical certificate obtained not more than two year prior to the date of this application, from a qualified medical practitioner not below the rank of a Civil Assistant Surgeon, or from a Certifying Surgeon certifying the candidate to be free from deafness, defective vision or any other infirmity, mental or physical, likely to interfere with the efficiency of his work; and
- (iii) a certificate from some person of good repute as to the general good conduct and sobriety of the candidate.

(2) 1[After the 31<sup>st</sup> December, 1961] no person shall be admitted as a candidate at any examination for a Manager's or Surveyor's Certificate unless he has passed the matriculation examination of a recognised university, or its equivalent, and for a Foreman's, Mate's Engine-driver's or 2[Blaster's] Certificate unless he satisfies the Board that he is literate :

3[Provided that nothing in this sub-regulation shall be deemed to debar a person, not satisfying the provisions thereof, from being admitted at such an examination after the said date, if he had been admitted at a similar examination before that date].

4[(3)(a) No person shall be admitted as a candidate of an examination for a Manager's or Foreman's Certificate, which is not restricted to mines having opencast working only, unless he has obtained a Mate's certificate not so restricted and a Gas-testing Certificate and no person shall be admitted as a candidate at an examination for Manager's or foreman's Certificate restrcted to miens having opencast workings only, unless he has obtained a Mate's Certificate;

Provided that this clause shall not apply –

- (i) to a candidate for a Manager's Certificate, if he already holds a Foreman's Certificate granted under regulation 22 or 23; and
- (ii) to a candidate for a Manager's First Class Certificate, if he already holds a Manager's Second Class Certificate granted under regulation 22 or 23.

(b) Notwithstanding anything contained in clause (a), if a candidate satisfied the Board that he did not have sufficient opportunity to obtain a Mate's or Gas-testing Certificate, the Board may admit him to the examination for a Manager's or Foreman's Certificate on such conditions if any, as it may think fit to impose].

16. Practical experience of candidates for Manager's Examinations – (1) No person shall be admitted as a candidate at any examination for a First or Second Class Manager's

Certificate (other than an Exchange or Service Certificate to which the provisions of Regulations 22 and 23 respectively apply), unless he has satisfied the Board that he has had practical experience in a metalliferous mine for a period of not less than five and three years respectively :

Provided that –

- (a) in the case of a candidate who has received 5[a diploma or degree in mining or mining engineering or other equivalent 6[qualification] approved in that behalf by the Central Government, such period shall be reduced to three and two years, respectively; and
- (b) in the case of a candidate who has received 5[a certificate, diploma or degree in applied geology, civil, mechanical or electrical engineering, or other equivalent 6[qualification] approved in that behalf by the Central Government, such period shall be reduced to four and two and a half years, respectively.

(2) The nature of the practical experience required of a candidate for a Manger's Certificate shall be experience approved by the Board and gained in one or other of the following capacities in a metallifeous mine having an average employment of not less than 60 in workings belowground or not less than 160 in all in the mie 7[or in such other 8(mines) as the Boad may approve in this behalf] –

- (a) as a workman, or a mining apprentice having direct practical experience of getting ore and of store work, timbering and repairing ;  
or
- (b) as an official in respect of mining operations :

9[Provided that out of the period of experience required under sub-regulation(1) from candidates for the examination of –

- (i) First Class Manager's Certificate, not restricted to mines having opencast workings only, a period of not less than eighteen months should have been spent in the working below ground of a mine.
- (ii) Second Class Manager's Certificate, not restricted to mines having opencast workings only, a period of not less than twelve months should have been spent in the working below ground of a mine.

10[Provided further that the Board may approve a part of the period of the experience gained while engaged in inspection, rescue, research, planning or any other work, connected with mining operation, so however, that, the aforesaid period shall not, inclusive of the period of experience in coal mines approved under regulations 19, exceed one year in case of 1[Second Class] and one and half years in a First Class Manager's Certificate].

2[17. Practical experience of candidates for Surveyor's Examination – No person shall be admitted as a candidate at any examination for a Surveyor's Certificate unless he has satisfied the Board that he has had not less than two year's practical experience of surveying of a type approved by the Board, In case of candidates for a certificate which is not restricted to mines having opencast workings, the said experience shall include practical experience for a period of not less than six months of surveying the workings belowground of a mine having an average employment of not less than 60 in workings below ground or such other mines as the Board may approve in this behalf :

Provided that the aforesaid period of two years shall be reduced to six months in case of candidate who has received a certificate, diploma or degree in mining or mining engineering, mine surveying, or civil engineering or other equivalent qualification approved in that behalf by the Central Government, subject, however, to the condition that in case of a candidate for a certificate which is not restricted to mines having opencast workings, the said six months experience should have been gained in workings below ground of a mine as aforsiad.]

3[18. Practical experience of candidates for Mate's and Blaster's Examinations. (1) No person shall be admitted as a candidate at any examination for a Mate's Certificate unless the Board is satisfied that he has had practical experience and training in a metalliferous mine for a period of not less than three year :

Provided that the said period shall be reduced –

- (a) to two years in the case of a candidate who has received a diploma or certificate in mining subjects or other equivalent qualification after a course of at least two years' duration approved in that behalf by the Central Government 4[or who received has a degree in applied geology or in civil, mechanical or electrical engineering or other equivalent qualification approved in that behalf by the Central Government] ; and
- (b) to one year in the case of a candidate who has received a diploma or degree in mining or mining engineering or other equivalent qualification approved in that behalf by the Central Government .

(2) No person shall be admitted as a candidate at any examination for a Blaster's Certificate unless the Board is satisfied that he has had practical experience and training in a metalliferous mine for a period of not less than two years, of which not less than six months shall be experience and training in connection with shot-firing :

Provided that the said period shall be reduced :

- (a) to one year (including not less than four months in shot-firing) in the case of a candidate who has received a diploma or certificate in mining subjects or other equivalent qualification



after a course of at least two years' duration approved in that behalf by the Central Government 4[or who has received a degree in applied geology or in civil, mechanical or electrical engineering or other equivalent qualification approved in that behalf by the Central Government] and

(b) to six months (including not less than two months in shot-firing) in the case of a candidate who has received a diploma or degree in mining or mining engineering or other equivalent qualification approved in that behalf by the Central Government.

(3) The nature of practical experience required of candidates for the aforesaid examinations shall be experience of such a type as may e approved by the Board.]

19. Approval of experience of candidates for Engine-drive's Certificates. – In the case of a candidate part of whose experience has been obtained in a coal mine, the period of practical experience in a metalliferous mine as prescribed in 6[regulations 16,17 and 18] may be reduced by the Board to such an extent and subject to such conditons as it may specify.

20. Practical experience of candidates for Engine-driver's Certificate – No person shall be admitted as a candidate at any examination for an Engine-driver's Certificate unless he has satisfied the Board that he has had practical experience of driving a winding engine or as an assistant to a qualified winding enginedriver for a period of at least one year :

Provided that no person shall be permitted to appear at any examination for a I Class Engine Driver's Certificate unless he holds a II Class Engine Driver's certificate.

1[21 Examination fees – (1) Fees on the following scale shall be paid in respect of every application for admission to an examination :-

	Rs
(a) in the case of an examination for a First Class Manager's Certificate	50
(b) in the case of an examination for a IInd Class Manager's Certificate	30
(c) in the case of an examination for a Surveyor's Certificate	20
(d) in the case of an examination for a Foreman's Certificate	20
(e) in the case of an examination for a Mate's Certificate	10
(f) in the case of an examination for a I Class Engine Driver's Certificate	20
(g) in the case of an examination for a IInd Class Engine Driver's Cert.	10
(h) in the case of an examination for a Blaster's Certificate	6
(i) in the case of an examination for a Gas testing's Certificate	4

(2) The Chief Inspector may permit the refund of any fee paid under sub-regulation (1) where the candidate has died before the examination or where the fee has been erroneously paid.

(3) Except as aforesaid examination fee paid shall not once be refundable.

22. Exchange Certificates – (1) The Board may grant to any person holding a Manger's Surveyor's, Overman's or Foreman's, Sirdar's or Mate's or Engine-driver's or shotfirer's or Blaster's Certificate granted under any Act for the regulation of mines for the time being in force in any other country, a certificate of similar class under these regulations if he 2[ possesses such practical experience and] passes such examination as the Board may stipulate :

Provided that a candidate for the grant of a Manger's Exchange Certificate shall also satisfy the Board that he has undergone, for a period of not less than six months, a course of practical training in India in the manner and in the mines approved by the Chief Inspector for the purpose. Before the commencement of his practical training in India as aforesaid, every such candidate shall submit to the Chief Inspector an application in a form supplied for the purpose.

(2) The Board may grant to any person holding a certificate referred to in sub-regulation (1) granted under the Coal Mines Regulations made under the Act a similar certificate under these relations if he 3[possesses such practical experience and] passes such examination as the Board may stipulate :

4[Provided that the Board may, subject to such conditions as it may specify, exempt any person from appearing at the examination or part thereof, for the grant of an Exchange Certificate].

5[(2-A) An Exchange Certificate other than a Winding Engine drive' or Blaster's Certificate granted under sub-regulation (1) or (2) may be restricted to mines having open-cast working only, and in such a case the certificate shall contain an endorsement to that effect].

(3) Every application for the grant of an Exchange Certificate under this regulation shall be accompanied by :

- (i) a medical certificate obtained not more than two years prior to the date of his application, from a qualified medical practitioner not below the rank of a Civil Assistant Surgeon or from a Certifying Surgeon, certifying the candidate to be free from deafness, defective vision or any other infirmity, mental or physical likely to interfere with the efficient discharge of his duties ; and
- (ii) a certificate from some person of good repute as to the general good conduct and sobriety of the candidate.

(4) Fees on the scale laid down in regulation 21 shall be paid in respect of every examination under the regulation.

23. Service Certificate – (1) The Board may grant, until such date as may be notified by the Central Government for the purpose in the Official Gazette without written examination;

(a) a Manager's Certificate to any person –

1(i) who has attained the age of 35 years and who satisfied the Board that he has worked, for a period of not less than eight years in the case of an applicant for First Class Manager's Certificate and six years in the case of an applicant for the Second Class Manager's as an Assistant Manager, underground manager, or manager or in any capacity accepted by the Board as equivalent or superior thereto in the planning, control and direction of mining operations of metalliferous mines of a type approved by the Board if he passes a viva voce examination in such subjects as the Board may specify ; or]

2[(I-A) who has attained the age of thirty years and has received a diploma or certificate in mining or mining engineering or an Honours or a Master's Degree in Geology or other equivalent qualification, approved in the behalf by the Central Government, if he satisfied the Board that he has had such practical experience as complies with the provisions of sub-regulation (2) of regulation 16 for a period of not less than eight years, in the case of a First Class Manager's Certificate and six years, in the case of Second Class Manager's Certificate and if he passes a viva voce examination in such subject as the Board may stipulate :

Provided that practical experience for period of not less than three of the eight years in the case of a First Class Manager's Certificate and for a period of not less than two of the six years in the case of Second Class Manager's Certificate shall be in the capacity of an assistant manager or under manager or manager or in a capacity accepted by the Boards are equivalent or superior thereto in the control and direction of mining operation in mines of a size approved by the Board];

(iii) who has attained the age of 25 years and has received 3[a diploma, certificate or degree in mining engineering, applied geology, civil, mechanical, or electrical engineering or other equivalent qualification] 4approved in this behalf by the Central Government, if he satisfied the Board that he has had practical experience of the nature approved by the Board for periods of not less than five years for a First Class Manager's Certificate and three years for a Second Class Manager's Certificate and if he passes a viva voce examination in such subjects as the Board may stipulate :

Provided that not less than two years and one year respectively, of the said practical experience shall have been obtained in metalliferous mines in India;

For the purpose aforesaid only such experience shall be approved, as complies with the provisions of regulation 16(2), or is experience in the capacity of a manager or in a superior capacity in the control and direction of mining operations ;

5[(b) a Foreman's, Mate's or Blaster's Certificate to any person –

- (i) who has attained the age of 25 years and who satisfies the Board that he has worked in the capacity of mine foreman, a mining mate or a blaster, as the case may be, in a metalliferous mine in India for a period of not less than three years in the case of a certificate restricted to mines having open-cast workings only and not less than four years in case of a certificate not so restricted and has passed such viva voce examination as the Board may stipulate;
- (ii) who has attained the age of 23 years and has received a diploma or certificate in mining or mining engineering or other equivalent qualification approved under sub-clause (iA) of clause (a) or a degree in geology from any recognised university, if he satisfied the Board that he has had such practical experience for a period of not less than two years in the case of a certificate restricted to mines having open-cast workings only and not less than three years in the case of a certificate not so restricted as has been specified in sub-regulation(2) of regulation 16 or in the capacity of a manager or in a capacity accepted by the Board as equivalent or superior thereto in the planning, control and direction of mining operations in metalliferous mines of a type approved by the Board and if he passes such viva voce examination as the Board may stipulate; or
- (iii) who has attained the age of 21 years and has received a diploma, certificate or degree in mining engineering, applied geology, civil, mechanical or electrical engineering or other equivalent qualification approved under sub-clause (ii) of clause (a), if he satisfied the Board that he has had such practical experience for a period of not less than one year in the case of a certificate restricted to mines having open-cast workings only and not less than two years in the case of a certificate not so restricted as has been specified in sub-regulation (2) of regulation 16 or in the capacity of a manager or in a capacity accepted by the Board as equivalent or superior thereto in the planning, control and direction of mining operation in metalliferous mines of a type approved by the Board and if he passes such viva voce examination as the Board may stipulate].

(2) Any Service Certificate granted under sub-regulation (1) may be restricted to miens having open-cast workings only; and this fact shall be endorsed on the Certificate.

(3) Every application for the grant of a Service Certificate under this sub-regulation shall be accompanied by :

- (i) a certificate of age granted by a Gazetted Officer of the Central Government or by the head-master of a school of a Higher Secondary or equivalent standard or by a qualified medical practitioner no below the rank of a Civil Assistant Surgeon ;

Provided that in case of a person holding a matriculation or equivalent certificate, such certificate shall be submitted as evidence of age ;

- (ii) a medical certificate obtained not more than two years prior to the date of his application, from a qualified medical practitioner not below the rank of a Civil Assistant Surgeon or from a Certifying Surgeon, certifying the candidate to be free from deafness, defective vision or any other infirmity, mental or physical, likely to interfere with the efficient discharge of his duties; and
- (iii) a certificate from some person of good repute as to the general good conduct and sobriety of the candidate.

(4) Fees on the scale laid down in Regulation 21 shall be paid in respect of every examination under this regulation.

24. Service Certificate for Surveyors. – (1) The Board may grant, until such date as may be notified by the Central Government for the purpose in the Official Gazette, a Surveyor's (restricted to metalliferous mines) to any person –

- (i) 1[who has attained the age of 30 years and who satisfied the Board that he has worked as surveyors of metalliferous mines in India for a period not less than six years, and has had practical experience in surveying of the nature approved by the Board, if he passes such viva voce examination as the Board may stipulate; or]
- (ii) who has attained the age of 25 years and has received 1[certificate, diploma or degree in mining, mining engineering, mine surveying or civil engineering or other equivalent 2qualification] approved in this behalf by the Central Government, if he satisfied the Board that he has had practical experience in surveying of the nature approved by the Board for a period of not less than two years (including not less than six months in the workings belowground of a metalliferous mine in India) and if he passes such viva voce examination as the Board may stipulate.

[NOTE- Any service certificate granted under this sub-regulation may be restricted to mines having opencast workings only, and such restriction shall be endorsed on the certificate].

(2) Every application for the grant of a Service Certificate under this sub-regulation shall be accompanied by :

- (i) a certificate of age granted by a Gazetted Officer of the Government or by the head-master of a school of a Higher Secondary or equivalent standard or by a qualified practitioner not below the rank of a Civil Assistant Surgeon :

Provided that in case of a person holding a matriculation or equivalent certificate, such certificate shall be submitted as evidence of age;

(ii) a medical certificate obtained not more than two years prior to the date of his application, from a qualified medical practitioner not below the rank of a Civil Assistant Surgeon or from a Certifying Surgeon, certifying the candidate to be free from deafness, defective vision or any other infirmity, mental or physical, likely to interfere with the efficient discharge of his duties; and

- (iii) a certificate from some person of good repute as to the general good conduct and sobriety of the candidate.

(3) Fees on the scale laid down in Regulation 21 shall be paid in respect of every examination under this regulation.

25. Validity of old Certificates – Any Engine-driver's or Blaster's Certificate granted under the Mysore Gold Mines Regulations, which is valid at the commencement of these regulations shall be deemed respectively to be the equivalent of an Engine-driver's or Blaster's Certificate granted under these regulations.

26. Duplicate Certificates – If any person proves to the satisfaction of the Board that he has, without any fault on his part, lost or been deprived of a certificate granted to him, under these regulations, the Board may, upon realisation of the following fees and subject to such terms and conditions as it thinks fit, cause a copy of the certificate to be delivered to him –

- |  |       |
|--|-------|
| (a) in the case of a Manager's or Surveyor's Certificate | Rs. 5 |
| (b) in the case of any other certificate                 | Rs. 2 |

The word "DUPLICATE" shall be stamped across every such copy.

27. Certificates to be delivered to the manager. – When the holder of a Foreman's, Mate's, Engine-driver's, Blaster's or Gas-testing certificate is employed in a mine in a capacity which requires the possession of the said certificate, he shall deliver such certificate to the manager of the mine in which he is for the time being employed. The manager shall deliver to him a receipt for the same; and shall retain the certificate in the office at the mine so long as the holder thereof is so employed, and shall return it to him on his ceasing to be so employed.

28. Court of Enquiry into fitness of a person to hold a Manager's or Surveyor's Certificate. –(1) If a person who is the holder of a Manager's or Surveyor's Certificate, has been convicted of an offence made punishable under the Act with fine which may extend to RS. 500 or more or with imprisonment, or if it appears to the Central Government that he is unfit to continue to hold such a certificate by reason of incompetence or misconduct in the performance of his duties under the Act or under these regulations, the Central Government may appoint a Court to hold an inquiry to determine as to whether or not such person is fit to continue to hold such certificate.

(2) The following provision shall have effect with respect to the constitution and procedure of the Court holding an enquiry :-

- (a) The court shall consist of a person or persons appointed by the Central Government and may conduct the inquiry either alone or with the assistance of an assessor or assessors so appointed.
- (b) The Central Government may pay to the person or persons constituting the Court and to any assessor appointed to assist the Court, such remuneration and allowances as it may fix.
- (c) The inquiry shall be public and shall be held at such place as the Central Government may appoint.
- (d) The central Government may appoint any person to undertake the management of the case.
- (e) The Central Government shall, before the beginning of the inquiry, furnish to the person whose fitness to continue to hold a certificate to be inquired into, a statement of the case on which the inquiry is instituted.
- (f) The said person may appear at the inquiry either in person or by counsel, solicitor or agent approved by the Court, and may give evidence or call such witnesses as he thinks fit.
- (g) If a majority of the persons constituting the Court thinks fit, the person whose conduct is under inquiry may be required to deliver up his certificate at any time before or during the inquiry; and such person shall be bound to comply with such requisition, unless he shows to the satisfaction of the Court sufficient cause to the contrary.
- (h) The Court shall, for the purpose of the inquiry, have all the powers of a civil court under the Code of Civil Procedure, 1908 (5 of 1908) for the purpose of enforcing the attendance of witnesses and compelling the production of registers, plans, sections, reports and other records and

material objects; and any person required as aforesaid to attend or to furnish any information shall be deemed to be legally bound to do so within the meaning of section 176 of the Indian Penal Code, 1860 (45 of 1860).

- (i) The Court, for the purpose of the inquiry, may exercise such of the powers of an Inspector under the Act as it may think necessary or expedient.
- (j) The Court shall, subject to the foregoing, have powers to regulate the procedure of the inquiry and to adjourn it from time to time.
- (k) A person appearing as a witness before the Court may be paid by the Central Government such expenses as would be allowed to a witness attending a civil or criminal court.
- (l) As the conclusion of the inquiry, the Court shall send to the Central Government a report containing a full statement of the case together with its opinion thereon, note of dissent, if any, submitted by the assessor or assessors and such account of or extracts from, the evidence as it may think fit; and if it considers that the certificate in question should be cancelled or suspended, it shall add a recommendation to the effect. Where the Court consists of more than one person, not including the assessors(s), and there is disagreement between the members of the Court, a dissentient from the opinion of the majority may forward a separate report to the Central Government with a statement of his recommendations.

(3) The Central Government may, on the recommendation of the Court, cancel or suspend a certificate; and if it does so the fact of such cancellation or suspension shall be notified in the Official Gazette and if the certificate or a duplicate thereof granted under regulation 26, is produced, be endorsed upon it.

1[29. Suspension of Certificate of Foreman, Mate, Engine driver, Blaster or Gas testing. –

- (1) If the Regional Inspector is of the opinion that the holder of a certificate of Foreman, Mate, Engine-driver, Blaster or Gas testing is incompetent or is guilty of negligence or misconduct in the performance of his duties, he may hold an enquiry to determine whether or not such a person (hereinafter referred to as the delinquent) is to continue to hold such certificate.
- (2) During such enquiry he shall record, -
  - (a) any evidence that the delinquent may like to give;
  - (b) the evidence of any witness that the delinquent may like to produce;
  - (c) the evidence of the Manager of the mine; and
  - (d) any other evidence that may be considered necessary or relevant by the Regional Inspector.

Unless the delinquent fails to be present in spite of sufficient notice, the evidence aforesaid shall be recorded in the presence of the delinquent and he shall be given



a reasonable opportunity to cross-examine the witnesses (other than those produced by him.). The Regional Inspector also may cross-examine the delinquent and the witnesses produced by him.

- (3) If as a result of the enquiry the Regional Inspector is of the opinion that the delinquent is not fit to hold the certificate, he shall, within fifteen days from the date of the conclusion of his enquiry, submit a report to the Chairman of the Board together with his findings, notes of evidence recorded during the enquiry and other relevant records. After considering such report, evidence and records, the Chairman may without any further reference to the Board suspend the certificate of the delinquent for a period not exceeding three months.
- (4) Where the Chairman is of the opinion that the suspension of the certificate for a period exceeding three months or its cancellation is called for, he shall recommend to the Board accordingly together with the findings of the Regional Inspector, the notes of evidence and other relevant records. A copy of such communication addressed to the Board together with the copies of the notes of evidence and the findings of the Regional Inspector shall also be sent to the delinquent who may submit his written representation within thirty days from the date of receipt of such copies.
- (5) The Board may, after considering the evidence and other records and the written representation, if any, submitted by the delinquent, either increase the period of suspension or cancel the certificate as it deems fit.
- (6) Where a certificate is suspended or cancelled under this regulation, the Chairman of the Board may call for such certificate and make suitable endorsement thereon.].

30. Validity of Foreman's, Mate's, Engine-driver's, Blaster's and Gas testing Certificates, - (1) (a) No Foreman's, Mate's, Engine-driver's, Blaster's shall remain valid for a period of more than five years unless the certificate bears an endorsement by the Regional Inspector to the effect that the holder thereof has, within the preceding five years, been examined and certified by a qualified medical practitioner appointed by the Chief Inspector to be free from deafness, defective vision or any other infirmity, mental or physical, likely to interfere with the efficient discharge of his duties.

- (b) An application in respect of an examination of fitness in pursuance of clause(a) shall be made to the Chief Inspector, accompanied by a fee of 2[fifteen rupees].

3[(2) (a) A medical examination undergone in accordance with rule 29B of the Mines Rules, 1955 shall also be deemed to be an examination for the purpose of sub-regulations(1).

- (b)The application for endorsement on a certificate by the Regional Inspector shall be accompanied by the certificate of fitness granted in terms of rule 29B of the Mines Rules, 1955 and a fee of five rupees.].

31. 4[Retirement age for Managers and Official etc. – (1) No person shall act as a manger or an official or a blaster or a winding engine man in a mine after attaining the age of 60 years unless he has obtained, within the preceding one year, a medical certificate of fitness certifying him fit to carry out the duties prescribed for him in the Act and in the regulations and orders made thereunder :

Provided that if the Chief Inspector or the Regional Inspector is of the opinion that a person as aforesaid though less than 60 years' of age, is medically unfit to carry on the duties prescribed for him in the Act and in the regulations and orders made thereunder, the Chief Inspector or the Regional Inspector may, by an order in writing, exceeding three months as he may specify therein; and no such person shall continue to act in any capacity as aforesaid after the period so specified unless he has obtained a medical certificate of fitness.

(2) The medical certificate of fitness as aforesaid shall be obtained from such authority and in such manner and after the payment of such fees as the Board may prescribe.

1[31. A. Right of the workers' representative to inspect the register maintained under the Mines Rules 1955 – The register maintained in Form 'B' under the Mines Rules, 1955 shall be made available for inspection to a workers' representative duly authorized by the persons employed in the mine on an application made by him in his behalf].

#### CHAPTER IV – Inspection and Mine Officials

32. Qualifications of Inspectors – (1) After the coming into force of these regulations, no new person shall be appointed as Chief Inspector unless he holds a degree or diploma in mining engineer of an educational institution approved by the Central Government and also a First Class Manager's Certificate granted under these regulations.

(2) After the coming into of these regulations, no person shall be appointed as in Inspector unless he holds a degree or diploma in mining engineering of an educational institution approved by the Central Government and also a First Class Manager's Certificate granted under these regulations:

Provided that –

- (i) in relation to electrical machinery installed in mines, a persons holding a degree or diploma in electrical engineering of an educational institution approved by the Central Government may be so appointed;
- (ii) in relation to other machinery or mechanical appliances installed in mines, a person holding a degree or diploma in mechanical engineering of an educational institution approved by the Central Government may be so appointed; and
- (iii) in relation to the provisions of the Act and of the regulations, and of orders made thereunder, which relate to matters concerning the health and welfare of persons, a person holding a degree or diploma in medicine, surgery, and/or social science or labour welfare, as the case may be, of an educational institution approved by the Central Government 2[or a person holding such other qualifications as the Central Government may approve in this behalf] may be so appointed.

4[33. Definition – For the purpose of these regulations –

- (a) all excavations within the mine boundary and all premises, plants, machinery and works as specified in clause (j) of sub-section (1) of section 2 of the Act shall collectively constitute the mine;
- (b) the expression, “average employment” of any mine, means the average per day during the preceding quarter of the total employment in all excavations and specified ancillary facilities within the specified mine boundaries (obtained by dividing the number of man days worked by the number of working days excluding the restdays and other non-working days.]

34. Qualifications and appointment of managers – (1)(a) No mine shall be opened, worked or re-opened unless there is a manager of the mine, being a person duly appointed and having such qualifications as are required by these regulations.

(b) No person shall act or be employed as a manager unless he is 23 years of age and is paid by, and is directly answerable to, the owner or agent of the mine.

(2) Except as hereinafter provided in sub-regulation (6), and subject to the provisions of sub-regulation (3), no person shall act or continue to act, or be appointed, as manager of a mine or mines the average employment of which corresponds to the figures given in column (i) of the table below unless he holds the corresponding qualifications given in column (ii) thereof :

(i)	(ii)
(a) In excess of 150 in workings belowground or of 400 in all the mine	A First Class Manager’s Certificate
(b) In excess of 75 but not exceeding 150 in workings below ground, or in excess of 150 but not exceeding 400 in all in the mine.	A First or Second Class Manager’s Certificate
(c) In any other case .....	A First or Second Class Manager’s Certificate or a Managers permit granted under sub-regulation (5).

Provided that no person shall act or continue to act, or be appointed, as manager of a mine or mines where work is being carried on by a system of deep-hole blasting and/or with the help of heavy machinery for the digging, excavation and removal, etc., of earth, stone, mineral or other material unless he holds a first class manager’s certificate :

Provided further that where special conditions exist, the Chief Inspector may, by an order in writing, direct that in the case of any such mine as is referred to in clause (b) of the table, the manager thereof shall be the holder of a First Class Manager’s Certificate, and that in the case of any such mine as is referred to in clause (c) of the table, the manager thereof shall be the holder of a First or Second Class Manager’s Certificate:

Provided further that if any mine undertaking consists of two or more separate mines and if, in the opinion of the Chief Inspector, they are not sufficiently near to one another to permit of daily personal supervision being exercised by one manager, he may, by an order in writing, require the appointment of a separate manager for each of such mines.

(3) Where under the provisions of sub-regulation (2) a person holding a First or Second Class Manager's Certificate has been appointed as manager, a person holding lower qualifications shall not, except with the previous permission in writing of the Chief Inspector and subject to such conditions as he may specify therein, be so appointed during the succeeding twelve months, notwithstanding any reduction in the average output of the mine.

(4) No person shall act, or be appointed, as manager of more than one mine except with the previous permission in writing of the Chief Inspector and subject to such conditions as he may specify therein. No such permission shall have effect for a period exceeding 12 months, unless renewed. The Chief Inspector may at any time, by an order in writing, vary or revoke any such permission in the circumstances under which the permission was granted have altered or the Chief Inspector finds that the manager has not been able to exercise effective supervision in the mines under his charge.

(5)(a) The Chief Inspector may, after holding such examination as he may deem necessary and subject to such conditions as he may specify therein grant to any person holding a Forman's Certificate, a permit (in these regulations referred to as Manager's Permit) authorised such person to act as the manager of any specified mine, the average employment of which does not exceed 75 in workings below ground or 150 in all in the mine.

(b) A Manager's Permit shall be valid only for such period, not exceeding 12 months as may be specified therein. The Chief Inspector may renew any Manager's Permit for further periods not exceeding 12 months at a time.

(c) A fee of Rs.10 shall be payable in respect of every application for the grant of a Manager's Permit. No fee shall be charged for renewal thereof.

(d) The Chief Inspector may, by an order in writing, after giving the holder of such permit an opportunity to make his representation, cancel a Manager's Permit.

(6) The Chief Inspector may, by an order in writing, and subject to such conditions as he may specify therein, authorise any person whom he considers competent, being appointed to act as manager of any mine or mines for a specified period, notwithstanding that such person does not possess the qualifications prescribed in that behalf by sub-regulation (2); and may by a like order revoke any such authority at any time.

(7)(a) Where by reason of absence or for any other reason, the manager is unable to exercise daily personal supervision or is unable to perform his duties under the Act or these regulations, or orders made thereunder, the owner, agent or manager shall authorise in writing a person whom he considers competent to act as manager of the mine:

Provided that –

- (i) such person holds a Manager's or Forman's Certificate;
- (ii) no such authorisation shall have effect for a period in excess of 30 days, except with the previous consent in writing of the Chief Inspector and subject to such conditions as he may specify therein; nor without a like consent shall a second authorization be made to take effect upon the expiry of the first. The Chief Inspector shall not permit any such authorisation to extend over a period exceeding 60 days unless the persons holds such qualifications specified in sub-regulation (2);
- (iii) the owner, agent or manager, as the case may be, shall forthwith send by registered post to the Chief Inspector and the Regional Inspector a written notice intimating that such an authorisation has been made, and stating the reason for the authorisation, the qualifications and experience of the person authorised, and the date of the commencement and ending of the authorisation; and
- (iv) the Chief Inspector or the Regional Inspector may, except in the case of a persons possessing the qualifications specified in sub-regulation (2), by an order in writing, revoke any authority so granted.

(b) The persons so authorised shall, during the period of such authorisation, have the same responsibilities discharge the same duties, and be subject to the same liabilities as the manager.

(8)(a) No manager shall vacate his office without giving due notice in writing to the owner or agent at least 30 days before the day on which he wishes to vacate his office:

Provided that the owner or agent may permit the manager to vacate his office after giving a shorter notice.

(b) No owner or agent shall transfer, discharge or dismiss a manager unless the manager has been relieved by a duly qualified person as prescribed under sub-regulation (2).

(c) Nothing in sub-regulation (7) shall confer on the owner, agent or manager the right to authorise during any period of such notice, any person not duly qualified to manager the mine under sub-regulation (2), to act as the manager except in case of illness or other causes over which the manager has no control, or except with the previous written permission of the Chief Inspector and subject to such conditions as he may specify therein:

(d) A copy of every such notice and authorisation shall forthwith be sent to the Chief Inspector and to the Regional Inspector by registered post.

(9)(a) The owner or agent shall provide suitable residential accommodation for the manager and the under-manager or assistant manager within a distance of three miles from all mine openings; and every manager, under manager and assistant manager shall reside in the accommodation so provided:

Provided that where special difficulties exist which render compliance with these provisions not reasonably practicable, the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, grant exemption from the same.

(b) No manager shall be entrusted by the owner or agent with any work, nor shall he himself perform any work, which will necessitate his frequent or prolonged absence from the mine.

(c) If any doubt arises as to any matter referred to in the foregoing clauses of this sub-regulation, it shall be referred to the Chief Inspector for decision.

(10) No manager shall act as agent or under manager or assistant manager or in any other supervisory capacity in another mine,

35. Appointment of assistant managers or underground managers – In every mine the average employment of which exceeds 450 in working below ground or 1,200 in all in the mine, the manager shall be assisted by assistant managers and/or underground managers on the following scale:

Average employment	Number of assistant managers and/or underground managers
Upto 600 workings belowground, or 1,600 in all in the mine.	One
In excess of 600 workings belowground, or 1,600 in all in the mine	One additional assistant manager or underground manager, for every additional 500 persons employed belowground or 800 in all in the mine, or part thereof, for a period of five years from the commencement of the Regulations, and thereafter, for every 300 additional persons employed belowground or 800 in all in the mine or part thereof:

Provided that in a mine where the average employment exceeds 1200 in workings belowground or 3,200 in all in the mine, at least one of the assistant managers or underground managers as aforesaid shall hold a First Class Manager's Certificate:

Provided further that the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit or require the appointment of assistant managers or underground managers in variation with these provisions.

NOTE. – For the purpose of this regulation, the expression “assistant manger or underground manager” shall include persons such as safety officers who hold equivalent qualifications.

36. Appointment of engineers – (1) At every mine where machinery is used, an engineer or other competent person not less than 23 years of age shall be appointed to hold general charge of such machinery, and to be responsible for its installation, maintenance and safe working.

Provided that nothing in this sub-regulation shall be deemed to ;prohibit the employment of two or more engineers or competent persons at one mine so long as the jurisdiction and sphere of responsibility of every such engineer or competent person is defined by the manager in his letter of appointment :

Provided further that after such date as the Central Government may notify in this behalf in the Official Gazette, no person (unless he holds 1[a degree or diploma in mechanical engineering or equivalent qualification] approved for the purpose by the Central Government) shall, except with the previous permission in writing of the Chief Inspector and subject to such conditions as he may specify therein, be appointed in an open cast mine worked by heavy earth-moving machinery in which the aggregate h.p. of all the machinery used exceeds 750, or in any other mine in which the aggregate h.p. of all the machinery used exceeds 250.or shall continue to act as an engineer or competent person as

(2) A notice of every such appointment, giving the name and full particulars of the qualifications and experience of the person so appointed, shall be sent to the Regional Inspector within seven days of such appointment :

(3) No person shall undertake the duties of an engineer of more than one mine without the previous permission in writing of the Regional Inspector and subject to such conditions as he may specify therein. The Regional Inspector may at any time, by an order in writing, vary or revoke such permission.

(4)Where by reason of temporary absence by any cause, the engineer, or competent person appointed under sub-regulation (1) is unable to perform his duties, the manager shall authorise in writing a person whom he considers competent to act in his place:

Provided that –

- (a) notice of every such authorisation shall be sent to the Regional Inspector forthwith;
- (b) no such authorisation shall have effect for a period in excess of 30 days except with the previous written consent of the Regional Inspector and subject to such conditions as he may specify therein; and
- (c) the Regional Inspector may by an order in writing, revoke any authority so granted.

37. Appointment and qualifications of senior officials – (1)(a) At every mine, one or more overman shall be appointed to hold charge of the different districts of the mine on each working shift.

(b) The mine or district assigned to a Forman shall not be of such a size, nor shall any additional duties other than his duties under these regulations be such, as are likely to prevent him from carrying out in a thorough manner the duties prescribed for him under these regulations and in case any doubt arises as to the foregoing duties it shall be referred to the Chief Inspector for decision.

(2) Every person employed under sub-regulation (1) (a) as an official subordinate to the manager or to an assistant manager or underground manager and superior to the Mining Mate shall hold either a Manager’s Certificate or an Forman’s Certificate.

38. Appointment of surveyors – (1) At every mine having workings belowground and at such other mines or classes of mines as may be notified from time to time by the Central Government a person not less than

23 years of age and holding a Surveyor's Certificate shall be appointed to be the Surveyor for carrying out the surveys and levellings and for preparing the plans and sections required under the Act or the regulations, or orders made thereunder.

Provided that nothing in this sub-regulation shall be deemed to prohibit the employment of two or more surveyors at one mine so long as the jurisdiction and sphere of responsibility of each of the surveyors is defined by the manager in his letter of appointment.

(2) A notice of every such appointment giving the name and full particulars of the qualifications of the person so appointed, shall be sent to the Regional Inspector within seven days of such appointment.

(3) No person shall be appointed as a surveyor of more than one mine or in any other capacity in the same mine, without the previous permission in writing of the Regional Inspector and subject to such conditions as may be specified therein. The Regional Inspector may, by an order in writing, revoke such permission if the circumstances under which it was granted have altered or the Regional Inspector finds that the surveyor has not been able to carry out satisfactorily the work allotted to him.

39. Appointment of Officials and competent persons – (1)(a) The owner, agent or manager shall appoint such number of competent persons, including officials and technicians as is sufficient to secure, during each of the working shifts –

- (i) adequate inspection of the mine and the equipment thereof;
- (ii) a thorough supervision of all operations in the mine;
- (iii) the installation, running and maintenance, in safe working order, of all machinery in the mine; and
- (iv) the enforcement of the requirements of the Act and these regulations and orders made thereunder:

Provided that if the Regional Inspector finds that those appointed are inadequate, he may require the appointment of such number of additional competent persons by the owner, agent or manager as he considers necessary.

(b) Without prejudice to the requirement of clause (a), where the mine is worked on more than one shift, the owner, agent or the managers shall arrange that during the afternoon shift and the night shift, the mine is under the general supervision or an undermanager or assistant manager, if any, and of an experienced mine forman in other cases.

(2) It shall be the responsibility of the manager to see that the persons so appointed are competent to perform the duties assigned to them. No person shall be so appointed unless he is paid by the owner or agent and is answerable to the manager.

(3) Copies of all appointments made under sub-regulation (1) shall be entered in a bound-paged book kept for the purpose. A list of all such competent persons shall also be maintained.

(4) Without prejudice to the requirements of sub-regulation (2), every manager on taking over charge of a mine, shall satisfy himself that all persons already appointed under sub-regulation (1) are competent to perform the duties assigned to them; and if he finds them competent, he shall either countersign their authorisations or issue fresh ones.

40. General Management – (1) The owner, agent and manager shall provide for the safety and proper discipline of persons employed in the mine.

(2) Except in a case of emergency, no person who is not an official or a competent persons shall give, otherwise than through the manager, instructions to a person employed in a mine, who is responsible to the manager.

**CHAPTER-V : Duties and Responsibilities of Workmen,  
Competent Persons and Officials, etc.**

41. Duties of persons employed in mines – (1)(a) Every person shall strictly adhere to the provisions of the Act and of the regulations and orders made thereunder, and to any order or direction issued by the manager or an official with a view to the safety or convenience of persons not being inconsistent with the Act and these regulations; nor shall he neglect or refuse to obey such order or directions.

(b) No person shall interfere with, impede or obstruct any person in the discharge of his duties, nor shall he offer or render any service, or use any threat, to any other person with a view to preventing him from complying with the provisions of the Act and of the regulations, and orders made thereunder or from performing his duties faithfully. If any person who receives any such offer or threat, fails to inform the manager forthwith, he shall also be guilty of a breach of these regulations.

(2) Every person shall, immediately before proceeding to work and immediately after terminating work at the end of his shift, have his name recorded in the register maintained under section 48(4) of the Act. In case of workings belowground, he shall get his name recorded every time he proceeds belowground or returns to the surface.

(3) No person shall go below ground unless he wears a hat of a type approved by the Chief Inspector.

(4)(a) No person shall, except with the authority of an official, remove or pass through any fence, barrier or gate, or remove or pass any danger signal.

(b) Subject to any directions that may be given by an official, no person shall, except for some justifiable purpose, go into any part of the mine other than that part in which he works, or travels to or from his working place by any roadway other than the proper travelling roadway.

(5) No person shall, while on duty, throw any stone or other missile with intent to cause injury, or fight or behave in a violent manner.

(6) Every person receiving any injury in the course of his duty shall, as soon as possible report the same to an official who shall arrange for the necessary first-aid to the injured person.

(7) No person shall sleep whilst on duty.

(8)(a) No person shall test for inflammable gas with a naked lamp, or brush or waft out inflammable gas. Should any person having a flame safety lamp find himself in the presence of inflammable gas, he shall not throw the lamp away or attempt to blow it out; but shall shelter it, hold it near the floor, avoid jerking it, and take it steadily into fresh air. Where he cannot take it into fresh air, he shall smother out the light or extinguish it in water.

(b) No person shall, when trying to examine for the presence of inflammable gas with a flame safety lamp, raise the lamp higher than may be necessary to allow the presence of inflammable gas to be detected.

(c) Every person using a safety lamp shall take proper care of it and shall not place it within 0.6 metre of the swing of any tool except in the case of a lamp which is actually worn, attached to the body of such person. In the case of a flame safety lamp he shall not place it on the floor unless it is necessary to do so for the safe performance of any particular work; and if the lamp becomes damaged, he shall at once carefully lower the flame until it is extinguished, and shall, at the first opportunity, report the damage to his superior official.

(9) Subject to the provisions of the Act and of these regulations and orders made thereunder, no person shall remain in a mine beyond the period over which his shift extends.



42. Duties of competent persons – Every competent person shall be responsible for the duties assigned to him. He shall be subject to orders of superior officials, and shall not –

- (a) depute another person to perform his work without the sanction of his superior official;
- (b) absent himself without having previously obtained permission from such official for the term of his absence or without having been relieved by a duly competent person; and
- (c) without permission from such official, perform during his shift any duties other than those for which he has been appointed.

43. Duties of officials – (1) Every official shall carry out the duties assigned to him by the manager, under-manager or assistant manager in accordance with the provisions of the Act and of the regulations and orders made thereunder.

(2) Every official shall, to the best of his power, see that persons under his charge understand and carry out their respective duties properly.

44. Duties and responsibilities of managers – (1)(a) In every mine daily personal supervision shall be exercised by the manager; and in case of workings belowground, he shall visit and examine the workings belowground on at least four days in every week to see that safety in every respect is ensured. Of these inspections one at least in every fortnight shall be made during the night shift :

Provided that in the case of a mine where an assistant manager or underground manager holding a First Class Manager's Certificate is employed in compliance with the first proviso to regulation 35 and visits and examines the workings belowground on not less than five days in every week, it shall suffice if the manager visits and examines the workings belowground on not less than two days in every week:

Provided further that when owing to any unavoidable cause the manager or the assistant manager or underground manager aforesaid is unable to carry out the aforesaid duties or inspections, he shall record the reason for the same in the book kept under clause (b).

(b) The manager, the undermanager and the assistant manager, if any, shall each maintain, in a bound paged book kept for the purpose, a diary; and shall record therein the result of each of his inspections and also the action taken by him to rectify the defects mentioned, if any.

(2) The manager shall make arrangements for all overmen and other officials to meet him or an undermanager, or assistant manager once in every working day for the purpose of conferring on matters connected with their duties.

(3)(a) The manager shall see that a sufficient supply of proper materials and appliances for the purpose of carrying out the provisions of the Act and of the regulations or orders made thereunder and for ensuring the safety of the mine and the persons employed therein, is always provided at the mine; and if he be not the owner or agent of the mine, he shall report in writing to the owner or agent when anything is required for the aforesaid purpose, that is not within the scope of his authority to order. A copy of every such report shall be recorded in a bound-paged book kept for the purpose.

(b) On receipt of a requisition under clause (a) the owner or agent shall take immediately and also shall, within three days of receipt of the requisition, inform the manager in writing of the action taken .

(4) The manager shall assign to every competent his particular duties, shall on his appointment make over to him a copy of the regulations, rules and bye-laws and of any orders made thereunder which affect him, and shall take all possible steps to ensure that every such person understands, carries out and enforces the provisions therein contained in a proper manner.

(5) The manager shall provide every overman with a tracing, upto the date of the last survey, showing the workings of the district belowground assigned to him. Where any work of reduction or extraction of pillars

is being carried out, such tracing shall show clearly the order in which such reduction or extraction is to be carried out.

(6) The manager shall examine all reports, registers and other records required to be made or kept in pursuance of the Act or of the regulations, or orders made thereunder, and shall countersign the same and date his signature. He may, however, by an order in writing, delegate this duty to an undermanager or assistant manager except in cases where a specific provision is made requiring the manager to countersign a report or register.

(7) The manager shall give attention to, and cause to be carefully investigated, any specific representation or complaint that may be made to him in writing by an employee of the mine as to any matter affecting the safety or health of persons in or about the mine.

(8) When any accident, resulting in serious bodily injury to any person or in loss of life, occurs in a mine, the manager shall inspect the site of accident as soon as possible, and shall also either himself or through an undermanager or assistant manager, have an inquiry made into the cause of and circumstances attending the accident. The result of every such enquiry and a plan of the site of the accident showing details, shall be recorded in a bound paged book kept for the purpose.

(9) The manager shall perform such other duties as have been prescribed in that behalf under the Act, the regulations, or orders made thereunder.

(10) The manager may suspend or take such disciplinary action against any employee for contravention of any of the provisions of the Act, these regulations or orders made thereunder.

45. Duties and responsibilities of assistant managers or underground manager – (1) The assistant manager or underground manager shall carry out the duties assigned to him by the manager, and shall see that in the part of the mine assigned to him by the manager, all work is carried out in accordance with the provisions of the act and of the regulations and orders made thereunder.

(2) The assistant managers or underground manager shall, subject to the orders of the manager, visit and examine the workings under his charge, or part thereof, on every working day.

(3) The assistant managers or underground manager shall, from time to time, carefully examine every travelable part of the mine or part thereof placed under his charge, whether frequented by workpersons or not.

(4) In the absence of the manager, assistant managers or underground manager shall have the same responsibility, discharge the same duties and be subject to the same liabilities as the manager, but not so as to exempt the manager therefrom.

43. Duties and responsibilities of mine – The mine foreman or other competent person appointed under regulation 37(1) shall strictly observe the following provisions, namely –

(1) (a) Subject to the orders of superior officials, he shall have responsible charge and control of such part of the mine, and shall carry out such duties, as may be assigned to him by the manager.

(b) In the case of working belowground he shall, while on duty, carry a tracing of the workings of such district and shall keep the tracing up-to-date.

(c) He shall, in his district, make the inspections and reports required by these regulations.

- (2) (a) He shall be responsible to see that the subordinate officials and competent persons in his district carry out their respective duties in a proper manner.
- (b) He shall, to the best of his power, enforce in his district the provisions of the Act, of these regulations and orders made thereunder, and shall, subject to the control of the manager and the underground manager, assistant manager, if any, give such directions as may be necessary to ensure compliance with those provisions, and to secure the safety of the district and the safety and proper discipline of the persons employed therein.
- (c) He shall have power to send out of the mine any person under his charge infringing or attempting to infringe any provision of the Act or of the regulations or orders made thereunder, or failing to carry out any direction given with regard to safety; and shall report in writing any such infringement or attempted infringement or failure to the manager.
- (3) He shall see that sufficient supplies of timber brattice and other necessaries required for the safe working of his district are kept in convenient places therein.
- (4) (a) He shall see that every air-crossing, stopping, door, brattice and other ventilation device is maintained in good order.
- (b) He shall, in his district, see that the ventilation is effective; and when brattices or air pipes are required to be used for the ventilation of the working places, he shall see that they are kept sufficiently advance to ensure that an adequate amount of air reaches every such working place.
- (5)(a) He shall see that all tracks and tramlines are properly laid, graded, ballasted or otherwise packed.
- (b) He shall see that the manholes on the haulage roadways are kept safe, clear of any obstruction, and properly white-washed.
- (c) He shall see that the stop-blocks, runway switches and other safety devices are fixed and used as required under the regulations, that drag or back-stays are provided and regularly used behind tubs ascending declines and that a sufficient supply of suitable sprags is provided where tubs are loaded on a gradient or lowered down a gradient by hand.
- (d) He shall, if he finds any of the ropes, chains, signals, brakes, jig wheels and post or other apparatus in use in his district to be in an unsafe condition, stop the use of the same forthwith.
- (6) He shall be responsible to see that except for the purpose of inspection, examination and repairs every person other than an official or a haulage attendant travels by the travelling roadway.
- (7) He shall give prompt attention to the removal of any danger observed or reported to him, and shall see that dangerous places are adequately fenced off.
- (8) He shall, under the direction of the manager, see that approved safety lamps are used and naked lights excluded wherever and whenever danger from inflammable gas is apprehended.
- (9)(a) He shall devote the whole of his time to his duties and shall visit each working place in his district as often as may be necessary or possible.
- (b) He shall not, except for justifiable cause, leave the district in his charge until he had finished the inspections required under these regulations and any other duties that he is required to perform, or until relieved by a duly appointed substitute.
- (c) He shall, if the mine is working in a continuous succession of shifts, confer with the official succeeding him and give him such information as may be necessary for the safety of his district and of persons employed therein.

(10) He shall, at the end of his shift, record in a bound-paged book kept for the purpose a general report on the performance of all his duties during the shift, including anything concerning the proper working of the mine and the safety and discipline of persons employed in his district.

47. Duties and responsibilities of mining mates – Every mining mate or other competent person appointed under regulation 116 shall strictly observe the following provisions, namely :-

(1)(a) Subject to orders of superior officials, he shall have responsible charge and control of the district of the mine assigned to him by the manager or the assistant manager or underground manager.

(b) He shall take reasonable means to ensure the proper observance of the requirements of the Act and of the regulations, and orders made thereunder by persons under his charge and shall, as soon as practicable, report any contravention thereof to his superior official.

(2)(a) He shall make such inspection and reports as are required by these regulations, and in making such examination, he shall pay particular attention to edges of the goaf, if any, for checking supports.

(b) Except in the case of a mine working in a continuous succession of shifts, he shall, on completion of the first inspection of the district, proceed to the station appointed under regulation 116 and instruct all persons as to their places of work and as to any special precautions necessary to be observed by them.

(c) If he finds any person in a place other than the one assigned to him, he may order such person out of the mine, and shall forthwith report the matter to his superior official.

(d) He shall ensure that no inexperienced person is employed on any work except under the supervision of an experienced person.

(3)(a) He shall see that all travelling roadways to, and working places in, his district are made and kept secure.

(b) He shall report to his superior official any deficiency in timber, appliances and other necessaries required for the safe working of the district.

(4) Where either of the two ways affording means of egress from the district to the surface is not ordinarily used for travelling, he shall travel, once at least in every seven days, the whole of such way in order to make himself thoroughly acquainted with the same.

(5)(a) If he observes any dangerous place during the course of his inspections or if any danger at a place where workpersons are employed is reported to him, he shall, if the danger cannot be removed forthwith withdraw all persons from such place and shall not leave the place until the danger has been removed in his presence or all approaches to the place have been fenced off so as to prevent persons from inadvertently entering such place.

(b) He shall take care that any dangerous operation is carried out with due precaution, and in such cases shall be present throughout whenever any work of clearing falls of ground and setting of supports therein is being carried out.

(c) He shall cause the entrance to every place which is not in actual use or in course of working or extension, to be fenced across the whole width, so as to prevent persons from inadvertently entering such place.

(d) If he finds any accumulation of inflammable or noxious gases, he shall carry out the provisions of regulations 141 and shall not remove such accumulation until he has received instructions in that behalf from his superior official.

(6) He shall, on receipt of information of an accident to any person in his district, proceed at once to the place of accident, inspect the place and, if required, supervise the rescue operations, and shall report or send notice of the accident to the manager or assistant manager or underground manager.

(7)(a) He shall devote the whole of his time to his duties, and shall not leave the district under his charge until the end of the shift or until relieved by a duly appointed substitute.

(b) If the mine is worked by a continuous succession of shifts, he shall, before leaving his district, confer with the sirdar or competent person succeeding him, and shall acquaint him with all matters requiring his personal attention and give him such other information as may be necessary for the safety of his district and of the persons employed therein.

48. Duties and responsibilities of blasters – Every blasters shall –

- (a) carry out his duties in accordance with the provisions of the regulations and of any orders made thereunder with respect to the transport and use of explosives;
- (b) be responsible for the observance by his assistants, if any, of such provisions and of any direction with a view to safety which may be given to them by a superior official;
- (c) not hand over any explosives to any unauthorised person;
- (d) see that clay, sand or other suitable stemming material is available in sufficient quantities at convenient places;
- (e) be present when shots are being charged and stemmed; and shall himself fire the shots; and
- (f) be responsible, when a shot has misfired, for seeing that the place is adequately fenced, and that the provisions of regulations 167 are strictly observed.

49. Duties of timberman – Every timberman shall carry out the orders of the manager, assistant manager or underground manager, foreman, mining mate or other competent person with respect to the securing of hangwall, footwall and back(roof). He shall at once report to the sirdar or other competent person any shortage of timber in his district. He shall also be responsible to see that woodcuttings are not left in any working belowground.

50. Duties of attendants of main mechanical ventilators – Every person in charge of the main mechanical ventilator shall –

- (a) keep the ventilator running at the speed fixed by the manager;
- (b) examine the machinery and observe the pressure-recorded or water gauge and the speed-indicator at intervals of not more than one hour, and shall, enter the readings of the indicator in a bound-paged book kept for the purpose at the fan-house;
- (c) immediately report to his superior official any stoppage of, damage to, or defect or derangement in the machinery, or any unusual variation in the water-gauge or other indicators; shall also immediately report to him any unusual circumstances in regard to mine ventilation which may come to his notice; and
- (d) where the ventilator is continuously operated, shall not leave his post until received by a duly appointed substitute.

51. Duties of lamp -room incharges – Every competent person in charge of a safety lamp-room-

- (a) shall be responsible for ensuring that all lamps in the safety lamp -room are properly maintained in accordance with the provisions of the regulations;

- (b) shall see that the safety lamp -room is kept in a neat and tidy condition, and that all damaged and defective gauges, glasses and other parts of safety lamps are not kept or stored in such room;
- (c) shall see that fire extinguishers or other means of dealing with fires provided in the safety lamps room are in good condition and readily available for use;
- (d) shall see that all records required by the regulations for the issue, return and maintenance of safety lamps are properly maintained; and
- (e) shall carry out such other duties relating to the maintenance, issue and return of safety lamps as may be specified by the manager or the undermanager or assistant manager.

52. Duties and responsibilities of surveyors – (1) Every surveyor shall –

- (a) make such accurate surveys and levellings, and prepare such plans and sections and tracings thereof, as the manager may direct or as may be required by the Act or by the regulations or orders made thereunder, and shall sign the plans, sections and tracings and date his signature; and
- (b) be responsible for the accuracy of any plan and section, or tracings thereof that has been prepared and signed by him.

(2) The surveyor shall record in a bound-paged book kept for the purpose –

- (a) the full facts when workings of the mine have approached to about 75 metres from the mine boundary, or from disused or waterlogged workings;
- (b) any doubts which may exist concerning the accuracy of the plans and sections prepared under these regulations; and
- (c) any other matter relating to the preparation of the plans and sections that he may like to bring to the notice of the manager.

Every entry in the book shall be signed and dated by the surveyor and countersigned and dated by the manager :

Provided that where in any mine two or more surveyors are employed, each of the surveyors shall make the entries aforesaid in respect of the workings in his jurisdiction or of the plans and sections in his charge.

(3) Nothing in sub-regulation (2) shall absolve the owner, agent or manager of his responsibility under the Act and under these regulations or orders made thereunder.

53. Duties and responsibilities of engineers – The engineer or other competent person appointed for the purpose –

- (a) shall, subject to the orders of the manager and other superior official, hold general charge of all machinery at the mine; and shall be responsible for the proper installation, maintenance and safe working of such machinery;
- (b) shall, when any machinery is shifted or newly installed, see that it is given a trial run before it is put into use and shall be present during every such trial run;
- (c) shall be present throughout whenever any work is installing, changing or recapping of any winding rope, or of installing changing or annealing any suspension gear, is being carried on;
- (d) shall see that the provisions of the Act and of the regulations and orders made thereunder relating to the installation, maintenance, operation or examination of machinery are properly carried out by himself or by subordinate officials, competent persons or workpersons as the case may be, appointed for the purpose; and
- (e) shall, if mechanics, electricians or other subordinate officials or competent persons are appointed for the purpose, examine all reports, registers and other records relating to the installation, maintenance, operation or examination of machinery required to be made or kept in pursuance of the Act, these regulations or orders made thereunder, and shall countersign the same and date his signature.

54. Duties of winding enginemen – (1) At the beginning of his shift the winding engineman shall examine the engine, brakes and all appliances in his charge, and shall satisfy himself that they are in good working order.

(2) Every winding engineman shall during his shift keep the winding engine and apparatus connected therewith properly cleaned and oiled, and shall see that the engine room is clean and free of inflammable material.

(3) The winding engineman shall immediately report in writing to the engineer or other competent person appointed for the purpose any defect which he has noticed in the engine, brake, indicator, drum, rope or other appliances under his charge.

(4) The winding engineman shall not allow any unauthorised person to enter the engine room or in any way to interfere with the engine.

(5) Every winding engineman shall thoroughly acquaint himself with, and carefully attend to, the prescribed code of signals; and shall not start the engine until he has received the proper signal to do so. If the signal is indistinct, he shall not start the engine until it has been repeated and he clearly understands it.

(6) The winding engineman shall avoid jerk in starting, running and stopping the engine, and shall cause the cage or other means of conveyance to be brought gently to rest at any stopping place.

(7) While persons are being lowered or raised in the shaft, the winding engineman shall not drive the engine at a speed higher than that fixed by the manager for manwinding purposes and approved by the Regional Inspector by an order in writing.

(8) The winding engineman shall not unclutch the drum of his engine until he has assured himself immediately beforehand by testing the brake of the drum against the full power of the engine that the brake is in proper condition to hold the load suspended from the said drum. When the drum is unclutched, he shall use the brake only for the purpose of maintaining such drum stationary, and shall not lower men or materials from an unclutched drum.

(9) The winding engineman shall on no pretext leave the handle or brake whilst the engine is in motion, or while persons are riding a cage or other means of conveyance in the shaft.

(10) The winding engineman shall not leave the engine whilst persons are at work in the shaft. Whenever he has occasion to leave the engine, he shall secure the drums with the brake and cut off the power.

(11) The winding engineman of a winding engine by which persons are lowered or raised in a shaft, shall not leave the engine at the end of his shift unless all the persons have come out of shaft or unless relieved by a duly appointed substitute.

55. Duties of banksman, bellmen and signalmen. – (1) Every banksman, bellmen and signalmen, as the case may be, shall observe the following provisions, -

(a) He shall, subject to the orders of a superior official, have full control of the top or bottom of shaft and the inset, as the case may be and shall report to such official any person who, without authority, gives a signal or disobeys instructions.

(b) He shall thoroughly acquaint himself with, and carefully attend to, the prescribed code of signals, and shall properly transmit the signals by the means provided. He shall not act on any signal the correctness of which he is in doubt, except a signal which he believes to be “to stop”. He shall not allow any unauthorised person to give signals.

(c) He shall immediately report to his superior official any defect in the signalling installation.

- (d) He shall devote the whole of his time of duties, and shall not leave his post during the period of his duty. Where persons are raised or lowered in the shaft, he shall not leave his post at the end of his shift unless all the persons have come out of the shaft or unless relieved by a duly appointed substitute.
- (e) He shall not allow more than the authorised number of persons to enter the cage or other means of conveyance at any one time.
- (f) He shall not, unless specially authorised in writing by the manager in that behalf, allow any persons when riding in a cage or other means of conveyance, to take with him any bulky material other than tools and instruments:

Provided that nothing in this clause shall be deemed to prohibit the carrying, in a cage or other means of conveyance, the explosives by a blaster or other competent person.

- (g) After any stoppage of winding for repairs or for any other cause for a period exceeding two hours, he shall not allow any person to ride in the cage or other means of conveyance unless it has been run at least one complete trip up and down the working portion of the shaft.
  - (h) He shall not allow any person to ride on the top or edge of any cage or other means of conveyance except when engaged in examination, repair or any other work in the shaft.
  - (i) He shall, after persons have entered the cage, see that the cage gates on both sides are in position and closed, before signalling for the cage to be lowered or raised.
  - (j) He shall not allow any unauthorised person to handle tubs in or out of the cage. While tubs are being lowered or raised, he shall also see that the catches are holding the tubs properly before signalling the cage or other means of conveyance away. If he notices any defect in the tub-catches, he shall immediately inform his superior official.
  - (k) He shall not, at any entrance into a shaft or inset which is provided with gates or fences not worked by the cage or other means of conveyance, begin to remove the gate or fence until the cage or other means of conveyance has stopped at the entrance, and shall close the gate before he has signalled the cage or other means of conveyance away. He shall not permit any unauthorised person to open or interfere with the gate.
  - (l) He shall see that all fences and gates provided at the top of the shaft or at any inset are in position.
  - (m) He shall not permit any unauthorised person to remove a fence or gate; and if he notices any defect in such fence or gate he shall immediately inform his superior official.
  - (n) He shall keep the top of the shaft or the inset and the floor of every cage free from loose material.
  - (o) He shall, when long timber, pipes, rails or other material projecting over the top of a cage or other means of conveyance are lowered or raised, see that the projecting ends are securely fastened to the rope, chains or bow.
  - (p) He shall, when he suspects that the cages are not working smoothly in the shaft or when he hears anything unusual happening in the shaft while the winding engine is working, immediately give signal to the winding engineman to stop the engine.
- (2)(a) At the beginning of his shift, the banks man shall see that the keps are in proper working order.
- (b) The banksman, when he is informed of any danger in the shaft, shall not allow any person to descend except for the purpose of examination or repair; and during the time that such examination or repair is going on, shall be on duty and listen for signals.



(c) The banksman shall not permit any person descending the shaft to carry any intoxicating drink or drug, or allow any intoxicated person to descend.

(3) Where the manager so directs by an order in writing the banksman or the bellman, as the case may be, shall also carry out the duties of a signaller.

56. Duties of haulage enginemen, brakemen, and signallers. – (1) At the beginning of his shift, the haulage engineman shall examine the engine, its brake and all appliances in his charge, and shall satisfy himself that they are in good working order.

(2) The haulage engineman shall, during his shift, keep the haulage engine and apparatus connected therewith properly cleaned and oiled, and the engine-room clean and free of inflammable material.

(3) The haulage engineman and banksman shall report immediately to the engineer or other competent person appointed for the purpose any defect which he has noticed in the engine, drum, rope or other appliances under his charge.

(4) Whenever the haulage engineman has occasion to leave the engine, he shall cut off the power and secure the engine with the brake.

(5) The haulage engineman, brakeman and signaller shall not allow any unauthorised person to enter the engine-room or in any way to interfere with the engine or signal, as the case may be.

(6) Every haulage engineman, brakeman and signaller shall thoroughly acquaint himself with, and carefully attend to, the prescribed code of signals. The haulage engineman shall not start the engine until he has received the proper signal to do so. If the signal is indistinct, he shall not start the engine until it has been repeated and he clearly understands it.

(7) The person in charge at the top of any haulage plane or incline shall see that the stop-block are blocking the way, before allowing any tub to be brought on to the tope landing; and shall cause the tubs to be securely coupled up to each other and to the rope or chain, before the stop block is opened. In case any alternative safety appliance is provided, he shall cause the same to be brought into use on every such occasion.

(8) The person who is responsible for the attachment, to the haulage rope, of any tub or set of tubs at any stopping place on any haulage plane or incline, shall see that no person remains in a position of danger at or near such stopping place while the rope is in motion.

(9) The person in charge of any tubs or set of tubs, which it is intended to sent up any haulage plane or incline on which drags or back-stays are required to be used, shall securely fix the drag or back-stay or cause it to be so fixed, before such tub or set of tubs is set in motion.

(10) The person in charge at the top or bottom of the incline shall see that no unauthorised person rides on any tub or haulage rope.

(11) Before a train of side-tipping tubs is set in motion, the person in charge shall see that the safety catches of all such tubs are properly secured.

57. Duties of Locomotive drivers and shunters – (1) The locomotive driver shall, before commencing work in his shifts, ensure that the audible signal and the brakes of the locomotive are in proper working order.

(2) The locomotive driver shall not work the on locomotive except during hours of daylight, unless the locomotive is fitted with sufficient headlights as prescribed.

- (3) The locomotive driver shall immediately report to the engineer or other competent person appointed for the purpose any defect which he has noticed in the locomotive or any part or fitting thereof.
- (4) The locomotive driver shall not set the locomotive in motion until audible warning has been given by him to persons whose safety may be endangered. He shall also give the audible warning when the locomotive is approaching a level crossing or any place where any person is at work or where the driver's sight is intercepted.
- (5) The locomotive driver shall not leave a locomotive unattended away from the places where it is housed, unless he has ensured that it cannot be set in motion by any unauthorised person.
- (6) The locomotive driver shall ensure that no unauthorised person drives, handles or raised on a locomotive.
- (7) When tubs or wagons are being pushed in front of the locomotive, the shunter shall accompany the leading wagon.

58. Duties of magazine incharge – Every magazine incharge –

- (a) shall, subject to the orders of superior officials, be responsible for the proper receipt, storage and issue of explosives in and from the magazine;
- (b) shall maintain such records of explosives so received, stored and issued, as are required by the rules made under Indian Explosives Act, 1884, and under the Act and under the regulations, rules, byelaws and orders made thereunder;
- (c) shall not issue explosives to any person other than a competent persons; and when explosives are returned to the magazine, shall re-issue such explosives before issuing fresh stock;
- (d) shall record in a bound-paged book kept for the purpose the names of various competent persons and the quantity and nature of explosives issued to each of them; and shall similarly record the quantity and nature of explosives returned to the magazine by each such person;
- (e) shall securely lock each canister before issuing it to the competent persons and shall also check whether the canister is returned to the magazine in locked condition; he shall not issue explosives in any canister which is not in proper repair or which cannot be securely locked;
- (f) shall not allow any unauthorised person to enter the magazine; and
- (g) shall, if he discovers any shortage of explosives in the magazine forthwith inform the manager in writing.

59. Duties of register keepers and attendance clerks, etc. – (1) Every person appointed to keep registers or other records required by or under the Act and the regulations and any orders made thereunder, or to make entries therein, shall make the necessary entries in ink and with reasonable despatch.

(2) During the whole time that persons are at work, the attendance clerk shall remain on duty at attendance cabin which shall be provided near the workplaces, or in case of workings belowground, near the outlet used by the workpersons to enter and leave such workings.

(3) No person who is not an employee of the mine or is not entitled to enter the mine under the Act or under the regulations, or orders made thereunder, or is not so authorised by the manager, shall enter the mine. It shall be the duty of the attendance clerk to see that no such person enters the mine; if any such person forcibly enters the mine, the attendance clerk shall immediately report the matter in writing to the manager.

(4) If after the commencement of a shift any official or a competent person has not got his attendance recorded in the register maintained under section 48(4) of the Act, the attendance clerk concerned shall, within two hours after the commencement of the shift, report the fact in writing to the Manager, or the under manager or assistant manager or other official in charge of the shift.

## CHAPTER-VI : Plans and Sections

60. General requirements about mine plans and sections – (1) Every plan or section prepared or submitted in accordance with the provisions of the regulations shall –

- (a) show the name of the mine and of the owner, and the purpose for which the plan is prepared;
- (b) show the true north, or the magnetic meridian and the date of the latter;
- (c) show a scale of the plan at least 25 centimeters long and suitably subdivided;
- (d) unless otherwise provided, be on a scale having a representative factor of
  - (i) 200 : 1, in case of mica mines and other mines having small scale workings below ground;
  - (ii) 2,000 : 1, in case of mines having large open cast workings and also in case of surface plans of large leasehold areas ; and
  - (iii) 1,000 : 1, in other cases.

Provided that the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit or required the plans to be prepared on any other suitable scale; and

- (e) be properly inked in or durable paper or on tracing cloth, and be kept in good condition.
- (2) The conventions shown in the Second Schedule shall be used in preparing all plans and sections required by the regulations.
- (3) The plans and sections shall be accurate within such limits or error as the Chief Inspector may specify by a general or special order.
- (4) The plans and sections required under these regulations shall be maintained up-to- date within three months except in case of open-cast workings in respect of which it shall suffice if the plans are maintained up-to-date within 12 months :

Provided that where any mine or part is proposed to be abandoned or the working thereof to be discontinued or rendered inaccessible, the plan and section shall be brought up-to-date before such abandonment or at the time of discontinuance; as the case may be, unless such abandonment or discontinuance has been caused by circumstances beyond the control of the owner, agent or manager, in which case the fact that the plan or section is not up-to-date shall be recorded on it.

(5) Plans and sections required to be maintained under the regulations shall be kept available for inspection in the office at the mine, and shall not be removed therefrom except by or with the approval in writing of the Regional Inspector, unless a true copy thereof has been kept therein.

61. Types of plans and sections – (1) The owner, agent or manager of every mine shall keep the following plans and sections :

- (a) A surface plan showing every surface feature within the boundaries, such as telephone, telegraph or power transmission line, watermain, tram-line, railway, road, river, watercourse, reservoir, tank, bore-hole, shaft and incline opening, opencast working, subsidence and building on the surface.
- (b) An underground plan showing :
  - (i) the position of the workings of the mine belowground;
  - (ii) every bore-hole and shaft (with depth), drive cross cut, winze, rise, excavation (stopped ground) and every tunnel and air passage connected therewith;

- (iii) every pillar or block of mineal left for the support of any structure on the surface; and underground magazines, if any;
- (iv) every important surface feature within the boundaries, such as railway, road, river, stream, watercourse, tank, reservoir, opencast working and building which is within 200 metres of any part of the workings measured on the horizontal plane;
- (v) the general strike of the veins, lodes, reefs an mineral beds or deposits;
- (vi) the position of every dyke, fault and other geological disturbance with the amount and direction of its throw; and
- (vii) an abstract of all statutory restrictions in respect of any specified workings with a referred to the order imposing the same.

Whatever this plan is brought up-to-date the then position of the workings shall be shown by dotted line drawn through the ends of the workings and such dotted line shall be marked with the date of the last survey.

Provided that the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, approve any other method of showing the up-to-date position of the working of the mine.

- (c) A transverse section or sections of the workings through the shaft or shafts and main adits indicating clearly the surface and the dips of the vein, lode, reef or mineral bed or deposit at different points; and such sections of the strata sunk or driven through in the mine or proved by boring, as may be available.
- (d) A vertical mine section or sections showing a vertical projection of the mine workings, where a reef, vein, lode or mineral bed or deposit has an average dip of more than 30 degrees from the horizontal;
- (e) A ventilation plan, and section where necessary, showing the system of ventilation in the mine, and in particular –
  - (i) the general direction of air-current;
  - (ii) every point where the quantity of air is measured;
  - (iii) every air-crossing, ventilation door, stopping and every other principle device for the regulation and distribution of air;
  - (iv) every fire-stopping and its serial number;
  - (v) every room used for storing inflammable material;
  - (vi) the position of fire-fighting equipment;
  - (vii) every water-dam with dimensions and other particulars of construction;
  - (viii) every pumping, telephone and ambulance station; and
  - (ix) every haulage and travelling roadway.
- (f) A water-danger plan and section showing :
  - (i) the position of the working belowground; an every borehole ans shaft (with depth), drive, crosscut, winze, rise, excavation and air passage connected therewith;
  - (ii) the position of every dyke, fault and other geological disturbance with the amount and direction of its throw;
  - (iii) levels taken in workings belowground at easily identifiable points sufficient in number to allow of the construction of sections along all drives, mainheadings and haulage roadways;
  - (iv) every source of water such as river, stream, water-course, reservoir, water-logged opencast workings on the surface, and also the outline of all water-logged workings belowground lying within 60 metres of any part of the workings measured in any direction ;
  - (v) every reservoir, dam or other structure, either above or belowground, constructed to withstand a pressure of water or to control in inrush of water, along with reference to its design and other details of construction;
  - (vi) surface contour lines drawn at vertical intervals not exceeding five metres (or ten metres in the case of a mine where there are no working belowground ; or in cases of mines

- situated in hilly terrain, such other larger interval as the Regional Inspector may permit by an order in writing and subject to such conditions as he may specify) over the whole area lying within 200 metres of any part of the workings; and
- (vii) the highest flood level of the area.

All levels taken above and belowground shall be referred to a plane in relation to a bench mark which shall be established on the surface in the mine. Particulars of this bench mark, together with its height above the Mean Sea Level, shall be shown on the plans and sections maintained under this clause.

- (g) A geological plan of the area of leasehold, on a suitable scale specified or approved by the Chief Inspector by a general or special order in writing.

(2) where different reefs, lodes, veins or mineral beds or deposits overlie or run parallel to one another, the workings of each reef, lode, vein or mineral bed or deposit shall be shown on a separate plan and/or longitudinal section or sections; so however that if two reefs, lodes, veins or mineral beds or deposits are so situated in relation to each other that the parting between workings made therein is less than 10 metres at any place, such workings shall also be shown on a combined plan and/or longitudinal section, as the case may be in different colours.

(3)(a) (i) The plans kept under clauses (a) and (b) of sub-regulation (1) shall also show the settled boundary of the mine, or where the boundary is in dispute, the boundaries claimed by the owner of the mine and by the owners of the mines adjacent to the disputed boundary :

Provided that where it is not possible to show the complete boundary of leasehold on the same plan, an additional key plan or any other suitable scale showing such boundaries and the outline of the workings shall also be maintained.

(ii) The plans required to be kept under clause (b) of sub-regulation (1) shall also show the workings both above and belowground of all adjacent mines as are situated within 60 metres, measured on any plane, of the boundary claimed by the owners of the mines. The position of these workings also shall be maintained up-to-date within three months, or 12 months if permitted under regulations 60(4)

- (iii) The plans required to be kept under clause (b) of sub-regulation (1) shall also, on every occasion that the workings are brought up-to-date in compliance with the provisions of clause (ii) of this sub-regulation, be signed by the surveyor and the manager of every adjoining mine having workings within 60 metres of the common boundary (or where the boundary is in dispute, within 60 metres of the boundary claimed by the owner of the mine) signifying the correctness of the common boundary, or the disputed boundaries as the case may be, and of the position of the workings in relation to one another.

- (b) The owner, agent or manager of every mine shall give all reasonable facilities to the surveyors of its adjacent mine to carry out the surveys and levellings required to be made under this sub-regulation.

(4)(a) The Regional Inspector may, by an order in writing, require such additional details to be shown on the plans and sections required to be kept under these regulations, or the preparation and maintenance of such other plans and sections showing such details and on such scale and within such time as he may specify in the order.

(b) The Regional Inspector may, by an order in writing, require the owner, agent or manager to submit to him within such time such plans and sections, or tracings thereof, as he may specify in the order.

(c) The owner, agent or manager shall, at any time if required by the Regional Inspector, show on any plan or section the then position of the workings of the mine.

62. Copies of plans and sections to be submitted – The owner, agent or manager shall, on or before the 30 April of every year, submit to the Chief Inspector two up-to-date copies of the plans and sections maintained under clauses (b) , (c) and (d) of regulation 61(1). The provisions of this regulation shall be deemed to have been complied with if the owner, agent or manager gets the copies of plans and sections submitted hereunder during the previous years brought up-to-date at his own expense.

63. Plans and sections to be submitted after abandonment or discontinuance – (1) Where any mine (or in case of a mine to which regulation 142 applies, any part thereof) is abandoned or the working thereof has been discontinued over a period exceeding four months, the person who was the owner of the mine at the time of abandonment or discontinuance shall, within 30 days after the abandonment or within five months after the discontinuance of the workings, as the case may be, submit to the Chief Inspector two true copies of the up-to-date plan and section of the workings of the mine or seam or section maintained under clauses (b), (c) and (d) of regulation 61(1). Every such copy shall show the bearing and distance of at least one of the shafts or openings of the mine from a trijunction or revenue pillar or from any other prominent and permanent surface feature, the position of all water-dams built belowground (with their dimensions and other particulars of construction) and also the spot levels at the ends of the workings:

Provided that if a change of ownership occurs after the abandonment or discontinuance and before the expiry of the 30 days or five months aforesaid, as the case may be, such plans and sections shall be submitted forthwith.

(2) The original or a certified true copy of the plan and section submitted under sub-regulation (1) shall be kept in the office at the mine.

(3) The Chief Inspector may, on such conditions as he thinks fit to impose, and on payment of the cost of preparing copies as determine by him, supply copies of a plan or section submitted to him under sub-regulation (1) or such parts thereof as he thinks fit -

- (a) to any person having a bona fide interest in the mine, seam or section;
- (b) to the owner, agent or manager of an adjacent mine.

64. Survey instruments and materials – The owner or agent shall provide accurate and reliable survey instruments and materials for the proper carrying out of all survey and levelling work and for the preparation of plans and sections required under these regulations; and no other instruments shall be used in connection with any such survey or levelling work.

65. List of plans, sections and instruments and their storage – (1) All plans and sections, and tracings or copies thereof, kept at the mine shall be serially numbered or suitably indexed.

(2) Suitable arrangements shall be made at every mine for the proper storage and maintenance of every plan and section of all instruments and materials. Such arrangements shall, unless otherwise permitted by the Chief Inspector by an order in writing an subject to such conditions as he may specify, provide for flat storage of every plan and section maintained under clauses (b), (c) and (d) of regulation 61(1).

(3) Every field book and other notes used in the preparation of plans and sections required under these regulations shall be duly indexed and kept in the office at the mine.

(4) A list of all plans and sections maintained under these regulations, or any orders made thereunder, and tracings or copies thereof; of all survey instruments provided under regulation 64 with their respective types specifications and identification numbers; and of all field books and other notes kept under sub-regulation (3) shall be kept in a bound paged book kept for the purpose, and shall be brought up-to-date

whenever necessary. Every entry in the book shall be signed and dated by the surveyor, and countersigned and dated by the manager.

66. Preparation of Plans by Surveyors – (1) Every plan and section, and tracing thereof, prepared under these regulations shall be prepared by or under the personal supervision of a surveyor appointed under regulation 38.

(2) Every plan or section, or any part thereof, prepared by or under the supervision of a surveyor shall carry thereon a certificate by him to the effect that the plan or section or part thereof is correct; and shall be signed and dated by the surveyor and countersigned and dated by the manager on every occasion that the plan or section is brought up-to-date.

(3) Every tracing of a plan or section or of any part thereof shall bear a reference to the original plan or section from which it was copied and shall be certified thereon by the surveyor to be a true copy of the original plan or section. The certificate shall be signed and dated by him.

(4) If the surveyor fails or omits to show any part of the workings or allow the plans or sections to be inaccurate, he shall be guilty of a breach of these regulations. Nothing in this sub-regulation shall, however, exempt the owner, agent or manager of their responsibility to ensure that every plan or section prepared, kept or submitted under these regulations or by any order made thereunder is correct and maintained up-to-date as required thereunder.

67. Plans to be checked on change of ownership or on re-opening. – (1) When there is a change in ownership of a mine, or where a mine or part thereof is reopened, or where in any mine or part thereof it is intended to start any extraction or reduction of pillars or blocks of minerals, the owner, agent and manager shall ensure that the plans and sections of the mine or part are accurate. If any doubt arises as to the accuracy of the plans and sections in any respect, he shall have accurate plans and sections prepared afresh before any drivage or other work of development or of extraction or reduction of pillars is commenced.

(2) If the Regional Inspector is of the opinion that any plan or section prepared, kept or submitted under the regulation is inaccurate, he may, by an order in writing, require a fresh survey made and a new plan or section prepared within such time as he may specify therein.

(3) If the plan or section required to be prepared under sub-regulation (2) is not prepared within the time specified in the order, or to the satisfaction of the Regional Inspector, or the plan or section is not prepared or brought up-to-date as required under these regulations, he may get the plan or section prepared by any other agency; and the cost thereof, as certified by the Chief Inspector, shall be defrayed by the owner of the mine and recoverable from him as an arrear of land revenue.

## **CHAPTER-VII : Means of Access and Egress**

66. Outlets from a mine – (1) No person shall be employed, or be permitted to enter or remain for purposes of employment, in any working belowground, unless the working is provided with at least two shafts or other outlets to the surface–

- (a) with which every lode, reef, vein or mineral bed or deposit or section thereof, for the time being at work has a communication so as to afford separate means of ingress and egress to the persons employed therein;
- (b) which do not have their surface openings in the same building; and
- (c) which are under the sole control of the manager :

Provided that the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit the employment belowground of persons even in a case where the two shafts or outlets are not under the control of the same manager.

(2) Suitable arrangements shall be made for persons to descend and ascend by each of such shafts or outlets. Where the shaft is vertical and more than 60 metres in depth, such arrangements shall be by means of a proper winding engine.. Every such winding engine shall be to installed and maintained as to be constantly available for use. In any doubt arises to whether any such arrangement is suitable or not, it shall be referred to the Chief Inspector for decision :

Provided that, if required by the Regional Inspector by an order in writing a proper winding engine shall be provided in a shaft more than 60 metres in depth even if it is not vertical.

(3) Such shafts, inclines or outlets shall not be less than 15 metres distant from one another at any point, and each shall be connected with the other by means of a walkable passage, not less than 1.8 metres high 1.5 metres wide, through the workings belowground that are being served by such shafts or outlets :

Provided that outlets made before the coming into force of these regulations may be closer than 15 metres but not less than 6 metres apart.

(4) Whenever the connection between two outlets which are required to be maintained under sub-regulation (1) has been obstructed or found dangerous, only such persons as are necessary to clear the obstruction or to repair the dangerous part of the connection or to make a new second outlet, as the case may be, shall be employed belowground until such time as the connection has been re-established or a new second outlet has been provided.

(5) The foregoing provisions of this regulation with respect to shafts and outlets shall not apply -

- (a) to a shaft which is being sunk or to an incline or outlet which is being made;
- (b) to any working for the purpose of making a connection between two or more shafts or outlets; and
- (c) to any working for the sole purpose of searching for or proving minerals;

so long as not more than 20 persons are employed belowground at any one time in the whole of the different seams in connection with a single shaft or outlet:

Provided that if the single outlet is an un-walkable shaft (other than a shaft in the course of being sunk) and exceeds 30 metres in depth, it shall be provided both with ladders and with other means of raising and lowering persons :

Provided further that nothing in this sub-regulation shall be deemed to authorise the driving of roadways for the development purposes before a second outlet has been made in accordance with the said provisions.

(6) The Chief Inspector may, by an order in writing and subject to such conditions as he may specify, exempt from the operation of this regulation any mine in the case of which special difficulties exist which in his opinion make compliance with the provisions thereof not reasonably practicable.

69. Working shafts and winzes – (1) Every shaft in use or in course of being sunk and every other outlet shall be made and kept secure.

(2) Every shaft (and every winze or raise intended to be used for purposes of winding or haulage) in the course of being sunk shall be provided with a permanent lining of metal, concrete or masonry, which shall at no time be more than six metres from the bottom of the shaft or winze:

Provided that where iron or steel rings with a substantial lagging are used below the permanent lagging and are kept close to the bottom of the shaft, this distance may be increased to not more than 20 metres:

If any doubt arises as to whether the strata are stable or not, it shall be referred to the Chief Inspector for decision.



(3) Every shaft or winze regularly used for lowering and raising persons or materials, in which water seeps out of the strata, shall be provided with water garlands or other means of collecting and conducting away seepage water.

(4) The top, all insets and bottom of every working shaft and the sump thereof shall be kept clear and free from loose materials, tools and debris.

70. Fencings and gates at outlets – (1) Every entrance to a mine from the surface, and the top and all entrances between the top and bottom, including the sump, if any, of every working, ventilating or pumping shaft, shall be kept securely fenced.

(2) Every walkable entrance from the surface to the workings belowground shall be provided with a substantial gate which shall be kept closed and locked when there are no persons belowground:

Provided that where such entrance is not used as a means of ingress or egress in or out of the mine, it shall be permanently closed so as effectively to prevent persons from entering therein.

71. Outlets from mine parts – Every part of a mine shall, where practicable, be provided with at least two ways affording means of egress to the surface. If any doubt arises as to whether the provision of two such ways is practicable or not, it shall be referred to the Chief Inspector for decision.

72. Periodic examination of outlets – (1) Every shaft, incline and other outlets provided as required by regulation 68 shall be examined, once at least in every seven days, by a mine foreman or other competent person. A report of every such examination shall immediately thereafter be recorded in a bound paged book kept for the purpose and shall be signed and dated by the person making the examination.

(2) If at the time of such examination or at any other time, the shaft or other outlet is found to be not safe, it shall not be used for any purpose, except as a natural airway, until it has been made safe in all respects. Report of every such action taken shall be recorded in the book kept under sub-regulation (1).

## **CHAPTER-VIII : Ladders and Ladderways**

73. Provision of ladderways. – (1) Every shaft or winze, including shaft or winze in the course of being sunk, which has an inclination exceeding 25 degrees from the horizontal, shall be provided with a ladderway from the top to the bottom :

Provided that in the case of a shaft or winze in the course of being sunk, the ladderway may be provided within such distance, not exceeding 20 metres, from the bottom as to secure it from danger during blasting operations and a chain or rope ladder shall be provided from this point to the bottom of the shaft or winze :

Provided further that where the Chief Inspector is of the opinion that compliance with the provisions of this sub-regulation is not reasonably practicable, he may, by an order in writing and subject to such conditions as he may specify therein, grant an exemption therefrom.

(2) Every working place shall be provided with platforms or other means of keeping a foothold, and where necessary, with ladders from climbing.

74. Ladders. (1) Every ladder used in a mine shall –

- (a) be of strong construction;
- (b) subject to the provision of sub-regulation (2), be securely fixed in the shaft, winze or stope at an inclination of not more than 80 degrees from the horizontal;
- (c) be made continuous or without perceptible overlapping or break except at a platform or collar;

- (d) project at least one metre above the mouth of the shaft, winze rise of stope and above every platform, except where strong holdfasts or hand-rails are provided;
- (e) have rungs equally spaced and at a sufficient distance from the wall or from any timber to ensure proper foothold; and
- (f) be maintained in good repair.

(2) Except in respect of the lowest 10 metres or a sinking shaft or winze, no ladder shall be placed at an inclination of more than 80 degrees from the horizontal.

Provided that the Regional Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit a ladder to be fixed at a steeper inclination.

75. Provision of sollars etc. – (1) If a ladderway provided under regulation 73(1) exceeds 20 metres in depth and has an inclination of more than 30 degrees with the horizontal, platforms or sollars shall be provided at intervals of not more than 15 metres along the underlie or slope of the shaft or winze. Where the inclination is more than 60 degrees from the horizontal, the platforms or sollars shall be provided at intervals of not more than 10 metres.

(2) If a manhole is provided at any platform in any shaft or winze, it shall be placed behind the ladder leading up from the platform.

(3) Every opening in a platform provided for the handing of timber or other materials shall be effectively closed off from the rest of the platform.

76. Guarding of ladderways. – (1) Every ladderway in a shaft or winze used for winding or other purposes shall be in a separate compartment or shall be adequately guarded from other compartments.

(2) Every ladderway below any place or travelling roadway where persons are stationed or pass, shall be provided with a suitable cover of substantial fence or guard.

77. Carrying of materials on ladderways. – No person shall carry or be permitted to carry a drill, tool, explosives or any loose material on a ladderway in a shaft or winze having an inclination of more than 45 degrees from the horizontal except so far as may be necessary for carrying out repairs :

Provided that nothing in this regulation shall prevent a person from carrying a drill, tool or explosives in suitable sling or container secured to his person.

## **CHAPTER-IX : Transport of Men and Materials – Winding in shafts**

78. Appointment of winding enginemen and their duties – (1) No person shall be appointed as a winding engineman unless he holds –

- (a) in the case of an electric winding engine of 75 h.p. or more or of a steam or compressed air winding engine which has cylinders exceeding 30 centimetres of diameter, a I Class Engine Driver's Certificate and
- (b) in any other case a II Class Engine Driver's Certificate:

Provided that this clause shall not apply to the driver of an Electrical Winding Engine upto 30 h.p. or of a steam or compressed air winding engine which has cylinders not exceeding 18 centimetres in diameter and which is not used for raising or lowering persons.

(2) Where special difficulties exist which made compliance with the provisions of sub-regulation (1) not reasonably practicable, the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, relax and said provisions.

(3) No person, other than a winding engineman appointed under sub-regulation (1) or a duly appointed assistant working under his direct personal supervision shall operate any winding engine:

Provided that in an emergency any other competent person may be permitted to operate the engine.

(4) The name of the winding engineman on duty, together with the period of his shift shall be posted in the winding engine room. Where the Regional Inspector is of the opinion that the duties of any winding engineman are unduly arduous, he may by an order in writing require the period of his shift to be reduced to such period, not less than five hours, as he may specify.

79. New winding installations – (1) When it is intended to bring into use any new winding installation for lowering and raising persons, the owner, agent or manager shall, not less than 30 days before such use, give notice of such intention to the Chief Inspector and the Regional Inspector. The notice shall contain detailed specifications of the installation.

(2) If the Chief Inspector, by an order in writing to requires, such additions or alterations shall be made to the installation, as he may specify in the order.

80. Construction and installation of winding equipment – (1) Every part of a winding installation, including headgear shall be of sound construction and adequate strength, and shall be maintained in safe working order. In case of any doubt as to the foregoing, it shall be referred to the Chief Inspector for decision.

(2) The engine shall be firmly connected to a rigid foundation and shall be so designed, constructed and maintained that with the power provided, the raising and lowering of persons or materials can be carried out with ease, regularity and safety.

(3) Unless otherwise permitted in writing by the Chief Inspector and subject to such conditions as he may specify therein, every engine for winding shall be so situated in relation to the headgear that the winding rope shall not, in the extreme position, subtend in either direction an angle more than one and a half degrees with the plane of the sheave or pulley used in connection with the rope.

(4)(a) The diameter of the drums or sheaves of the winding engine, and of the pulleys and sheaves used in connection with the winding shall, unless otherwise permitted in writing by the Chief Inspector and subject to such conditions as he may specify therein, be not less than 80 times the diameter of the rope in the case of winding installations installed before the coming into force of these regulations and not less than 100 times the diameter of the rope in other cases:

Provided that the Chief Inspector may, by an order in writing, require that in the case of any specified winding installation installed before the date aforesaid, the diameter of the said drums, pulley or sheaves shall not be less than such size, upto 100 times the diameter of the rope, as he may specify in the order.

(b) The grooves of such sheaves or pulleys shall be suited to the diameter of such rope.

(c) Every pulley or sheaves used in connection with winding shall, while in motion, rotate in a vertical plane, and shall be maintained in such a condition that slipping is reduced to a minimum.

81. Spare rope to be kept in store. – At every mine where a shaft or winze is used for lowering or raising persons, at least one spare winding rope, suitable for use in such shaft or winze shall be kept in reserve.

82. Fittings of winding engines – At every shaft, including a shaft in the course of being sunk, where winding is effected by means of an engine, the following provisions regarding winding engines shall have effect, namely:

(1) There shall be on the drum such flanges, and also if the drum is conical or spiral such other appliances, as will be sufficient to prevent the rope from slipping or coiling unevenly. Except in the 'Koepe' system of

winding, the end of the rope shall be securely fixed in such a manner that the rope is not unduly strained. There shall be at least two turns of the rope on the drum when the cage or other means of conveyance is at its lowest working point in the shaft or winze.

(2)(a) There shall be provided one or more brakes on the drum which :

- (i) if there are two cages or other means of conveyance, will hold such cages or other means of conveyance when the maximum torque is applied in either direction; or
  - (ii) if there is only one cage or other means of conveyance, will hold the loaded cage or other means of conveyance in midshaft when the maximum torque is applied downwards.
- (b) At least one of the brakes shall be so designed that the brake remains at the 'on' position except when operated.
- (c) Where the brake or brakes are power-operated, at least one of them shall be arranged to be applied automatically at all times if the power supply fails. In no case shall a brake be operated by an auxiliary electric current.
- (d) The brake on the drum shall be used only for the purpose of keeping such drum stationary and not for lowering the cage or other means of conveyance, except in cases where the engine is to be worked at a very low speed as when examining the winding rope or the shaft or winze.

(3) Where the winding engine is worked by steam or compressed air, a screw stop-valve shall not be used as controlling valve of the engine.

(4) Every engine shall be equipped with a reliable depth-indicator (in addition to any mark on the rope) showing to the winding engineman the position of the cage or other means of conveyance in the shaft, and an automatic device that will ring a bell in the engine room when the ascending cage or other means of conveyance is at a distance of not less than two revolutions of the drum from the top of the shaft or winze. The depth-indicator shall be tested after every adjustment or replacement of the winding rope.

83. Shaft fittings – At every winding shaft, other than a shaft in the course of being sunk – to which the provisions of regulation 87 shall apply – the following provisions shall have effect, namely:

(1)(a) Efficient means shall be provided and maintained for interchanging separate, distinct and definite signals between the top of the shaft or winze and –

- (i) the bottom or other permanent landing of the shaft; and
- (ii) every inset for the time being in use.

There shall also be provided and maintained efficient means for transmitting such signals from the top of the shaft to the winding engineman. All signals shall be transmitted by mechanical or electrical means.

(b) In signalling, the following code of signals shall be used and strictly observed :

ONE RAP	:	STOP
TWO RAPS	:	LOWER
THREE RAPS	:	RAISE
FOUR RAPS	:	MEN ready to ascend or descend
FOUR RAPS	:	IN REPLY – men may enter the cage or other means of conveyance.

Any other signals shall be addition to, and shall not interfere with, the foregoing.

Provided that the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit the use of any code of signalling other than that specified above.

- (c) A printed copy of the code of signals, including additional signals, if any, shall be posted prominently at the top of the shaft and at every such inset and landing and also in the winding engine room.
  - (d) No person other than the banksman, bellman or signalman shall give any signal unless he is an official of the mine or is authorised in writing by the manager to give signals.
- (2)(a) Where the shaft or winze is vertical and exceeds 45 metres in depth, it shall be provided with sufficient number of guides to ensure smooth and safe travel of the cage or other means of conveyance.
- (b) Where rope guides are used, the cheese-weights or bottom clams shall be kept so exposed as to permit regular examination.
- (3) Above the topmost landing, 'dogs' or other devices for holding the cage or other means of conveyance in the event of an overwind shall be provided, or the guides, runners or receivers shall be sprung.
- (4) Where the shaft or winze is vertical, protective roofing or pent-house sufficient to prevent danger from anything falling in the shaft or winze, shall be provided and maintained at the bottom of the shaft or winze and at all landings where persons ascend or descend. The gap, both vertical and horizontal, between the protective roofing and the top of cage, when the cage is at the bottom of the shaft, shall not exceed 15 centimeters.

84. Manwinding – At every shaft or winze, other than a shaft in the course of being sunk, where a winding engine is used for the purpose of lowering or raising persons, the following provisions shall have effect, namely :-

- (1) In respect of every part of the winding installation, including pulleys or sheaves, cages, chains, distribution plates and detaching hooks, the following particulars shall be recorded in a bound paged book kept for the purpose -
  - (a) Name of the manufacturer and the year of manufacture;
  - (b) Specifications and dimensions;
  - (c) Reference to every certificate supplied with the part; and
  - (d) Any other detail that may be necessary or required by the Regional Inspector;

All entries in the book shall be made and signed by the engineer or other competent person, and shall be countersigned and dated by the manager.

- (2) Whenever any part or article is replaced or any repaired part or article used in any winding installation, the fact of such replacement or repair shall be recorded in the book kept under sub-regulation (1).
- (3) Where drumclutches are provided, the following provisions shall have effect, namely –
  - (a) The operating gear of the clutch of the drum shall be provided with locking gear to prevent inadvertent withdrawal of the clutch.
  - (b) Every engine used for the lowering or raising of persons shall have a suitable interlocking device so fitted that it is not possible –
    - (i) to unclutch any drum unless the brakes of such drum are applied; or
    - (ii) to release the brakes until the drum clutch is fully engaged and securely locked.
  - (c) Unless the cage or other means of conveyance attached to the drum is resting at the bottom of the shaft, the drum shall not be unclutched unless the winding engineman has assured himself immediately beforehand that the brake is fully applied.

(4) If the shaft or winze is vertical, except in the 'Koepe' system or winding, there shall be provided between the rope and the cage or other means of conveyance a detaching hook. The space between such detaching hook, measured from the centre of the hole for attaching it to the rope shackle, and the detaching-bell or plate when the cage or other means of conveyance is at its normal position at the top of the shaft or winze, shall be not less than 3.6 metres where a geared engine is used, and not less than 7.5 metres where a direct acting engine is used.

(5) If the shaft or winze exceeds 300 metres in depth, there shall be a clear over-run space of not less than 7.5 metres below the lowest landing place. The sump below the lowest landing place shall be kept free from water or other liquid matter to such an extent that in case of an overwind, the persons riding in the case or other means of conveyance will not be submerged.

(6) In the case of every shaft or winze exceeding 100 metres in depth, unless exempted by the Chief Inspector by an order in writing and subject to such conditions as he may specify therein, the engine shall be fitted with an automatically recording speed indicator.

(7)(a) In case of every shaft or winze exceeding 100 metres in depth, there shall be provided an effective automatic contrivance to prevent overspeeding and overwinding, hereinafter called the 'Automatic Contrivance'. The Automatic Contrivance shall prevent the descending cage from being landing at the pit bottom or other permanent landing at a speed exceeding 1.5 metres per second and shall also control the movement of the ascending cage in such a manner as to prevent danger to persons riding therein. The Regional Inspector may, by an order in writing, specify the maximum speed of winding in any shaft.

Provided that in case of any shaft or winze the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, grant exemption from the provisions of this sub-regulation.

(b) Tests of every Automatic Contrivance and every brake shall be made by the engineer or other competent persons appointed for the purpose, in the following manner -

- (i) once at least in every seven days, by raising each cage or other means of conveyance, in turn, to pass the last control point above the topmost landing; and
- (ii) once at least in every three months, by attempting to land the descending cage at excessive speed. For the purpose of this test, the setting of the Automatic Contrivance may be altered so that pre-determined point in the shaft or winze is regarded as the landing.

The results of every such tests shall be recorded in a bound paged book kept for the purpose, and shall be signed and dated by the person making the test.

Provided that where special conditions exist, the Chief Inspector, may, by an order in writing and subject to such conditions as he may specify therein, permit the tests aforesaid to be carried out in such other manner as he may specify in the order.

(c) Unless the Automatic Contrivance is in full and fixed engagement with the winding engine, it shall be fully engaged, either automatically or by the winding engineman, wherever necessary to be lowered or raised; and a proper automatic indicator to show that this has been done shall be provided in such a position as to be easily seen by the banksman. No person shall be allowed to enter any cage or other means of conveyance until the indicator shows that the Automatic contrivance has been fully engaged.

(8) Except where an Automatic Contrivance is provided to prevent overwinding, a point shall be fixed and marked on the indicator of the engine in such a way as to show when the cage or other means of conveyance is at a distance of not less than twice the circumference of the drum from the completion of the wind; and if such cage or other means of conveyance contains persons, the winding engineman shall not, as soon as it has reached the point aforesaid, raise it for the remaining distance at a speed exceeding 1.2 metres per second.

(9) Where the only means of egress in a mine is by apparatus worked by steam or electricity, precautions shall be taken to ensure that the two winding engines do not fail simultaneously, and in particular, in the case of electric winding engines, the engines shall be capable of being connected to two separate power supplies. Unless the Chief Inspector by an order in writing otherwise directs, the provisions of this sub-regulation shall be deemed to be satisfied if an emergency winding gear is maintained.

(10)(a) Except in the 'koepe' system of winding, at the top of every shaft or winze where cages are used, suitable keps shall be provided and so arranged as to fall into the 'on' position when the operating lever is released.

(b) At every inset where keps or folding platforms are provided, arrangements shall be made to lock the keps or platforms securely in the 'off' position; and when in the 'off' position, such keps or platforms shall leave the shaft or winze clear for the passage of the cage. In every such case, a proper automatic indicator to show the position of the keps or platforms, as the case may be, shall be provided in such a position as to be easily seen by the banksman.

(11)(a) Unless otherwise permitted by the Chief Inspector by an order in writing and subject to such conditions as he may specify therein every cage or other means of conveyance in which persons ride in a vertical or steeply inclined shaft or winze shall be –

- (i) covered completely at the top;
- (ii) closed in at the two sides in a manner sufficient to prevent persons or things from projecting beyond the sides;
- (iii) provided with a rigid hand-bar fixed in a position where it can be easily reached by all persons in the cage or other means of conveyance; and
- (iv) provided with suitable gates or other rigid fences such that the gap between the floor of cage or other means of conveyance and the lowest part of the gate or fence does not exceed 15 centimetres and that between any two members of the gate or fence does not exceed 25 centimetres. Gates or fences shall not open outwards; and they shall be so fitted and maintained that they cannot be accidentally opened.

Provided that so much of this sub-regulation as requires a covering at the top shall not apply in a shaft or winze which is less than 30 metres in depth.

(b) The floor of every cage or other means of conveyance shall be strongly constructed and so maintained to prevent any part of the body of a person riding in the cage or other means of conveyance from projecting beyond the floor.

(12) Not more than such number of persons as may be authorised by the manager shall be allowed to ride in the same cage or same deck of a cage or other means of conveyance at one time; and a notice specifying the number shall be posted at the top of every shaft or winze and at every inset and landing :

Provided that where the Regional Inspector is of the opinion that the number so authorised is high, he may, by an order in writing, require the manager to fix a lower maximum number of persons as may be specified by him.

(13)(a) Unless permitted by the Chief Inspector by an order in writing and subject to such conditions as he may specify therein, the total load when the authorised number of persons ride at any one time in any cage or other means of conveyance shall not exceed 60 per cent of the maximum load when materials are wound.

(b) No person shall, when ascending or descending a shaft, take with him any bulky material other than tools and instruments, except when engaged in repairing the shaft or with the written authority of the manager.

85. Multi-decks – Where a cage has two or more decks which are used simultaneously, each floor at a landing shall be connected by an effective signalling device with the main floor of the landing; and only the banksman or the bellman or the signalman or an official, as the case may be, at such main floor shall give action signal, and only after he has satisfied himself that all cage gates are closed.

78 Winding of material – (1) Every cage used for the raising or lowering of tubs shall be provided of tubs shall be provided with catches or other effective contrivances to prevent the tubs falling out. The cage shall not be set in motion unless the catches or other effective contrivances are in position.

(2)(a) The floor of every cage shall be kept clean; and no skip, bucket or tub shall be filled up to such height that any of the contents can fall out.

(b) Before long timber, pipes, rails, or other material projecting over the top of the cage or other means of conveyance are lowered or raised, the projecting ends shall be securely fastened to the rope, chain or bow.

87. Winding in sinking shafts – At every shaft or winze in the course of being sunk, where a winding engine is use the following provisions shall have effect, namely :

(1) If the shaft or winze is vertical and exceeds 45 metres in depth, there shall be provided for each bucket or other means of conveyance a detaching-hook. Between the centre of the hole for attaching the detaching-hook to the rope shackle and the detaching bell or plate, when the bucket or other means of conveyance is at the tope landing, there shall be a clear over-run space of not less than 3.6 metres.

(2) Where the shaft or winze is vertical and exceeds 150 metres in depth –

(a) the bucket or other means of conveyance, when used for lowering or raising persons, shall be provided with sufficient cover overhead for protection from things falling down the shaft; and

(b) these shall be provided for each bucket or other means of conveyance a sufficient number of guides which shall be kept extended to within 22.5 metres of the shaft bottom at all times when sinking is in progress:

Provided that the Regional Inspector may, by an order in writing, require the provision of guides in a shaft or winze which is less than 150 metres in depth or is not vertical.

(3)(a) There shall be provided and maintained two separate means of interchanging distinct and definite signals between the bottom and the top of the shaft or winze. Efficient means shall also be provided and maintained for transmitting such signals from the top of the shaft or winze to the winding engineman. The signalling appliances shall be examined by a competent person once at least in every 24 hours. The result of every such examination shall be recorded in a bound paged book kept for the purpose and shall be signed and dated by the person making the examination.

1[ (b) In signalling, the following code of signals shall be used and observed

ONE RAP	..	STOP
TWO RAPS	..	LOWER
THREE RAPS	..	TAKE UP SLACK or RAISE
FOUR RAPS	..	TAKE UP SLACK or RAISE when men are riding.

Any other signals shall be in addition to, and shall not interfere with, the foregoing.

Provided that the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit the use of any code of signalling other than that specified above.

(c) A printed copy of the code of signals, including additional signals, if any, shall be posted prominently at the top of the shaft or winze and also in the winding engine room.



(d) Except while riding in a bucket or other means of conveyance, no person other than the chargeman or a person authorised in writing by the manager, shall give any signal.

(4) Every bucket or other means of conveyance in which persons or materials are conveyed, shall be of strong construction and so maintained as to prevent persons or materials from falling.

(5)(a) At the top of the shaft or at the landing where the bucket or other means of conveyance is normally landed, suitable doors or covering shall be provided. Except as may be required for the passage of the bucket or other means of conveyance, the doors or covering shall always be kept closed.

(b) Where the shaft or winze has an inclination of 35 degrees or more from the horizontal and exceeds 45 metres in depth measured along its plane, persons working at the bottom shall also be protected by a suitable protective covering extending over the whole area of the shaft or winze, sufficient space being left therein only for the passage of the bucket or other means of conveyance; and the cover or scaffold shall be kept lowered –

- (i) if the shaft or winze is vertical to not more than 22.5 metres from the bottom; and
- (ii) in any other case, not more than 30 metres from the bottom :

Provided that where special circumstances exist, the Chief Inspector may, by an order in writing subject to such conditions as he may specify therein, grant an exemption from the provisions of this clause.

(6) Not more than such number of persons as may be authorised by the manager shall be allowed to ride in the bucket or other means conveyance at one time; and a notice specifying such number shall be posted prominently at the top of the shaft or winze.

(7) When tools, implements or other materials are lowered or raised, the banksman or chargeman, as the case may be, shall see that -

- (a) the bucket is properly loaded;
- (b) materials are not loaded above the rim;
- (c) long timber, pipes, rails, tools or other material with ends projecting over the rim are securely fastened to the rope, chains or bow; and
- (d) the bucket, before being sent away, is steadied, and the bottom and sides thereof are free from adhering material.

(8) Where guides are provided, the bucket or other means of conveyance shall be raised slowly from the bottom of the shaft or winze, until the rider is picket up.

(9) While persons are at work on any scaffold or platform in the shaft or winze, the following precautions shall be strictly observed :

- (a) The scaffold or platform shall be secured to the sides of the shaft in order to prevent it from swinging;
- (b) The opening for the passage of the bucket or other means of conveyance, shall be so protected as effectively to prevent anything falling through it;
- (c) The scaffold or platform shall not be lowered or raised except under the order of the chargeman or other competent person.

88. Winding ropes, etc. – At every shaft where a rope is used for winding purposes, the following provisions shall have effect, namely :

(1)(a) No rope, bar, link, chain or other attachment to a cage or other means of conveyance shall be used unless it is of good quality and manufacture, is free from any visible defect and is of adequate calculated strength :

Provided that the Chief Inspector may, by an order in writing prohibit the use of any rope or type of rope or bar, link, chain or other attachment where, in his opinion such use is unsafe.

(b) A single-linked chain shall not be used, except for the short coupling chain attached to a cage or other means of conveyance. Such singlelinked chain shall be attached to the safety hook through a distribution plate or other approved appliance.

(c) Where safety-chains are used, their length shall be such that if the kingbolt breaks, the shock to the cage or other means of conveyance is as slight as possible.

(d) The attachment between the rope and the cage or other means of conveyance shall be of such type and be maintained in such manner as to obviate accidental disconnection.

(e) In case of a doubt, as to the fitness of any rope, bar, link, chain or other attachment used or intended for use, it shall be referred to the Chief Inspector for decision.

(2)(a) Except, in a sinking shaft less than 30 metres in depth, every winding rope shall be made of cold drawn steel wire, and the gauge of the wires used in the construction of such rope shall be suited to the diameter of the drums, pulleys and sheaves of the winding installation.

(b) In any shaft, including a shaft in course of being sunk, where persons are lowered or raised and where guides are not provided, no rope other than a rope of non-spinning type shall be used.

(c) No rope which has been spliced shall be used for winding purposes.

(d) No winding rope shall be used or continued in use, if its safety factor (i.e. the ratio between breaking load on the rope at any point and the maximum static load on it when the cage or other means of conveyance is at the lowest working point) is or becomes –

(i) less than 10 in the case of a shaft not exceeding 300 metres in depth;

(ii) less than 9 in the case of a shaft exceeding 300 metres but not exceeding 500 metres in depth;

(iii) less than 8 in the case of a shaft exceeding 500 metres but not exceeding 700 metres in depth;

(iv) less than 7 in the case of a shaft exceeding 700 metres but not exceeding 1000 metres in depth;

(v) less than 6 in the case of a shaft exceeding 1000 metres but not exceeding 1500 metres in depth;

(3)(a) For every rope in use or intended for use, a certificate showing its breaking load, quality, construction and diameter (obtained from the manufacturer or supplier) and a history of its use, including a record of diameters of the drums, sheaves and pulleys used in conjunction with the rope, shall be kept in a bound paged book kept for the purpose. All entries therein shall be made and signed by the engineer or other competent person, and shall be countersigned and dated by the manager.

(b) If in the case of a new rope a test certificate as to the amount of its breaking load is not available, it shall not be used unless a portion thereof, not less than three metres in length, has been cut off and tested in a laboratory, institution or test house approved by the Central Government for the purpose.

(4) No winding rope which has been in use for more than three and half year shall be used for winding purposes :

Provided that where the Regional Inspector is satisfied that due to sparing use any such rope is in good condition even after the expiry of the said period, he may, by an order in writing and subject to such conditions as he may specify therein, allow the use of such rope for a longer period. Every application for permission to use a rope after the period of three and a half years aforesaid shall be accompanied by a copy of the entries, in respect of the rope, in the book kept for the purpose under sub-regulation (3), and also by a certificate as to the strength of the rope, obtained in the manner laid down in clause (b) of the sub-

regulation. The certificate aforesaid shall relate to a piece of the rope cut off not more than three months prior to the date of the application:

Provided further that where the Regional Inspector is of the opinion that any rope has become unsafe for use in a shaft before the expiry of the period of three and a half years aforesaid, he may, by an order in writing, prohibit the use of such rope for winding purposes. An appeal any such order may be preferred to the Chief Inspector.

(5)(a) No mode or type of capping shall be used, which fails to withstand a load of at least 10 times the maximum static load thereon.

(b) The cappel of a round rope shall not be attached to the rope by rivets passing through the rope.

(c) In those forms of capping, in which the wires at the end of the rope are bent back on the rope itself to form a cone, wedges formed by the lapping of soft iron wire shall be placed between the rope and that portion which is bent back. The length of the tapered portion of the socket shall be not less than 12 times the diameter of the rope.

(d) Where white metal is used in the capping of ropes, the tapered portion of the socket shall not be less than eight times the diameter of the rope.

(e) If white metal is used in the capping of ropes -

- (i) its melting point shall not exceed 300 degrees centigrade, and its temperature when poured into the socket shall not exceed 363 degree centigrade;
- (ii) in the length of rope which is to lie within the tapered part of the socket, the fibre core, if any, shall be cut and the wires shall be untwisted and thoroughly cleaned; and
- (iii) the socket shall be heated to a temperature of about 100 degrees centigrade before the white metal is poured into it.

(6) Except in the 'Koepe' system of winding, every rope shall be recapped once at least in every six months, or if necessary, at shorter intervals and also after every overwind. Before every such recapping, a length, including the capping, of at least two metres shall be cut off the rope. Each piece of rope so cut-off shall be opened and its internal condition examined. The operation shall be carried out under the supervision of the engineer or other competent person, who shall record the date and other particulars thereof (including the length of the rope remaining after recapping) in a bound paged book kept for the purpose and shall sign and date the same.

89. Suspension gear – (1) All parts of suspension gear in regular use shall unless otherwise permitted by the Chief Inspector, be renewed after a period of service of not more than ten years, and at shorter intervals, if necessary.

(2)(a) All cage chains in general use and all other parts of suspension gear between the rope and the cage or other means of conveyance, including the detaching-hook, shall be taken apart, cleaned and carefully examined as to wear and tear (where necessary by gouging) and for rust and cracks, once at least in every six months, or if necessary, as shorter intervals. The various parts shall be annealed or given other proper heat treatment before being refitted. :

Provided that in the case of such chains or gear manufactured from a steel which is not liable to deterioration necessitating annealing or heat treatment, the Chief Inspector may by an order in writing and subject to such conditions as he may specify therein, grant exemption from the carrying out of this operation;

b) Every detaching bell or plate used in connection a safety-hook shall be examined, and the opening therein checked by calipers or gauges, once at least in every 30 days.

(c) The operations and examination required under this sub-regulation shall be carried out by or under the supervision of the engineer or other competent person, who shall record the date and other particulars thereof in a bound paged book kept for the purpose, and shall sign and date the same.

90. Precautions after recapping, etc - After every installation or recapping of a rope and after every renewal or refitting of any suspension gear, the engineer or other competent person shall, after the cages or other means of conveyance fully loaded with materials have made five trips up and down the working portion of the shaft, examine the cappel and other parts of the suspension gear to see that they are in proper working order. A report of every such examination shall be recorded in the book kept under regulation 89(2), and shall be signed and dated by the persons making the examination.

91. Examination of winding equipment – (1) It shall be the duty of the engineer or other competent person to examine –

(a) Once at least in every 24 hours –

- (i) the attachment of the winding rope to the drum, the depth indicator, every part of the suspension gear in the shaft, including cages or other means of conveyance and their gates, and every external part of the winding apparatus, upon the proper working of which the safety of persons depends; and
- (ii) the brakes of the winding engines;

(b) Once at least in every seven days –

- (i) each winding rope, by passing the rope at a speed not exceeding one meter per second; and
- (ii) the external parts of the winding engine, the guides and the signalling arrangements fitted in a shaft or winze;

(c) Once at least in every 30 days, every winding rope, by passing the rope at a speed not exceeding 0.5 metre per second. For the purpose of this examination, the rope shall be cleaned of any entrusted dirt and grease at all places particularly liable to deterioration and at other places, not more than 30 metres apart throughout the length, and any reduction in the circumference of the rope and the superficial condition of the wires as to wear, corrosion, brittleness and fracture at every such place shall be noted; and

(d) Once at least in every 12 months, the winding engine as to the condition of its internal parts.

(2) A report of every such examination shall be recorded in a bound paged book kept for the purpose, and shall be signed and dated by the person who made the examination and countersigned and dated by the engineer, or where there is no duly qualified engineer, by the manger.

(3) If on any examination made as aforesaid, there is discovered any weakness or defect by which the safety of persons may be endangered, such weakness or defect shall be immediately reported in writing to the engineer or other competent person and to the manager; and until such weakness or defect is remedied the winding installation shall not be used.

92. Gates and fences – (1) At the tope of every shaft or winze and at every inset which is in use, there shall be provided suitably gates or fences which shall effectively close the openings into the shaft or winze at all times when a cage or other means of conveyance is not at the tope or the landing. Except with the permission of the Chief Inspector by an order in writing and subject to such conditions as he may specify therein, every such gate at the tope of a shaft shall be self-operating.

(2)(a) At every landing where it is necessary for persons to pass from one side of the shaft to the other, an adequate passby shall be provided for enabling them to do so without entering or crossing the shaft. Every passby so provided shall be not less than 1.8 metres high and 1.2 metres wide, and shall be kept clear of all obstructions.

(b) No person shall enter or cross, or be permitted to enter or cross the winding compartment of a shaft or winze except for the purpose of entering or leaving a cage or other means of conveyance or for undertaking an examination, repair or any other work therein; and no persons shall be allowed to work in any such space unless the cages or other means of conveyance, if any, have been stopped and adequate precautions have been taken for the protection of such person.

93. Duties of persons riding or working in shafts – (1) No person shall get on or off a cage or other means of conveyance after the same has been signalled to be set in motion or leave it until it has reached the appointed stopping place; nor shall any person ride on the top or edge of any cage or other means of conveyance except when engaged in an examination, repair or any other work in the shaft or winze.

(2) Every person, when at or about the top or bottom of a shaft or any inset, shall obey the lawful orders and directions of the banksman or bellman, as the case may be.

(3)(a) NO person shall carry out any examination, repair or other work in any shaft while winding operations are being carried on; and no winding shall be carried on or permitted while persons are engaged in such examination, repair or work, except where winding is necessary for the same.

(b) The person in immediately charge of any examination, repair or work in any shaft shall warn the banksman and the winding engineman that such examination, repair or work is about to be undertaken.

(c) Every person while engaged in any examination, repair or other work in a shaft shall be accompanied by at least one other person; and all such persons shall be provided with effective safety belts unless otherwise efficiently protected against the risk of falling.

(d) Every person engaged in trying out an examination, repair or other work in a shaft shall be protected by a suitable covering from objects falling from above. Every such person shall also be provided with a protective hat; and shall wear the same when so engaged.

94. General precautions – (1) No unauthorised person shall enter or be allowed, in a winding engine room.

(2) No adolescent or woman shall descend or ascend a shaft in a cage or other means of conveyance unless accompanied by one or more adult males.

## **CHAPTER-X : Transport of Men and Materials – Haulage**

95. Haulage roadways – The following provisions shall have effect with respect to every length of road or roadway in a mine where materials are transported in tubs by means of gravity or mechanical power, namely :

(1) Every such roadway shall –

- (a) be of adequate dimensions and, as far as practicable, shall be straight and of regular gradient; and
- (b) have tracks properly laid with rails of adequate section.

(2)(a) Pulleys, sheaves and rollers that alter the direction of a rope shall be securely fixed.

(b) No person shall guide or adjust a moving rope on to a drum, pulley, sheave or roller except with a lever or other proper appliance.

(3) Where haulage is effected by one or more ropes, there shall be provided and maintained -

- (a) at the top of every inclined plane, at least one stop-block or other effective contrivance to arrest tubs from running or moving out of control;
- (b) at least one run way switch or other effective contrivance below the first stop-block or other effective contrivance at a distance greater than the length of a set or train of tubs:

Provided that such distance shall not exceed the length of a set or train of tubs by more than 10 metres:

Provided further that where the Regional Inspector, by an order in writing so requires, the stop-block and the switch or other effective contrivance aforesaid shall be so intercoupled that they do not remain simultaneously ineffective:

(c) an attachment, behind an ascending tub or set or train of tubs, of a back-stay, drag or other suitable contrivance for preventing the tub, set or train of tubs running back. Where an endless rope or chain is used, the provisions of this clause shall be deemed to be satisfied if suitable automatic catches or other effective contrivance are provided at suitable intervals along the track to prevent the ascending tubs running back :

Provided that the Regional Inspector may, by an order in writing and subject to such conditions as he may specify therein, grant exemption from the operation of this clause on grounds that compliance with the provisions thereof is not reasonably practicable;

(d) safety hooks, jazz-rails or other suitable contrivances to prevent runaway in the forward direction;

(e) tub re-railers at intervals of not more than 250; and

(f) on every haulage roadway exceeding 30 metres in length, effective means of transmitting signal from every stopping place on the roadway to the place at which the machinery working the rope is operated. All signals shall be transmitted by mechanical or electrical means:

Provided that the Regional Inspector may, by an order in writing, require means of transmitting signals in the reverse direction also. If any doubt arises as to whether any means of transmitting signal is effective or not, it shall be referred to the Chief Inspector for decision.

(4)(a)(i) The following code of signals shall be used and strictly observed –

ONE RAP	..	STOP when in motion
TWO RAPS	..	LOWER or haul in slowly
THREE RAPS	..	START when at rest
FOUR RAPS	..	RAISE or haul out slowly

Any other signals shall be in addition to, and shall not interfere with, the foregoing.

Provided that the Chief Inspector may, by an order in writing an subject to such conditions as he may specify therein, permit the use of any code of signals other than that specified above.

(ii) A printed copy of the code of signals, including additional signals, if any, shall be posted prominently at the place in which the machinery that works the rope is operated and at all regular stopping places along the roadway.

(iii) No person, other than a competent persons or an official, shall give any signal.

(b) Where in any mine belowground, a system of haulage roadway (and conveyors, if any) extent to distance of more than 600 metres from the shaft or the entrance to the mine, efficient telephonic

communication shall be provided and maintained between the end of every such system and the bottom and top of the shaft or the entrance to the mine as the case may be :

Provided that where travelling is unduly arduous, the Regional Inspector may, by an order in writing, require the provision and maintenance of telephonic communication in any other case also.

(c) Where telephones or electrical signals are provided -

- (i) adequate precautions shall be taken to prevent signal and telephone wires coming into contact with other cables and electrical apparatus;
- (ii) signal wires shall be supported on insulators, and shall not be energised at more than 30 volts;
- (iii) contact makers shall be so constructed as to prevent accidental closing of the circuit; and
- (iv) in every gassy seam of the second or third degree], all signalling or telephonic communication circuit shall be constructed, installed, protected, operated and maintained in such a manner as be intrinsically safe.

(5) At places where telephone receivers are installed or where signals and safety contrivances are regularly operated, every person using the telephone or operating any such signal or safety contrivance shall be afforded adequate protection against tubs moving out of control.

(6)(a) Where any person is allotted to work or pass while the haulage is in motion, manholes for refuge shall be provided at intervals of not more than 10 metres:

Provided that where the gradient is less than 1 in 6 such manholes may be provided at intervals of not more than 20 metres.

(b) Manholes shall be not less than 1.8 metres in height and 1.2 metres in depth, and not less than 0.75 metres but not more than one metre in width:

Provided that the Regional Inspector may, by an order in writing and subject to such condition as he may specify therein, permit the use as manholes or cross-roadways other than haulage roadways, of dimensions larger than those aforesaid.

(c) Every manhole shall be kept clean and clear of obstruction, and white washed both inside and for a distance of not less than 0.3 metres around the aperture.

(d) As far as practicable, all manholes shall be provided on one side of the haulage roadway.

(e) In case where there are serious practical difficulties in providing manholes as specified in clauses (a) and (b), the Regional Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit manholes to be at greater intervals or of other dimensions.

(f) Except where haulage is effected by means of an endless rope or chain, whenever the haulage rope is in motion, every person on the haulage roadway shall take shelter in a manhole.

(7) The manager or assistant manager or underground manager shall, by an order in writing, in respect of every haulage road or roadway, fix the maximum number of tubs, according as to whether they are loaded or not loaded, that may be coupled together to run as a set or train. A notice specifying the number of tubs so fixed shall be posted prominently at the top and at all regular stopping places of the haulage road or roadway.

(8) At all places where tubs are coupled or uncoupled, there shall be a clear space of not less than one metre

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- (a) between, the tubs and one side of the roadway; and
- (b) where there are two or more tracks also between the adjacent tracks.

(9)(a) When any roadway or face is in direct line with a haulage track and persons may be exposed to danger from runaway tubs, a strong buffer or other effective contrivance to prevent such danger shall be provided and maintained.

(b) A stopblock or other effective contrivance shall be provided near the entrance of every tramming roadway branching off the main haulage road or roadway, and on every track which slopes towards a shaft or winze.

96. Travelling roadways – (1) Except when an exemption in writing has been granted by the Regional Inspector and subject to such conditions as he may specify therein, travelling roadways, separate from haulage roadways on which haulage is effected by mechanical means or gravity, shall be provided for persons to travel to and from their working places.

(2) Every such travelling roadway shall –

- (a) be not less than 1.8 metres high throughout;
- (b) where the inclination exceeds 30 degrees from the horizontal, be provided with suitable steps or ladders;
- (c) where the inclination exceeds 45 degrees from the horizontal, be provided, in addition to steps or ladders, with hand rails or ropes so as to ensure safe travel; and
- (d) where the inclination exceeds 60 degrees from the horizontal, be provided, in addition to the steps or ladders and rails or ropes, with suitable platforms at intervals not exceeding 10 metres measured along the slope.

(3) Except for purposes of inspection, examination or repair, every person other than an official of a haulage attendant shall travel by the travelling roadway or compartment.

(4) Where persons using a travelling roadway or compartment have to cross a conveyor or a haulage worked by mechanical means or gravity, a suitable cross-over or cross-under bridge or other suitable device approved in writing by the Regional Inspector shall be provided.

(5) No haulage shall be used for the general conveyance of persons except with the permission in writing of the Chief Inspector and subject to such conditions as he may specify therein.

97. Tubs and their movement – (1)(a) On every tub there shall be provided and maintained at each coupling end a strong buffer projecting beyond the end and so arranged that when two such tubs are in tandem, the gap between the innermost ends shall not be less than 20 centimeters.

(b) On every side-tipping tub in use, safety-catches shall be provided to prevent accidental tipping. No tub or set or train of tubs shall be set in motion unless all the safety catches are properly secured.

(c) The attachment between a rope or locomotive and a tub or set or train of tubs, and the attachment between any two tubs in a set or train, shall be of a type approved in writing by the Chief Inspector by a general or special order and so maintained as to obviate accidental disconnection.

(d) The state of every buffer and drawbar of every tub in use and of every safety-catch, coupling-chain and other attachment shall be examined once at least in every seven days, by a competent person appointed for the purpose. A report of every such examination shall be recorded in a bound paged book kept for the purpose, and shall be signed and dated by the person who made the examination.

(2)(a) When tubs are about to be moved, persons likely to be endangered shall be warned.



(b) Two or more tubs shall not be moved by hand in close succession but shall be coupled and moved together. Two tubs shall be deemed to be in close succession when the distance between them at any time in less than 10 metres.

(c) No person shall cause or permit a tub to run uncontrolled except with the written permission of the manager:

Provided that the Regional Inspector may, by an order in writing, prohibit the uncontrolled movement of tubs at any place if he is of the opinion that such movement is likely to cause danger.

(d) No person while taking a tub down a gradient exceeding 1 in 20, shall go in front of the tub; and in every case where conditions are such that a person cannot control the tub from behind, he shall not take the tub down unless sprags or other suitable contrivances are used to control it.

(e) Where required for use, a sufficient number of sprags of suitable material and dimensions shall be provided.

(f) Every tub while standing on a track having a gradient of more than 1 in 20, shall unless held effectively by brakes or securely coupled to a haulage rope or locomotive, be effectively blocked, chained or otherwise secured.

(g) Except where haulage is effected by means of an endless rope, the coupling and uncoupling to tubs shall as far as practicable, be done only when the tub or set of the tubs, and the rope if connected to the set is not in motion.

(h) As far as practicable tubs shall not be coupled or uncoupled on a gradient.

(i) Whenever it comes to the attention of a haulage attendant that a tube being hauled by a rope, chain, locomotive or other mechanical means has got derailed, he shall immediately cause the haulage to be stopped. The tube shall then be re-railed, or detached from the rope etc., before the haulage is started again.

(3) No person shall ride on any tub or haulage rope except with the written authority of the manager. A list of all persons so authorised shall be maintained.

98. Protection at loading chutes. – Every chute where tubes are loaded shall be provided with suitable gates for holding back the column of material.

99. Haulage engines and ropes – (1) Every haulage engine shall be provided with an effective brake.

(2) (a). No rope shall be used for purposes of haulage if it has any serious visible defect over any length.

(b) Every rope which is capped shall be recapped once at least in every six months, and if necessary, at shorter intervals, under the supervision of a competent person.

(c) For every haulage rope in use, a record of size, construction, quality, name of supplier, and dates of installation and of recapping, shall be kept in a bound paged book kept for the purpose, and all entries therein shall be made by the competent person who shall sign the same and date his signature.

100. Roadway Conveyors – (1) Every roadway conveyor shall be so installed that –

(a) between the conveyor and one side of the roadway, there is a travelling space from obstruction not less than one metre wide;

(b) the conveyor or any part thereof does not scrape against wooden props or supports;

(c) the anchoring of the return station of the conveyor is independent of the face or roadway support.

(2) Where the inclination of the conveyor is such as to give rise to danger from sliding objects or material suitable devices shall be used to provide adequate protection against such danger.

(3) On every length of roadway in which a conveyor is installed for transporting loads over a distance exceeding 30 metres, there shall be provided and maintained effective means of transmitting signals from every point on the length of the road to the place at which the machinery working the conveyor is operated:

Provided that the Regional Inspector may, by an order in writing, require means of transmitting signals in the reserve direction also.

(4) No belt conveyor shall be used in a mine belowground without the permission in writing of the Chief Inspector and subject to such conditions as he may specify therein.

101. Examination of haulage engines and track etc. – (1) It shall be the duty of a competent person to examine carefully -

- (a) once at least in every 24 hours, every haulage engine, brake-wheel, rope and other appliance in use; and
- (b) once at least in every seven days, every track where the haulage is effected by means of mechanical power of gravity, and every safety contrivance fitted thereon.

(2) A report of every such examination shall be recorded in a bound paged book kept for the purpose, and shall be signed and dated by the person who made the examination.

102. Examination of haulage and travelling roadways – It shall be the duty of the forman or other competent person to examine carefully, once at least in every seven days, the state of all haulage and travelling roads and roadways, including roadways leading to all the outlets of the mine which are in use. A report of every such examination shall be recorded in a bound paged book kept for the purpose, and shall be signed and dated by the person who made the examination.

103. Locomotives – (1) No locomotive shall be used belowground otherwise than in accordance with the permission in writing of the Chief Inspector and subject to such conditions as he may specify therein.

(2) No locomotive shall be used where the gradient of the track exceeds 1 in 15.

(3) No person other than the driver shall ride on any locomotive unless authorised in writing to do so by the manager.

(4) Except during shunting operations, the locomotive shall lead the tubs or set or train of tubs.

104. Movement of railway wagons – (1) No adolescent shall be employed in moving railway wagons.

(2) The movement of railway wagons shall be carried on under the supervision of a competent male person who shall himself control the brake.

(3) Before wagons are moved, persons likely to be endangered shall be warned by the competent persons appointed under sub-regulation (2).

(4) No person shall move or attempt to move a wagon by pushing at the buffer, or by pulling from in front.

(5) Where two or more wagons are moved simultaneously, the wagons shall be coupled together, and the number shall not exceed the number which can be effectively controlled; they shall be moved only by pushing from the sides or from behind the last wagon.

- (6) No locomotive or wagon shall be moved when the natural light is insufficient, unless the approaching end is distinguished by a suitable light or is accompanied by a person carrying a lamp.
- (7) No person, other than the competent person referred to in-sub-regulation (2), shall pass immediately in front of wagons moving under bins or screens, nor between moving wagons and the under-structure of the bins or screens.
- (8) No person shall be upon the buffer of a locomotive or wagon in motion unless there is a secure handhold, or stand thereon unless there is also a secure footplace. No person shall pass over the coupling between any two wagons while the wagons are moving.
- (9) No person shall cross a line of rails by crawling or passing underneath a train or wagon, nor shall a person sit or sleep underneath a wagon.
- (10) Wherever railway wagons are specially placed so as to afford a thoroughfare, such thoroughfare shall be not less than five metres in width.
- (11) No material shall be placed or dumped within 1.2 metres from either side of a track of rails.

105. Fencings and gates – (1) Where any haulage road or tramline passes over a public road, suitable gates shall be provided to prevent danger to public from a moving tubs, sets or trains of tubs or locomotive. Every such gate shall be fitted with a danger signal, and when the natural light is insufficient, also with warning lamps.

(2) Where occupied buildings are situated within 15 metres of any haulage road or tramline, a substantial fence shall be provided and maintained between such buildings and the haulage road or tramline.

## **CHAPTER-XI : Mine Workings**

106. Opencast workings – In opencast workings, the following precautions shall be observed, namely: -

(1) In alluvial soil, morum gravel, clay, debris or other similar ground -

(a)(i) the sides shall be sloped at an angle of safety not exceeding 45 degrees from the horizontal or such other angle as the Regional Inspector may permit by an order in writing and subject to such conditions as he may specify therein; or

(ii) the sides shall be kept benched and the height of any bench shall not exceed 1.5 metres and the breadth thereof shall not be less than the height:

Provided that the Regional Inspector may, by an order in writing and subject to such conditions as he may specify therein, exempt from the operation of this clause any working in the case of which special difficulties exist, which in his opinion make compliance with the provisions thereof not reasonably practicable; and

(b) where any pillar is left 'in situ' for the purpose of measurement, its height shall not exceed 2.5 metres; and where the height of such pillar exceeds 1.25 metres, the base of the pillar shall not be less than 1.6 metres in diameter.

(2) (a) Where 'float' or other similar deposit is worked by manual means on a sloping face, the face shall be benched and the sides shall be sloped at an angle of not more than 60 degrees from the horizontal. The height of any bench shall not exceed six metres and the breadth thereof shall not be less than the height:

Provided that where the ore-body consists of comparatively hard and compact rock, the Regional Inspector may, by an order in writing subject to such conditions as he may specify therein, permit the height of the bench to be increased up to 7.5 metres while its width is not less than six metres :

Provided further that in case of a mine or part where special difficulties exist, the Chief Inspector may, by an order in writing subject to such conditions as he may specify therein, relax the provisions of this sub-regulation.

(b) Where in any mine or part it is proposed to work by a system of deep-hole blasting and/or with the help of heavy machinery for its digging, excavation and removal in such manner as would not permit of compliance with the requirement of sub-regulation (1) the owner, agent or manager shall, not less than 60 days before starting such work, give notice in writing of the method of working to the Chief Inspector and the Regional Inspector; and no such work shall be commenced or carried out except in accordance with such conditions as the Chief Inspector may specify by an order in writing. Every such notice shall be in duplicate, and shall give the details of the method of working including the precautions that are proposed to be taken against the danger from falls of sides and material.

(3) In an excavation in any hard and compact ground or in prospecting trenches or pits, the sides shall be adequately benched, sloped or secured so as to prevent danger from fall of sides.

(4) No tree, loose stone or debris shall unless otherwise permitted in writing by the Chief Inspector be allowed to remain within a distance of three metres from the edge or side of the excavation.

(5) No person shall undercut any face or side or cause or permit such undercutting as to cause any overhanging.

107 Underground workings. – In every mine worked by a system of workings below ground, the following provisions shall have effect, namely –

(1) Unless otherwise permitted by the Regional Inspector by an order in writing and subject to such condition as he may specify therein, the height of every main drive shall be not less than 1.8 metres.

(2) The dimensions of pillars or blocks formed in any vein, lode, reef or mineral bed or deposit shall be such as to ensure stability of the workings during the development and stoping stages and between such stages.

[(3) No extraction or splitting or reduction of pillars or blocks of minerals shall be commenced, conducted or carried out except with the prior permission in writing of the Chief Inspector and in accordance with such conditions as he may specify therein. An application for such permission shall be accompanied by an up-to-date plan of the area where the pillars or blocks of mineral are proposed to be extracted or reduced, showing the proposed extent of extraction or reduction, the manner in which such extraction or reduction is proposed to be carried out, the thickness and other characteristics of the mineral deposit, the rate and direction of general dip and of the pitch of the vein, the nature of hangwall, and footwall, the stoping width, the depth of the workings, and such other particulars as the Chief Inspector may require. A copy of the application and the plan shall simultaneously be sent to the Regional Inspector.

(3-A) The operations of extraction, splitting and reduction of pillars or blocks of mineral shall be commenced, conducted or carried out in such a manner as to prevent, as far as possible, the extension of a collapse in the stoped-out area over-riding the pillars or blocks of minerals that have not been extracted].

(4) Nothing in sub-regulation (3) shall prevent the splitting or reduction of any pillar or block of mineral bed or deposit where, in the opinion of the manager such work is necessary for haulage, ventilation, drainage or any other purpose necessary for the proper working of the mine, if 14 days' previous notice in writing of the intention to commence such work has been given to the Regional Inspector. Every such notice shall be accompanied by an offset plan showing details of the operation. If in the opinion of the

Regional Inspector such work is likely to endanger the stability of the workings, he may, by an order in writing, require the completion, before commencing such drivage or enlargement, of such protective works as he may specify therein.

(5) Proper provision shall be made to prevent the premature collapse of workings; and adequate steps shall be taken to isolate, control or remedy any such collapse which may occur.

108. Powers of Inspectors – If in any mine or part thereof, it appears to the Regional Inspector that the provisions of regulations 106 and 107 or of any order issued under any of these regulations have not been complied with, he may give notice in writing to the owner, agent or manager requiring him to take such protective measures, within such time as he may specify in the notice. In case of non-compliance with the requirements of the notice, the Regional Inspector may, by an order in writing, prohibit until the requirements specified in the notice are complied with to his satisfaction, the employment of any person other than those required for complying with the said requirements, in the part or parts of the mine in which protective measures are required to be taken.

1[108A. Pointing out contraventions during inspections – (1) If the Chief Inspector or an Inspector, during his inspection of any mine, finds or comes to know of any contravention of any provisions of Act or the regulations, rules, bylaws or orders made thereunder, he shall enter such contravention in an inter leafed paged and bound register kept for the purpose at the mine, in Form VI and shall also point out such contravention to the owner, agent or manager, it present on the spot. The Chief Inspector or the Inspector making the entry in the Register aforesaid shall duly sign such entries with date, and take a carbon copy of the entries for his record:

Provided that the Chief Inspector or the Inspector need not enter such contraventions which require confirmation after a survey or other further examination and he may subsequently intimate the owner, agent or manager, specifying the contraventions, if confirmed, and also any other contraventions which were, by inadvertence, not entered in the register aforesaid.

(2) The owner agent or manager shall check the aforesaid register once every day and countersign each entry therein. He shall et copies of such entries made out within three days of the ate of entry and display one such copy on the notice board of the mine for a period of at least fifteen days. When so required, the owner, agent or manager shall also supply copies of the entries to the registered trade unions of workers in the mine and to the State Government concerned.

(3) The owner, agent or manager of the mine shall return one copy, within a period not exceeding fifteen days from the date of the entry, to the Chief Inspector or the Inspector who made the entry with remarks thereon showing the action taken to remedy the contravention and the date on which such action was taken.

109. Workings under railways and roads, etc. – (1) No workings shall be made and no work of extraction or reduction of pillars shall be conducted at, or extended to, any point within 45 metres of any railway, or of any public works in respect of which this regulation is applicable by reason of any general or special order of the Central Government, or of any public road or building, or of other permanent structure not belonging to the owner of the mine, without the prior permission in writing of the Chief Inspector and subject to such conditions as he may specify therein.

(2) Every application for permission under sub-regulation (1) shall specify the position of the workings of the mine in relation to the railway or public road or works or building or structure concerned, the manner in which it is proposed to carry out the intended operations, and the limits to which it is proposed to carry out the said operations; and shall be accompanied by two copies of a plan showing the existing and the intended mining operations in so far as they affect the railway or public road or works or building or structure concerned. A copy of the application shall also be sent in the case of a railway, to the railway

administration concerned; and in the case of any public works as aforesaid, in such authority as the Central Government may by general or special order direct.

(3) Notwithstanding anything contained in the regulations, the stability of such railway, road, works, building or structure shall not be endangered until it has been dismantled, diverted or vacated, as the case may be.

(4) Where the stability of such railway, road, works, buildings or structure has been endangered due to any mining operations, the Chief Inspector may, by an order, in writing, require the owner to construct in the mine belowground or on the surface such protective works within such time as he may specify in the order.

110. Protective works before a mine is closed – [(1) The Chief Inspector may, by an order in writing, require the owner of any mine to which regulation 6 applies, to construct in the mine belowground or on the surface such protective works within such time as he may specify therein.

(2) If the owner fails to construct such protective works within the time specified in the order, the Chief Inspector may get the works executed by any other agency, and the cost thereof, as certified by the Chief Inspector shall be defrayed by the owner of the mine and recoverable from him as an arrear of land revenue.

(3) Until the protective works have been constructed to the satisfaction of the Chief Inspector, the means of entering the mine at not less than two entrances shall be kept intact and in working order.

111. Working near mine boundaries – 2[(1) The owner, agent or manager of every mine shall fix boundaries of the mine. Notwithstanding anything contained in sub-regulation (2), the boundaries shall not be changed except with the permission of the Chief Inspector in writing and subject to such conditions as he may specify therein].

3[(2)] No working shall be made within a distance of 7.5 metres of the boundary of any mine and, in case of a disputed boundary, no working shall be made within a distance of 7.5 metres of the boundary claimed by the owner of an adjacent mine until such time as a binding agreement has been reached as to the correct boundary or the question has been finally determined by a court of law:

1[Provided further that, where the workings of any 2[mine], for any reason, are extended or get extended within any shorter distance than what is laid down herein above, the Chief Inspector may, by an order in writing, require the owner to construct such protective works within such time as he may specify in the order].

3[(3)] Notwithstanding anything contained in sub-regulation (1), the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit the workings of any mine or part thereof to extend within any shorter distance than 7.5 metres aforesaid, or may require that the said working shall not extend further than a specified distance, not exceeding 60 metres, of such boundary.

112. Support of workings. – (1) The roof or back, hanging wall, footwall and sides of every roadway and working place, including airways and travelling roadways to second outlets, shall be made and kept secure.

(2)(a) If the Regional Inspector is of the opinion with respect to any mine or part thereof that systematic support for the roof or back hanging wall, footwall and sides, or either, or them, ought to be provided and maintained for the purpose of securing the safety of persons employed therein, he may serve upon the owner, agent or manager an order in writing specifying the mine or part, stating that he is of opinion aforesaid and requiring the provision and maintenance of support in accordance with a code of Timbering Rules which he may specify in the order.

(b)The manager shall hand over copies of the code of Timbering Rules to the assistant manager, the underground manager and to all other supervising officials concerned, and shall also post such copies at conspicuous places in the mine.

- (c) The manager, assistant manager, underground manager and such supervising officials shall be responsible for securing effective compliance with the provisions of the Timbering Rules, and the mine or part thereof shall not be worked in contravention thereof.

113. Setting of supports. – (1) Every piece of timber used as a support shall be set securely and on a secure foundation and whenever it becomes loose or broken shall, as soon as possible, be tightened or replaced.

- (3) Every crib set or pigstye used as a support shall be well built on a secure foundation, and shall be made and kept tight. Only rectangular pieces of material shall be used as members of a crib set or pigstye; so however that in case of timber it shall be sufficient to joggle two opposite sides to provide flat surfaces.
- (4) The sides of every pack used for the purpose of support shall be well built on secure foundation. The pack shall be filled with debris or other suitable incombustible material, if so required by the Regional Inspector as shall be made as tight as practicable over its whole area.
- (5) Where sand or other material is stowed for the purpose of support, it shall be packed tight.
- (6) Except where it is no longer necessary for purposes of support, any support dislodged by or removed for any operation shall be replaced with the least possible delay.
- (7) In every place wherein a fall of ground involving the displacement or breakage of supports has occurred, no work of clearing the fall or any part thereof shall be undertaken until the newly exposed roof or back hanging wall, footwall or side has been examined and made safe- if necessary, by temporary supports.

114. Steep workings – (1) In workings having an inclination of 30 degrees or more from the horizontal adequate precautions shall be taken to prevent danger to persons from falling or rolling of timber, tools or other appliances or material.

(2) No person shall work or be permitted to work at any place having an inclination of 45 degrees or more from the horizontal, where he is likely to slip or overbalance, unless he is secured by a safety belt or life line or is otherwise safeguarded.

115. Fencing and gates – (1)(a) Unless otherwise permitted by the Chief Inspector by an order in writing and subject to such conditions as he may specify the top of every opencast working shall be kept securely fenced.

(b) Where an excavation which has been formed as a result of any mining operation, extends within a distance of 15 metres from a public road or any building, substantial fencing shall be erected and maintained around the excavation.

(c) Where as a result of mining operations, a subsidence of the surface has taken place or is likely to take place and persons are likely to be endangered thereby, the owner, agent or manager shall keep the entire surface area securely and effectively fenced.

(2) Every entrance to a shaft, winze, ore-pass, chute sump, store or other dangerous place shall be provided with an efficient fence, barrier or gate, so designed and constructed as to effectively prevent any person from entering or falling therein.

(3) Where a shaft, winze rise, chute, ore-pass or stope leads directly into a working place or travelling roadway, such place or roadway and any working place situated on its dip side, shall be securely guarded or otherwise protected as to prevent danger to persons from falling materials.

(4) Every entrance from a roadway in a mine to a part of the mine which, for the time being, is neither being worked nor being used for any purpose, by reason of any cause whatsoever, shall be provided with a fence, barrier or gate so designed and constructed as to prevent any person from inadvertently entering that part of the mine.

(5) (a) Shaft and opencast workings temporarily or permanently out of use and any place in or about an excavation which is dangerous shall be completely filled in or kept securely fenced:

Provided that if in the opinion of the Regional Inspector, any disused trench, pit or other excavation is dangerous, he may, by an order in writing, require the same to be filled in to the level of the adjacent ground.

(b) Before a mine is abandoned or the working thereof discontinued, the owner, agent or manager shall cause the top or entrance of every shaft, incline or other opening into the mine to be fenced by a structure of a permanent character sufficient effectively to prevent persons falling into or entering the same.

116. Examination by mining mate – (1) Every place in a mine, whether belowground or in opencast working including travelling roadways and landings, where work is carried on or where persons are stationed or required to pass shall be placed under the charge of a mining mate or other competent person.

(2) The mine or district assigned to a mining mate or other competent person shall not be of such a size, nor shall any additional duties other than his duties under the regulations be such, as to be likely to prevent him from carrying out in a thorough manner the duties prescribed for him under the regulations. If any doubt arises as to the foregoing, it shall be referred to the Chief Inspector for decision.

(3)(a) At the entrance to every mine or district, one or more stations shall be fixed by the manager; and except in the case of a mine working in a continuous succession of shifts no person other than the persons making the examination under clause (b) or an official shall pass beyond any such station until all the roadways and working places to which such persons are required to have access, have been examined by the competent person in charge of the mine or district and found to be satisfactorily ventilated and in safe condition. Every such station shall be legibly marked 'STATION' and shall be of such a size as to accommodate all the persons employed in the district in any one shift.

(d) The mining mate or other competent person accompanied by such assistants as may be required shall, within two hours before the connection of work in a shift, inspect every part of the mine or district assigned to him, in which persons have to work or pass during the shift and all roadways and working places where work is temporarily stopped and shall ascertain the condition thereof as regards ventilation, sanitation, the presence of gases, the state of the roof and sides, presence of spontaneous heating and other fire risks, and generally so far as the safety of the persons is concerned.

Provided that in the case of a mine or part to which regulation 142 applies, such inspection shall be made with an approved flame safety lamp; and that in the case of a mine or part to which regulation 123(1) applies, a cage containing suitable birds or other means of detecting carbon monoxide gas approved by the Chief Inspector shall be carried during every such inspection.

(e) Similar inspections shall be made once at least in every four hours during which the shift continues, of all the roadways and other working places to which persons engaged in the mine or district are required to have access;

(f) The mining mate or other competent person shall, at the completion of his shift, record without delay the result of his inspections in a bound paged book kept for the purpose. Every such report shall be a full and accurate report of the inspections and shall include the following.

- (i) the details referred to in clause (b);
- (ii) the number of persons working under his charge;
- (iii) such instructions for the purposes of securing the safety of the persons as he may have given during his shift; and
- (iv) the date and time of the inspections, the signature of the mining mate or other competent person, and the date and time when the report was written.



(g) In case of a mine where any other system of examination of working places has been in force, the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit such a system to be continued in lieu of the system of examination laid down in this sub-regulation.

(12) In the case of a shaft in the course of being sunk, the competent person or chargeman shall –

(a) have entire charge of the shaft bottom and shall, in his shift, remain in the shaft while persons are at work at the bottom of the shaft. He shall be the last person to ascend the shaft at the end of the shift and if his shift is succeeded immediately by another shift, he shall not leave the bottom of the shaft until after the descent of the chargeman of the succeeding shaft; and

(b) after each round of shots, and at the beginning of every shift, and after every cessation of work in the shaft for a period exceeding two hours, shall examine the sides of the shaft and remove all loose pieces before persons are allowed to descend.

114. Avoidance of dangers – (1) If at any time it is found by a competent person in charge of a mine or district, that by reason of any cause whatsoever, the mine or district is dangerous, he shall immediately withdraw all persons from the mine or district; and the mine or district shall be fenced off so as to prevent persons inadvertently entering therein.

(2) The competent person shall also immediately inform the manager or under-manager or assistant manager about the danger, and shall record the fact in the book kept under sub-regulation (3).

(3) The manager or assistant manager or underground manager shall make, or cause to be made by a competent person, a careful examination of the mine or district; and no person shall, except in so far as is necessary for enquiring into the cause of the danger or for the removal thereof or for exploration, be re-admitted into the mine or district until the mine or district is reported to be safe. A report of every such examination shall be recorded without delay in a bound paged book kept for the purpose and shall be signed and dated by the person who made the examination.

(4) If the work of removing the danger is suspended before the danger is removed, the mine or district shall be securely fenced off effectively to prevent persons entering therein during the period of suspension.

(13) Notwithstanding anything contained in these regulations –

(a) where the danger arises from the presence of inflammable or noxious gas, the provisions of regulation 141 shall apply; and

(b) where the appearance in any part of a mine of smoke or other sign indicates that a fire or spontaneous heating has or may have broken out the provisions of regulation 120 shall apply.

118. General precautions – (1) Where several persons are working together in any place, one of them shall be placed in charge. No person shall be so appointed unless he is 21 years of age and has had not less than three years' experience in the workings of a mine.

(2) No person shall work in any place other than his authorised working place.

(3) Every person shall carefully examine his working place before commencing work and also at intervals during the shift. If any dangerous conditions is observed, he shall cease all work at that place and shall either take immediate steps to remove such danger or inform an official or the competent person in charge of the mine or district. Where several persons are working together and one of them is in charge, the examination required by this sub-regulation shall be made by the person in charge.

(4) No person shall work or travel on any ledge or footpath less than 1.5 metres wide, from which he will be likely to fall more than 1.8 metres, unless he is protected by guard rails, fence or rope suitably fixed and sufficiently strong to prevent him from falling.

(5) (a) No person shall carry or be permitted to carry any load along a road or footpath having an inclination of 30 degrees or more from the horizontal.

(b) Every road or footpath, along which loads are carried by human agency, shall comply with the following requirements -

- (i) its breadth shall not be less than one metre; and
- (ii) at every place where the inclination exceeds 15 degrees from the horizontal, level steps shall be provided such that the vertical height of every step does not exceed 0.20 metre and the distance from the edge to the back is not less than 0.35 metre.

Explanation – Gang-planks used for loading purposes shall not be deemed to be part of a footpath for the purposes of this sub-regulation, provided that every gang-plank shall be so inclined or constructed as to give a secure foot-hold.

(6) No person shall be employed to lift, carry or move a load so heavy as is likely to cause bodily injury or injury to health of that person. In case of any doubt as to whether risk of bodily injury or injury to health is involved, it shall be referred to the Chief Inspector for decision.

(8) Every person shall ensure that tools, wood, stones, or other articles are not put down or allowed to remain, in or near a shaft, winze or opening into a stope where work is going on, in such position as may result in their falling into the shaft, winze, or stope, as the case may be.

(8) No person shall cast any material down any chute, pass or stope or other place until he has assured himself that no person is in the way.

(9) No person shall work or be permitted to work alone in any remote part of a mine where, in any accident occurred he would not soon be discovered or assisted.

(10) No inexperienced person shall be employed in the mine for any work whereby he or other persons can be seriously endangered, except under the supervision and guidance of an experienced person.

## **CHAPTER XII – Precautions against Dangers from Fire, Dust, Gas and Water**

119. Precautions against Fire – (1) (a) No oil, grease, canvas or other inflammable material shall be stored in any mine except in a fire-proof receptacle. Greasy or oily waste in workings belowground, shall be regularly removed to the surface.

(b) No person shall place or throw, or cause or permit to be placed or thrown, any naked light or lamp or ‘cheesa stick’ or kai-piece’ on or near any timber, wooden structure or other combustible material.

© Where explosives are used in blasting any timber forming part of stulls, sets and chutes sufficient water shall be applied to the timber both before and after firing a shot.

(2) (a) All surface structures and supports within a horizontal distance of 10 metres from all entrances to a mine shall be of incombustible material :

Provided that this clause shall not apply to temporary structures, supports and coverings at the top of a shaft or winze which is in the course of being sunk an to the small lid of a shaft-covering operated by the rope cappel.

- (b) Dead leaves or dry vegetation shall not be allowed to accumulate or remain, and combustible materials other than material required for use within a period of 24 hours, and inflammable materials, shall not be stored within a distance of 15 metres from any entrance to a mine, which is not effectively sealed off from the workings belowground.
- (c) No person shall light a fire or permit a fire to be lighted on the surface within a distance of 15 metres from any entrance to a mine, except by an order I writing of the manager and only for a special purpose specified in such order. All such orders shall be recorded in a bound paged book kept for the purpose:

Provided that this clause shall not apply to boilers other than vertical boilers.

- (3) (a) Except with the previous permission in writing of the Regional Inspector and subject to such conditions as he may specify therein, no timber or other combustible material shall be used I the construction of or in connection with, any shaft lining or any room housing any machinery or apparatus belowsround.
- (b) Wood cuttings shall not be left in any working belowgroud, but shall be removed to the surface at the end of every shift.

©No person shall light a fire or permit a fire to be lighted in any workings belowground :

Provided that –

- (i) in the case of a mine to which regulation 142 does not apply, flame or electric welding or repairing apparatus may be used belowground if permitted by a order in writing of the manager or assistant manager or underground manager. Every such order shall specify person who shall be in charge of the apparatus; and it shall be the duty of such person to bring the apparatus back to the surface when no longer required belowsround; and
- (ii) in the case of a mine to where the provisions of regulation 142 apply, a flame or electric welding or repairing apparatus may be used belowground if prior permission in writing has been obtained from the Regional Inspector and subject to such conditions as he may specify therein.
- (d) No person shall leave a portable light or lamp belowground unless he has placed it in charge of some other person remaining therein.
- (e) At the end of a shift, unless the mine is worked by a continuous succession of shifts, after all persons have left the mine, all lights shall be extinguished and all power cut off :

Provided that nothing in this clause shall be deemed to prohibit the running of a mechanical ventilator or auxiliary fan belowground after the shift is over.

- (f) Proper provision shall be made to prevent an outbreak of fire or spontaneous heating belowground or the spread of fire to the mine from any adjoining mine; and adequate steps shall be taken to control or isolate any such fire or heating that may occur. Where in the opinion of the Regional Inspector the provisions of this clause have not been complied with or the steps so taken are inadequate, he may, by an order in writing, require such additional precautions or steps to be taken within such time as he may specify therein. If any such order is not complied with within the specified period, the Regional

Inspector may prohibit until the order has been complied with, the employment in the mine or part, of any person whose employment is not, in his opinion, necessary for the purpose of complying with the order.

120. Precautions after a fire has broken out – (1) (a) On the appearance in any part of a mine of smoke or other signs indicating that a fire or spontaneous heating has or may have broken out, all persons other than those whose presence in the mine is deemed necessary for dealing with the fire or heating shall be immediately withdrawn from the mine. No person, other than those required for dealing with or sealing off the fire or heating, shall be admitted in the mine until the fire or heating has been extinguished or effectively sealed off and an examination has been made by the manager or by the assistant manager or underground manager and the mine has been declared to be safe. A report of every such examination shall be recorded in a bound paged book kept for the purpose and shall be signed and dated by the person making the examination :

Provided that the Regional Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit the employment in the mine, of persons other than those required to deal with the fire or heating.

(b) The examination required by clause (a) shall be made with a cage contain in suitable birds or other means of detecting carbon monoxide gas approved by the Chief Inspector.

(2) During the whole time that any work of dealing with or sealing off a fire or heating belowground is in progress –

- (a) a competent person shall be present on the spot throughout.
- (b) There shall be available, at or near the place, two smoke helmets or other suitable apparatus for use in emergency; and \
- (c) A cage containing suitable birds or other means of detecting carbon monoxide gas approved by the Chief Inspector shall be kept at all places where persons are employed.

121. Equipment for fire-fighting – (1) a sufficient supply of sand or incombustible dust or sufficient portable fire extinguishers shall be provided at every entrance to a mine, at every landing and the bottom of every shaft or winze in use, at every engine room and at every other place where timber, canvas, grease, oil or other inflammable material is stored.

(2) At every mine, the following provisions shall be made for dealing with any fire or heating belowground –

- (a) A sufficient supply of sand or incombustible dust or sufficient portable fire extinguishers shall be kept at suitable places at the entrance to every district; and
- (b) In every mine employing 100 persons or more belowground on any one day in that of the previous year –
  - (i) where pipes containing water under pressure are available, an adequate number of hose-pipes, not more than 120 metres apart, shall be provided on such pipes, Hose-pipes not less than 60 metres in length and the necessary fittings shall be provided.
  - (ii) Portable water tanks fitted with hand pressure pumps and hose-pipes not less than 60 metres in length and the necessary fittings shall be provided.

(3)(a) Soda acid type extinguishers or water shall not be used for fighting oil or electrical fires.

(b) Foam type extinguishers shall not be used for fighting electrical fires.

(c) Fire extinguishers containing chemicals which are liable, when operated, or give off poisonous or noxious gases, shall not be provided or used belowground :

Provided that nothing in this clause shall be deemed to prohibit the use belowground of fire extinguishers giving off carbon dioxide when operated.

(9) A competent person shall, once at least in every three months, examine every fire -extinguisher so provided, and shall discharge and refill it as often as may be necessary to ensure that it is in proper working order. A report of every such examination or refilling shall be kept in a bound paged book kept for the purpose, and shall be signed and dated by the person making the examination or refilling.

122. Apparatus for testing for Carbon Monoxide – In every mine to which regulation 123 (1) and 142 apply there shall be kept at the mine, constantly available for use, two or more suitable birds or other means of detecting carbon monoxide gas approved by the Chief Inspector :

Provided that the Regional Inspector may, by an order in writing, require compliance with this regulation in case of any other mine also.

123. Precautions when a fire exists belowground . – (1) In every mine in which a fire of spontaneous heating exists in workings belowground (whether such fire has been isolated by means of suitable seals or not), no work whatsoever shall be done in any part or section adjacent to the part or section on fire or believed to be on fire, except with the permission in writing of the Chief Inspector and subject to such conditions as he may specify therein.

(2) In every mine to which sub-regulation (1) and regulation 142 apply, arrangements shall be made, once at least in every 30 days, to ascertain the atmospheric conditions behind the seals of an area of old workings or a fire or spontaneous heating unless such seals are capable of resisting the force of an explosion :

Provided that the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, exempt any mine or part thereof from the operation of this sub-regulation where in his opinion special difficulties exist which make compliance with provisions thereof not reasonably practicable.

(4) (a) Every seal erected to isolate or control a fire or spontaneous heating belowground shall be numbered, and shall be of adequate strength and shall be so maintained as to prevent any leakage of air or gas through it. Where water is likely to accumulate behind any such stopping, there shall be provided in the stopping a suitable pipe or other device to drain away the water without permitting any leakage of air or gas etc.

(b) where in any mine or part thereof the provisions of clause (a) have not been complied with or where in the opinion of the Regional Inspector the steps so taken are inadequate, he may give notice in writing to the owner, agent or manager requiring him to take such protective measures, within such time, as he may specify therein. In case of non-compliance with the requirements of the notice, the Regional Inspector may, by an order in writing, prohibit until the requirements of the notice have been complied with to his satisfaction, the employment in the mine or part, of any person whose employment is not, in his opinion, necessary for the purpose of complying with the requirements aforesaid.

(4) A competent person shall, once at least in every seven days, inspect all seals erected to isolate or control a fire or spontaneous heating belowground. During every such inspection, he shall ascertain the general condition of every seal, check it for leakage and presence of gas and ascertain the temperature and humidity of the atmosphere outside the seal. For every seal, he shall place his signature, with date, on a check-board provided for the purpose at a suitable position on the seal; and this record shall be maintained for a period of not less than three months. A report of every such inspection shall also be recorded in a bound pagged book kept for the purpose and shall be signed and dated by the person making the inspection :

Provided that the Regional Inspector may, by an order in writing, require such inspection to be made at such shorter intervals as he may specify therein.

1124. Precautions against dust. – (1) The owner, agent or manager of every mine shall take such steps as are necessary for the minimising of emissions of dust and for the suppression of dust which enters the air at any work place belowground or on surface and for ensuring that the exposure of workers to respirable dust is limited to an extent that is reasonably practicable but in any case not exceeding the limits that are harmful to the health of persons.

(2) For the purpose of this regulation, a place shall not be deemed to be in a harmless state for person to work or pass or be therein, if the 8 hours time – weighted average concentration of airborne respirable dust –

- (i) in milligrams per cubic metre of air sampled by a gravimetric dust sampler of a type approved by and determined in accordance with the procedure as specified by the Chief Inspector by a general or special order, exceeds five in case of manganese ore and the value arrived at by dividing the figures of fifteen with the percentage of free respirable silica present in other cases; or
- (ii) in case of respirable asbestos fibres, exceeds two fibres per millilitre of air sampled by an open membrane filter and measured by a phase contrast optical microscope of a type approved by and in accordance with the procedure as specified by the Chief Inspector or by a general or special order.

Explanation – For the purpose of this regulation, the term “respirable asbestos fibre” means any fibrous form of mineral silicates of chrysolite, actinolite, amosite, anthophyllite, crocidolite, tremolite or any admixture thereof with a length of greater than 5 micrometres and a diameter of less than 3 micrometres and a length to – diameter ratio greater than three is to one.

(3) (a) The owner, agent or manager of every mine shall, within six months of the coming into force of the Metalliferous Mines (Amendment) Regulations, 1988 and once at least every six months thereafter or whenever the Regional Inspector so requires by an order in writing, cause the air at every work place where airborne dust is generated to be sampled and the concentration of respirable dust therein determined :

Provided that, if any measurement at any workplace shows the concentration in excess of fifty percent or seventy five percent of the allowable concentration as specified in sub-regulation(2) (hereinafter referred to as ‘permissible limit’) the subsequent measurements shall be carried on at intervals not exceeding three months or one month respectively :

Provided further that, such measurements shall also be carried on immediately upon the commissioning of any plant, equipment or machinery or upon the introduction of any new work practice or upon any alteration therein that is likely to bring about any substantial change in the level of airborne respirable dust.

(b) The location, frequency, timing, duration and pattern of sampling shall be such that the samples drawn are, as far as practicable, truly representative of the levels of dust exposure of work persons, and the sampling shall include –

- (i) 'static monitoring' to identify sources of dust emission and levels of dust concentration in working environment ; and
- (ii) 'personal monitoring' of air reaching the breathing zone of work persons.

The sampling shall be duly supplemented by short-term sampling during peak-emissions.

(c) Samples shall be taken –

- (i) by a person who has been specially trained for the purpose; and
  - (ii) by the sampling equipment and accessories that have been checked to ensure correct maintenance and efficient operation thereof and examined, tested and calibrated on a date which is not earlier than one year.
- (d) Respirable dust content of the samples and quartz content shall be determined as soon as practicable at a properly equipped laboratory approved in writing by the Chief Inspector in that behalf.
- (e) All results of measurements of airborne respirable dust and all other relevant particulars shall be systematically recorded within fourteen days of the date of collection of samples, in a bound paged book kept for the purpose. Every entry in the book aforesaid shall be countersigned and dated by the manager within twenty four hours after such recording.

(4) When the dust monitoring results have established that the permissible limit of dust concentrations being exceeded at any place, the relevant operation or operations causing excessive dust shall cease. The operation or operations shall not be resumed and allowed to be carried on until improvements have been made in the prevention and suppression of dust and fresh sampling carried out immediately on resumption of the said operation or operations has established that such improvements have reduced the dust concentration below the 'permissible limit' :

Provided that if the dust prevention and suppression device of any machinery or equipment fails to operate efficiently, the operation of the said machinery or equipment shall likewise cease and shall not be resumed until the defect therein has been rectified:

Provided further that, purely as a contingency measure or as a secondary means of protection in a work situation wherein it is technically not feasible to reduce the respirable dust concentration below the 'permissible limit' or during the time period necessary to install and commission any device or to institute any new work practice for dust prevention or suppression, compliance with the 'permissible limit' of dust exposure may be achieved by remote operation or by job rotation and failing which by the use of a respiratory equipment of a type specified from time to time by the Chief Inspector, by a general or special order in writing in this behalf.

(5) The owner, agent or manager of every mine where need of dust respirators might arise shall –

- (a) ensure that, subject to the second proviso to sub-regulation (4), no person goes into or works or is allowed to go into or work at any place where the respirable dust concentration is in excess of the 'permissible limit' unless he wears a suitable dust respirator; and
- (b) Provide –

- (i) sufficient dust respirators of appropriate design at no costs to concerned work persons for their use
  - (ii) for the dust respirators to be regularly cleaned, disinfected and maintained in efficient working order; and
  - (iii) for the proper fitting of and for thorough training of the concerned workers in the need for and correct use of respirators.
- (6) To prevent the liberation and accumulation of dust and the propagation of airborne dust, the following provisions shall have effect, namely :-
- (a) dust shall be suppressed as close as possible to its source of formation.
  - (b) During any operation of drilling or boring on surface or belowground -
    - (i) the production of dust shall be reduced by using bits which are sharp and of proper shape, by keeping suitable pressure on the bits and by keeping the holes clear of the cuttings,
    - (ii) a jet of water shall be directed on to the cutting edge to wet the cuttings or other equally efficient device approved by the Chief Inspector shall be provided and kept in operation throughout the drilling or boring operation to prevent the atmosphere being charged with dust. Where pneumatic drilling is performed, water shall be turned on before turning on compressed air to the drill. When, however, drilling is done by hand, it shall be sufficient if holes are kept constantly moist during such drilling.
  - (c) Roadways on surface or below ground where mobile mining machinery ply shall be regularly wetted or shall be effectively treated with some other equally efficient agent to reduce dust being raised in the atmosphere to a minimum.
  - (d) No plant for the screening or sorting of minerals or ores and as far as practicable, no heap of cinder, cement, sand, mortar or other dry and fine material shall be placed within 80 m. of the top of any down-cast shaft or other intake airway not shall any such material be so handled as to make it air-borne an drawn into such shaft or airway.
  - (e) In every working belowground—
    - (i) no machinery or equipment which is likely to emit dust in excess of ‘permissible limit’ shall be operated unless it is equipped with a suitable dust-prevention and suppression device and unless such device is operating efficiently ;
    - (ii) work places and rock walls in the vicinity thereof shall be, unless naturally wet throughout regularly washed down to prevent accumulation of dust and shall be kept thoroughly wetted during work shifts;
    - (iii) a current of air sufficient to clear away the dust emitted by any machinery or operation and to dilute the dust concentration below the ‘permissible limit’ shall be maintained by means of general ventilation and if necessary, by local ventilation, so however that, as far as practicable, the velocity of air in any roadway or workplace shall not be such as to raise dust in the atmosphere;



- (iv) after blasting, working places shall not be entered, unless sufficient time has elapsed for dust, smoke and fumes to be cleared by a current of air and the broken ore or rock shall not be moved unless it has been thoroughly wetted with water;
  - (v) vehicles, tubs and conveyors used for transport of mineral or ores shall be maintained in good condition so as to minimise spillage or leakage and chutes, spiral conveyors, ore passes, bins, tipplers conveyor discharge points and skip loading and unloading installations shall be so controlled as to reduce the formation of dust to the minimum. Such material shall be also thoroughly wetted with water unless it is already wet or other effective means of dust suppression are used;
  - (vi) unless, owing to special difficulties, exempted in writing by Regional Inspector in that behalf and subject to such conditions as he might specify therein, water in pipes in sufficient quantity and under adequate pressure and independent of any pumping system shall be provided and maintained so as to get maximum efficiency in the laying of dust.
- (f) No process of crushing, breaking, disintegrating, opening, grinding, screening or sieving of ores, minerals or stone or any operation incidental thereto shall be carried out at any mine unless appropriate and effective dust control measures, such as, but not limited to isolation, enclosure, exhaust ventilation and dust collection are designed, provided, maintained and used.
- (g) The exhausted air, belowground or on surface, which contains dust in excess of the 'permissible limit' shall be efficiently diluted and if necessary filtered so as to reduce the concentration of respirable dust therein below ten percent of the 'permissible limit' before being recirculated into working places or before emission into atmosphere.
- (h) Every device used for the prevention and suppression of dust produced by any machinery, equipment or process as also for the filtering of the exhausted air and every dust respirator shall be inspected once at least in every seven days and shall be thoroughly examined and tested at least once in every period of six months and reports of the results of every such inspection, examination and test shall be recorded in the register maintained under clause (e) or sub-regulation (3).
- (7) The owner, agent, or manager of every asbestos mine where mining operations are carried on and where 'permissible limit' of dust concentration is exceeded, shall also –
- (a) Provide –
    - (i) sufficient protective clothing in good condition for the use of, at no cost to, the persons employed in such operations, as well as arrangements for proper dusting by means of a vacuum cleaner and for regular washing thereof;
    - (ii) suitable place for putting on and taking off the protective clothing;
    - (iii) well maintained washing and bathing places;
    - (iv) separate place for storing and changing personal clothing;
    - (v) clean and hygienic place for taking food or snacks -

(b) cause –

(j) sorting, separation, grading, mixing, compression and packing of asbestos fibres and collection and disposal of waste including filtered dust to be carried out in such a manner that asbestos dust does not escape into air ;

(ii) All machinery, plant, work premises and all internal surfaces of the building where milling operations are carried on to be maintained in clean state and free of asbestos waste. Such cleaning shall be carried out by means of a vacuum cleaner or by some suitable exhaust draught ad persons undertaking these operations or present thereat shall be provided with and wear appropriate respiratory equipment and protective clothing;

(iii) asbestos fibres to be packed in impermeable bags;

(iv) cautionary notices, in language or languages understood by the majority of work persons with standard warning symbol to be prominently displayed at every such place where milling of asbestos is carried on and where the ‘permissible limit’ of dust exposure is likely to be exceeded, to warn the persons as to the hazards to health from asbestos dust, as to the need for the use of protective clothing and of appropriate dust respiratory by persons entering therein and as to the synergistic effect on the hazards of smoking cigarettes, beedis, cigars, etc. and occupational exposure to asbestos dust.

(8) The manager of every mine where airborne dust is generated, shall formulate and implement a scheme specifying –

(a) the location, frequency, timing duration and pattern of sampling ;

(b) the instruments and accessories to be used for sampling ;

(c) the laboratory at which respirable dust content of samples and quartz content shall be determined ;

(d) the format in which the results of measurements of dust concentration and other particulars have to be recorded ;

(e) the organization for dust monitoring and for the examination and maintenance of dust prevention and suppression measures and dusts respirators ; and

(f) the manner of making all persons concerned with the implementation of the dust control measures fully conversant with the nature of work to be performed by each in that behalf.

(9) The Regional Inspector may, where special conditions exist, permit, or require by an order in writing and subject to such conditions as he may specify therein, any variation in the foregoing provisions or in the manager” scheme.

(10) If any doubt arises as to any matter referred to in this regulation, it shall be referred to the Chief Inspector for decision]1.

125. Precautions against irruption of gas – Where any working is extended to within 30 metres of any stoped-out area or disused workings containing or likely to contain an accumulation of inflammable or noxious gases, there shall be maintained at least one bore-hole not less than 1.5 metres in advance of the working. The operation of drilling the bore hole shall be carried out under the supervision of a competent person; and where

inflammable gas is present or likely to be present, no lamp or light other than an approved safety lamp or torch shall be used in any such working.

126. Recovery and exploratory work – (1) After an explosion of inflammable gas has occurred in a mine only such persons as are authorised by the manager or by the principal official present at the surface, shall be allowed to enter the mine.

(2) When it is intended or proposed to reopen a mine or part thereof, which has been isolated, sealed off or flooded with water to deal with a fire or spontaneous heating, the owner, agent or manager shall, not less than 14 days before the commencement of such work, give notice in writing of such intention or proposal to the Regional Inspector and the Chief Inspector.

(3) Where it is intended to carry out any exploratory work in a mine or part belowground likely to contain irrespirable atmosphere –

(a) no party of less than three persons shall be allowed to proceed to carry out such work; and

(b) every such party shall carry a cage containing suitable birds or other means of detecting carbon monoxide gas approved by the Chief Inspector and also an approved flame safety lamp.

127. Danger from surface water – (1) Where any mine or part thereof is so situated that there is any danger of inrush of surface water into the mine or part, adequate protection against such inrush shall be provided and maintained. If any dispute arises as to whether such protection is adequate or not, it shall be referred to the Chief Inspector for decision.

(2) No workings shall be made in any mine vertically below –

(a) any part of any river, canal, lake, tank or other surface reservoir; or

(b) any spot lying within a horizontal distance of 15 metres from either bank of a river or canal or from the boundary of a lake, tank or other surface reservoir;

except with the permission in writing of the Chief Inspector and subject to such conditions as he may specify therein.

(3) Every application for permission under sub-regulation (2) shall be accompanied by two copies of a plan and section showing the existing position of the workings of the mine, the proposed layout of workings, the depth of the workings from the surface, the position and depth of any stoped-out area in the neighborhood, all faults and other geological disturbances and such other particulars as may affect the safety of the mine or of the persons employed therein.

Explanation. – Where sand or alluvium are lying in the course of a river, canal, lake, tank or reservoir, the depth from the surface shall be reckoned from the surface of hard ground underlying such sand or alluvium.

128. Danger from underground inundation. – (1) Proper provision shall be made in every mine to prevent irruption of water other liquid matter from the workings of the same mine or of an adjoining mine.

(2) (a) No working which has approached with a distance of 60 metres of any disused or abandoned workings (not being workings which have been examined and found to be free from accumulation of water or other liquid matter), whether in the same mine or in an adjoining mine, shall be extended further except with the prior permission in writing of the Chief Inspector and subject to such conditions as he may specify therein :

Provided that if any heavy seepage of water is noticed in any working approaching, but not within 60 metres of, any such disused or abandoned working, such working shall be immediately stopped, and the Chief Inspector and the Regional Inspector shall forthwith be informed about the occurrence. The workings shall not be extended further except with the prior permission in writing of the Chief Inspector and subject to such conditions as he may specify therein.

Explanation. – For the purpose of this sub-regulation, the distance between the said workings shall mean the shortest distance between the said workings measured in any direction whether horizontal vertical or inclined.

(b) Every application for permission under clause (a) shall be accompanied by two copies of a plan and section showing the outline of such disused or abandoned workings in relation to the workings which are approaching the said workings and such other information as may be available in respect of the said workings.

(c) Except where otherwise permitted by the Chief Inspector by an order in writing and subject to such conditions as he may specify therein, no such working shall exceed two metres in width or height; and there shall be maintained at least one bore-hole near the center of the working face, and sufficient flank holes on each side and where necessary, bore-holes above and below the workings, at intervals of not more than five metres. All such bore-holes shall be, and shall be constantly maintained, at sufficient distance in advance of the working and such distance shall in no case be less than three metres. These precautions shall be carried out under the direct supervision of a competent person specially authorised for the purpose.

(d) The precautions laid down in clause (c) shall also be observed in any other working where any heavy seepage of water is noticed whether approaching disused or abandoned workings or not.

129. International flooding . (1) When the owner, agent or manager intends or proposed, by introducing water from the surface or from any other part of the mine or from an adjacent mine, to flood any part of the workings of his mine, he shall give in writing not less than 14 days' notice of such intention or proposal to the Chief Inspector and the

Regional Inspector and to the management of all adjoining mines and of such other mines as might be affected by such flooding.

Provided that the Regional Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit such operations to be commenced on any day prior to the expiry of the said 14 days:

Provided further that the Regional Inspector may, by an order in writing, either prohibit any such operation or require that such operation shall not be commenced until such precautions as he may specify therein, have been taken to his satisfaction.

Explanation. – For the purposes of this sub-regulation, a mine shall have the meaning assigned to it under regulation 33.

- (2) If the operations in respect of which notice is given under sub-regulation (1), are not commenced within 60 days from the expiry of the said 14 days, the notice shall be deemed to have lapsed and the provision of the sub-regulation(1) shall apply as if no such notice had been given.

130. Construction of a reservoir, dam or other structure. – (1) Where in any mine it is intended to construct a reservoir, dam or other structure to withstand a pressure of water or other material which will flow when wet, or to control an inrush of water (other than a reservoir, dam or structure for storing small quantities of water) the owner, agent or manager shall give in writing not less than 14 days notice of such intention to the Regional Inspector. Every such notice shall be accompanied by two copies of plans and sections showing the design and other details of the proposed construction.

Provided that where the safety of the mine or of the persons employed therein is seriously threatened, the provisions of this regulation shall be deemed to have been complied with if the said notice is given to the Regional Inspector as soon as the work of construction is commenced :

Provided further that where such a reservoir, dam or other structure was constructed before the coming into force of these regulations, the said copies of the plans and sections shall be submitted to the Regional Inspector within three months of the coming into force of these regulations. Where these details are not available, the Regional Inspector shall be informed of the fact within the aforesaid period.

- (2) The Regional Inspector may, by an order in writing, require such modification or alternations to be made by the design of any such reservoir, dam or structure as he may specify therein.

## **CHAPTER – VIII - Ventilation**

131. Standard of ventilation. – (1) It shall be the duty of the owner, agent or manager of every mine to take such steps as are necessary for securing that there is constantly produced in all parts of the mine belowground, ventilation adequate to clear away smoke, steam and dust; to dilute gases that are inflammable or noxious so as to render them harmless; to provide air containing a sufficiency of oxygen; and to prevent such excessive rise of temperature or humidity as may be harmful to the health of persons. If any doubt arises as to whether the ventilation in a mine or part thereof is adequate or not, it shall be referred to the Chief Inspector for decision.

- (2) For the purpose of this regulations, a place shall not be deemed to be in a safe state for persons to work or pass therein if the air contains either less than 19 percent of oxygen or more than 0.5 percent of carbon dioxide or any noxious gas present in quantity likely to affect the health of any person; and such place shall not be deemed to be normally kept free from inflammable gas if the percentage of such gas at any point in that place exceeds one in a quarter.
- (3) If with respect to any mine or part thereof the Regional Inspector is of the opinion that the ventilation is not adequate, he may, by an order in writing, require the installation and maintenance of such a mechanical ventilator as is capable of producing adequate ventilation in the mine or part.

132. Mechanical ventilators and their fittings. – (1) Every mechanical ventilator shall be installed in a fireproof housing situated at a safe distance from the opening, shaft or winze; and every mechanical ventilator, other than an auxiliary fan, shall be so designed and maintained that the current of air can be reversed when necessary.

- (2) In every mine to which regulation 142 applies, if electricity is used for driving the mechanical ventilator, current shall be supplied to the drive motor of the ventilator through a separate circuit from the main distribution point of the mine.
- (3) There shall be provided and maintained at every main mechanical ventilator –
  - (a) a suitable pressure-recording gauge or water gauge; and
  - (b) except where the ventilator is driven by a constant speed drive, a recording instrument by which the speed of the ventilator shall be continuously registered.
- (4) At every shaft or winze ordinarily used for lowering or raising of persons or material, where a mechanical ventilator is installed, there shall be provided a properly constructed air-lock.

Provided that unless the Regional Inspector so requires by an order in writing, the provision of this sub-regulation shall not apply to a shaft or winze where a

mechanical ventilator was installed before the coming into force of these regulations.

- (5) The flow of air produced by a mechanical ventilator shall, as far as practicable, be so arranged as to aid the natural ventilation.
- (6) Every mechanical ventilator shall be in charge of a competent person appointed for the purpose, who shall not be entrusted with any other additional duties which may require him to go outside the fan house or which may interfere with his duties as incharge of the mechanical ventilator.
- (7) In every mine in which a mechanical ventilator is in use, the quantity of air circulating in every ventilating district shall be measure once at least in every 30 days and recorded in a bound paged book kept for the purpose.

133. Standing Orders. – (1) For the purpose of ventilation, every mine shall be divided into such number of districts or splits as to ensure that separate current of fresh air is made available in every such district or split.

- (2) The intake air shall be so arranged as to travel away from all stagnant water.
- (3) In any mine or part where a mechanical ventilator is used, every drive, crosscut, winze or rise which is a connection between a main intake airway and a main return airway shall, until it has ceased to be required and has been sealed off, be provided with at least two doors so spaced that whenever one door is opened, the other door can be kept closed. Steps shall be taken or ensure that at least one of the doors is always closed. Any such connection which has ceased to be so required, shall be effectively sealed.

135. Brattices, doors, stoppings ad aircrossings. - (1) There shall be provided ad maintained in every mine such number of stoppings , doors and other devices as may be adequate to ensure compliance with the provision of regulations 131. If any doubt arises as to the adequacy of such ventilation devices, it shall be referred to the Chief Inspector for decision.

(2) (a) The space between the frame or every ventilation door and the roof and sides of the road, shall be built up with masonry or concrete, not less than 25 centimetres in thickness.

- (b) Every such door shall be self-closing; and whenever opened, it shall be closed as soon as possible, and shall not be propped or fixed so as to remain open.
- (c) If such door is required to be frequently kept open for the passage of men or material, there shall be, throughout every working shift, a door attendant at the door.
- (d) Unless required for purposes of control of fire or otherwise, if a door is not in use, it shall be taken off its hinges and placed in such a position that it shall not cause any obstruction to the air current.

(3)(a) Every stopping between the main intake and main return airways shall be constructed of masonry or brickwork, not less than 25 centimetres in thickness or such greater thickness as may be required by the Regional Inspector, and shall be faced with a sufficient thickness of lime or cement plaster to prevent leakage of air.

(c) Every stopping in use shall be kept accessible for inspection.

(4) The partitions and walls of every air-crossing shall be not less than 25 centimetres in thickness if constructed of masonry or of concrete not properly reinforced, and not less than 15 centimeters in thickness if constructed of properly reinforced concrete.

(5) Every air-crossing, ventilation stopping, door or brattice shall be maintained in efficient working order and good repair.

(6) A competent person shall, once atleast in every 30 days, examine every airway, air crossing, ventilation stopping and door in use, and shall record the result thereof in a bound paged book kept for the purpose, and shall sign the same and date his signature.

136. Auxiliary fans.- (1) Every auxiliary fan :

(a) shall be installed, located and worked in such a manner that –

(i) a sufficient quantity of air shall, at all times, reach it so as to ensure that it does not re-circulate air; and

(ii) there is no risk of the air which it circulates being contaminated by any substantial quantity of inflammable or noxious gases or dust; and

(b) shall have an air-duct for conducting the air to or from the face or blind end; and such air-duct shall be so maintained as to minimise any leakage of air and to ensure an adequate supply of air to within 4.5 metres of the face or blind end.

(2) No auxiliary fan shall be started, stopped, removed, replaced or in any way altered or interfered with, except by or on the authority of an official.

(3) No person shall enter or remain in any place which is dependent for its ventilation on an auxiliary fan, unless such fan is operating efficiently. Whenever the ventilation of any such place has been interrupted, whether by the stoppage of the fan or otherwise, no person shall so enter or remain therein, except for the purpose of restoring the ventilation, unless the place has been examined by a competent person and declared safe.

137. Precautions against fire in ventilation appliances. - The covering of every shaft, winze or rise sealed off or covered for ventilation purposes, every fan drift, duct or casing and every part of a mechanical ventilator or fan within such drift, duct or casing, and every air-crossing and ventilation door shall be constructed of fire-proof material :



Provided that this regulation shall not apply to the small lid of a shaft covering operated by the rope cappel.

138. Ventilation plants to be brought up-to-date. – As soon as any alteration is made in the ventilation of a mine, involving the erection or removal of an air-crossing or stopping or the alteration in the position or installation of a ventilator below ground, the erection, removal, alteration or installation, as the case may be, shall be shown on the ventilation plan maintained under-regulation 61.

139. Obstructions, interruptions and alterations. (1) No material or debris shall be allowed to accumulate in any level, drive, crosscut or any other part of the working below ground so as to impede the ventilation.

(2) Every roadway an working below ground which is not adequately ventilated shall be fenced or barricaded so as to effectively prevent persons entering the same.

(7) If any person becomes aware of any obstruction in, or interference with, or deficiency of, ventilation in any mine or part thereof, he shall –

(a) if it falls within his power to remedy such obstruction, interference or deficiency, immediately take steps to do so; or

(b) cease all work at that place, and shall forthwith inform his superior official of such obstruction interference or deficiency.

(4) whenever there is any interruption of ventilation by the stoppage or any mechanical ventilator, including an auxiliary fan, installed below ground, the official in charge of the mine or part shall immediately take precautionary measures including withdrawal of men, if necessary against dangers that may arise out of non-compliance with the provisions of regulation 131, to restore the ventilation in the mine or part.

(5) No person shall alter the general system of ventilation in any mine or part except with the authority of the manger :

Provided that, in an emergency, an official or the mine may carry out such alteration as he may deem necessary for the safety of persons, but he shall as soon as possible inform his superior official an the manager about the same in writing.

140. Precautio ns against gas during de-watering and re-opening.- (1) No disused mine or shaft shall be de-watered except under the constant supervision of a no competent person and during such de-watering, approved safety lamps or torches shall be exclusively used, and there shall also be kept burning at every place where persons are at work at least on e approved flame safety lamp.

(2) (a) The first inspection of a mine or part which is re-opened after a discontinuance of mining o0erations for a period exceeding seven days and of any part of amine after being de-watered shall be made by a competent person with an approved

flame safety lamp and during such inspection, no additional light or lamp other than an approved electric torch or lamp shall be used.

- (c) The result of every such inspection shall be recorded in a bound paged book kept for the purpose, and shall be signed and dated by the persons making the inspection, and countersigned and dated by the manager.

141. Precautions against inflammable and noxious gases . – (1) For the purpose of this regulation, inflammable gas shall be deemed to have been found or detected when it is indicated by the lowered flame of a flame safety lamp or, where methane indicators are used, they indicate one and a quarter percent, or more of inflammable gas.

(2) When any person detects the presence of inflammable gas, he shall not brush or waft it out, but shall immediately withdraw from the place and shall inform his superior official about the same.

(3) Where in any place in a mine, inflammable or noxious gas is detected, all persons shall be withdrawn from the place, and the place shall be immediately fenced off so as to prevent persons invariably entering the same. The competent person in charge shall, without delay, take steps to remove the gas by improving the ventilation.

(4) During the removal of such gas all persons except those necessary for such removal, shall be withdrawn from the return side of the ventilating district in which the gas has been detected unless the quantity of gas is, in the opinion of the competent persons, so small that such withdrawal is not necessary :

Provided that where the danger arises from the presence of inflammable gas, no naked light shall be used in the ventilating district in which the gas is detected.

- (5) No person shall be re-admitted into the place where the gas was detected until a competent person has examined the place and has reported that the place is free from gas, Every such examination shall be made with an approved flame safety lamp and, in the case of noxious gas, also with a cage containing suitable birds or other means of detecting carbon monoxide gas approved by the Chief Inspector.
- (6) Particulars of every occurrence referred to in sub-regulation (2) and of every examination made under sub-regulation(5) together with a statement as to where and when the gas was found and when it was removed, and in case of inflammable gas, the percentage thereof, shall be recorded in a bound paged book kept for the purpose, Every such entry shall be signed and dated by the competent person making the report, and countersigned and dated by the manager.
- (7) In any part of a mine to which regulations 123(1) and 142 apply, or where the Regional Inspector may require by an order in writing, all unused workings which have not been sealed off, shall once at least in every seven days be

inspected by a competent person for the presence of inflammable or noxious gas. A report of every such inspection shall be recorded in a bound paged book kept for the purpose, and shall be signed and dated by the person who made the inspection.

142. Safety lamps to be used in gassy mines. – No lamp or light other than an approved safety lamp or torch or other installation permitted under the Indian Electricity Rules, 1956 shall be used or permitted to be used below ground in any mine, -

- (a) in any part of a mine in which an explosion or ignition of inflammable gas has occurred;
- (b) in any ventilating district in which inflammable gas has been found; and
- (c) in any place in which, in the opinion of the Regional Inspector, inflammable gas is likely to be present in such quantities as to render the use of naked lights dangerous :

Provided that if safety lamps are not immediately available in the case of any mine to which clauses (b) and (c) apply, the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, grant a temporary exemption from the operation thereof until such time as safety lamps can be obtained :

Provided further that the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, exempt any mine or part thereof from the operation of this regulation on the ground that on account of the special character of the mine or part, the use of safety lamps is not necessary therein.

143. Contrabands. – In every mine or part of which regulation 142 applies, the following provisions shall have effect, namely –

- (1) No person shall have in his possession belowground any cigar, cigarette, biri or other smoking apparatus, or any match or other apparatus of any kind capable of producing a light, flame or spark :

Provided that nothing in this sub-regulation shall be deemed to prohibit the use belowground of any apparatus for the purpose of shot firing or of relighting safety lamps, of a type approved by the Chief Inspector.

- (2) For the purpose of ascertaining whether any person proceeding belowground has in his possession any article as aforesaid, a competent person other than the banksman, if any, shall be appointed to search every such person immediately before he enters the mine. The competent person shall be on duty throughout the shift, and no duties other than those under this regulation and regulation 149(2) shall be entrusted to him.

- (3) The competent person so appointed shall make a thorough search for the articles aforesaid and in particular shall –
- (a) search or turn out all pockets;
  - (b) pass his hand over all clothings; and
  - (c) examine any article in the possession of the person searched.
- (4) If the competent person suspects that the person searched is concealing any articles as aforesaid, he shall detain him, and as soon as possible refer the matter to the manager or assistant manager or underground manager. No such person shall be allowed to enter the mine until the manager or other superior official is satisfied that the person has no such article in his possession.
- (5) Any person who refused to allow himself to be so searched or who on being searched is found to have in his possession any of the article aforesaid, shall be guilty of an offence against this regulation.

144. Determination of environmental conditions. – In every mine having workings belowground extending to a depth of more than 50 metres from the surface, determinations shall, once at least in every 30 days be made of temperature, humidity and such other environmental conditions as the Regional Inspector may by an order in writing stipulate, at the blind end of every drivage and at such other points as the Regional Inspector may specify.

145. Appointment of Ventilation Officer.- In the case of any mine having extensive workings below ground, if the Chief Inspector by an order in writing so requires, the manager shall be assisted by a Ventilation Officer, holding such qualification as the Chief Inspector may specify in the order, who shall be responsible for supervising the maintenance of the ventilation system of the mine in accordance with the provisions of these regulations.

#### **CHAPTER XIV – Lighting and Safety Lamps**

146. General lighting : (1) Adequate general lighting arrangements shall be provided during working hours –
- (a) on the surface where the natural light is insufficient : in every engine house, in the vicinity of every working shaft, at every open cast working, at every shunting or marshaling yard, and at every place where persons have to work; and
  - (b) belowground –
    - (i) at every shaft landing and shaft bottom or siding which is in regular use;
    - (ii) in every travelling roadway normally used by 50 or more persons during any shift and in every working stope :

Provided that the provisions of this clause shall be deemed to have been complied with where electric or carbide lamps or lights are provided to every workperson;

- (iii) at the top and bottom of every self-acting incline in regular use;
- (iv) at every place on a haulage roadway, at which tubs are regularly coupled or uncoupled or attached to or detached from a haulage rope;
- (v) at every place at which tubs are regularly filled mechanically;
- (vi) at every room and place containing any engine, motor or other apparatus in regular use; and
- (vii) at every first aid station below ground :

Provided that in a mine or part where regulation 142 applies, the lighting fixtures shall comply with the provisions of the Indian Electricity Rules, 1956.

(2) The lighting provided in a mine shall, as far as possible, be so arranged as to prevent glare or eye strain.

(3) Where electric energy is available at the mine, the lighting arrangement made under sub-regulation (1) shall unless otherwise permitted by the Chief Inspector by an order in writing and subject to such conditions as he may specify by electrical means.

(4) Where electric lighting is used, an additional light or lamp having no connection with electric supply shall be kept continuously burning –

- (i) belowground, in every shaft bottom or landing in regular use and in every engine room; and
- (ii) on the surface, after dark, at the top of every working shaft and in every engine room.

(5) Every electrical lamp-fitting shall be so constructed as to protect it from accidental damage; and adequate precautions shall be taken to prevent lamps being damaged from shot-firing.

147. Every person to carry a light. – The owner, agent or manager shall provide every person employed belowground with a light or lamp adequate to enable him to perform his duties in a proper and thorough manner and no such person shall proceed or remain belowground without such light or lamp.

148. Standards of lighting. – (1) If any doubt arises as to whether any lamp or light is of adequate lighting performance or not, it shall be referred to the Chief Inspector for decision.

(2) The Chief Inspector may, from time to time, by notification in the Official Gazette, specify –

- (a) The type of lamp to be provided to specified categories of persons employed in a mine; or
- (b) The standard of lighting to be provided in specified areas or places in a mine.

149. Maintenance and examination of safety lamps. – In every mine or part thereof in which the use of safety lamps is for the time being required by or in pursuance of the regulations, the following provisions shall have effect, namely –

- (1) A competent person appointed for the purpose shall clean, trim, examine and lock securely all such lamps before they are issued for use, and no such lamp shall be issued for use unless it is in safe working order and securely locked.
- (2) A competent person appointed for the purpose shall examine every safety lamp at the surface immediately before it is taken belowground for use and shall assure himself, as far as practicable from external observation that such lamp is in safe working order and securely locked. \The person so appointed shall not perform any other duties, other than those prescribed under regulation 143(2).
- (3) A competent person appointed for the purpose shall examine every safety lamp on its being returned after use. \If on such examination, any lamp is found to be damaged or misused, he shall record the nature of the damage or misuse in a bound paged book kept for the purpose. Every such entry shall be countersigned and dated by the manager.
- (4) The manager, assistant manger, under ground manager or a competent person appointed for the purpose shall, once at least in every seven days, examine thoroughly every safety lamp in use, and shall record the result of examination of every such lamp in a bound paged book kept for the purpose.
- (5) No person shall be appointed as a competent person under this regulation unless he holds a Gas testing Certificate.

150. Use of safety lamps. – (1) Every safety lamp shall be numbered, and so long as the lamp is in use the number thereof shall be maintained in a legible condition.

(2) A competent person appointed for the purpose shall maintain a correct record of the lamps issued from and returned to the lamp-room, and in the record so maintained, the number of the lamp issued to and person shall be entered against his name.

(3) If any person returns to the lamp-room a lamp other than the one issued to him, he shall explain the cause and circumstances of the change.

(4) No unauthorized person shall either himself take or give out any safety lamp from the lamp-room.

(5) Every person who receives a lamp shall satisfy himself that it is complete and in good order; and should he find any defect therein, he shall immediately return it to the lamp-room.

(6) No person shall willfully damage or improperly use, or unlock or open, or attempt to unlock or open any safety lamp.

(7) Should any person find that the safety lamp in his possession has become defective, he shall at once carefully extinguish the flame, if any, and report the defect to his superior official.

151. Maintenance and repairs of safety lamps. – (1) Every safety lamp shall be properly assembled and maintained in good order. If any lamp is found to be defective or damaged, it shall not be issued for use until the defect or damage has been remedied.

(2) If the wires of any gauge of a flame safety lamp are broken or burnt away, the gauge shall not be reconditioned for further use.

(3) Damaged and defective gauges, glasses and other parts of a safety lamp shall not be kept or stored in the safety lamp-room.

(4) No glass of a safety lamp and no bulb of an electric safety lamp, shall be replaced except by a glass or bulb of such type as the Chief Inspector may, from time to time specify by notification in the Official Gazette; and no other part of a safety lamp (other than a wick or battery, as the case may be) shall be replaced except by a part manufactured by the manufacturers of the lamp to approved specifications. No repaired part shall be used in a safety lamp.

(5) In every flame safety lamp kept for the purpose of inspection or of testing for or detecting the presence of inflammable gas, no oil other than an oil of a type approved by the Chief Inspector shall be used.

152. Precautions to be taken in safety lamp-room. – (1) No unauthorised person shall enter the safety lamp room.

(2) No person shall smoke in the safety lamp-room

(3) Where petrol, benzol, or any other highly volatile spirit is used in safety lamps, the following precautions shall be observed–

- (a) lamps shall be cleaned, refitted and refilled in a separate room;
- (b) only such quantity of volatile spirit as is required for one working day shall be kept in any such room;
- (c) internal relighters shall not be taken out of lamps and cleaned, repaired or refitted on the same table where lamps are cleaned, refitted or refilled; and
- (d) adequate number of suitable fire extinguishers shall be provided and kept ready for use in every such room.

## **CHAPTER XV – Explosives and Shotfiring**

153. Type of Explosives to be used in mines. – No explosive shall be used in a mine except that provided by the owner, agent or manager. The explosives provided for use shall be of good quality and, as far as can be known, in good condition.

154. Storage of explosives. – (1) No owner, agent or manager shall store, or knowingly allow any other person to store, within the premises of a mine any explosives otherwise than in accordance with the provisions of rules made under the Indian Explosives Act, 1884.

(2) Explosives shall not be taken into or kept in any building except a magazine duly approved by the Licencing Authority under the Indian Explosives Act, 1884 :

Provided that the Regional Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit the use of any store or premises specially constructed at or near the entrance to a mine for the temporary storage of explosives intended for use in the mine or of surplus explosives brought out of the mine at the end of a shift.

(3) Explosives shall not be stored below ground in a mine except with the approval in writing of the Chief Inspector and subject to such conditions as he may specify therein. Such storage shall be done only in a magazine or magazines duly licenced in accordance with the provisions of rules made under the Indian Explosives Act, 1884.

(4) Every licence granted by the Licencing Authority under the Indian Explosives Act, 1884 for the storage of explosives, or a true copy thereof, shall be kept at the office of the mine.

155. Cartridges. (1) Unless otherwise permitted by the Chief Inspector by an order in writing and subject to such conditions as he may specify therein, no explosive, other than a fuse or a detonator, shall be issued for use in mine, or taken into or used in any part of a mine, unless it is in the form of a cartridge. Cartridges shall be used only in the form in which they are received.

(2) The preparation of cartridges from loose gunpowder, the drying of gunpowder and the reconstruction of damp cartridges shall be carried out by a competent person and only in a place approved by the Licencing Authority and in accordance with the rules made under the Indian Explosives Act, 1884.

156. Magazines, stores and premises to store explosives. – (1) Every magazine, or store or premises, where explosives are stored shall be in charge of a competent person who shall be responsible for the proper receipt, storage and issue of explosives.

(2) Explosives shall not be issued from the magazine unless they are required for immediate use. If any explosives are returned to the magazine or store or premises, they shall be reissued before fresh stock is used.



(3) Explosives shall be issued only to competent persons upon written requisition signed by the blaster or by a official authorised for the purpose, and only against their signature or thumb impression. Such requisition shall be preserved by the person in charge of the magazine or store or premises.

(4) The person in charge of the magazine or store or premises shall maintain, in a bound paged book kept for the purpose, a clear and accurate record of explosives issued to each competent person and a similar record of explosives returned tot he magazine or store or premises.

157. Cases and containers for carrying explosives. (1) No explosive shall be issued from the magazine or taken into any mine except in a case or container of substantial construction and securely locked. Cases or containers made of iron or steel shall be heavily galvanised; and no case or container provided for carrying detonators shall be constructed of metal or other conductive material.

(2) No detonator shall be kept in a case of container which contains other explosives, materials or tools; and two or more types of detonators shall not be kept in the same case of container :

Provided that nothing in this sub-regulation shall restrict the conveyance of primer cartridges fitted with detonators in the same case or container for use in a wet working or in a sinking shaft or winze.

(3) No detonator shall be taken out from a case or container unless it is required for immediate use.

(4) No case or container shall contain more than five kilogrammes or explosives, and no person shall have in his possession at one time in any place more than one such case or container :

Provided that nothing in this sub-regulation shall prohibit the conveyance of larger quantity of explosives in bulk for supplying an under ground magazine :

Provided further that the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, permit the carrying of a larger quantity of explosives in a single case of container, or the use, at one time in one place, of more than one such case or container.

(5)Every case or container shall be numbered; and as far as practicable, the same case or container shall be issue to the same blaster or competent person, as the case may be, every day.

(6) The key of every case or container shall be retained by the blaster in his own possession throughout his shift.

158. Transport of explosives. – (1) While explosives in bulk are lowered or raised in a shaft or winze, a distinguishing mark shall be attached to the cage, skip or bucket

containing the explosive; or the person in charge of explosives shall travel in the same cage, skip or bucket.

(2) Every cage, skip or bucket containing explosives shall be gently lowered or raised; and it shall be the duty of the banksman or bellman, as the case may be, to adequately warn the winding engineman before the cage, skip or bucket is set in motion.

(3) Where explosives are being carried on a ladder, every case or container shall be securely fastened to the person carrying it.

(4) No person other than a blaster shall carry any priming cartridge into a shaft which is in the course of being sunk. No such cartridge shall be so carried except in a thick felt bag or other container sufficient to protect it from shock.

159. Reserve Stations. – No case container containing explosives shall be left or kept below ground except in a place appointed by the manager or assistant manager or underground manager for the purpose and so situated that it is not frequented by workpersons. Every such place shall be kept clean, safe and adequately fenced and legibly marked 'RESERVE STATION'.

160. Blasters. – (1) The preparation of charges and the charging and stemming of holes shall be carried out by or under the personal supervision of a competent person, in these regulations referred to as a 'blaster'. The blaster shall fire the shots himself.

- (2) No person shall be appointed to be a blaster unless he is the holder of Manager's, Foreman's Mate's or Blaster's certificate.
- (3) If 30 or more persons are employed belowground at any one time in any mine or district under the charge of a competent person referred to in regulation 116, such person shall not perform the duties of a blaster.
- (4) No person whose wages depend on the amount of mineral, rock or debris obtained by firing shots, shall be appointed to perform the duties of a blaster.
- (5) The manager shall fix, from time to time, the maximum number of shots that a blaster may fire in any one shift; and such number shall not unless the Regional Inspector by an order in writing and subject to such conditions as he may specify therein otherwise permits, exceed 80 in case they are fired electrically or by means of an igniter cord and 50 in other cases, and shall be based upon –
  - (i) the time normally required to prepare and fire a shot in accordance with the provisions of these regulations;
  - (ii) the time required for that blaster to move between places where shots are fired;
  - (iii) the assistance, if any, available to him in the performance of his said duties; and
  - (iv) any other duties assigned to him, whether statutory or otherwise :

Provided that the Regional Inspector may, by an order in writing an subject to such conditions as he may specify, permit the manager to fix the maximum number of shots to be fired by a blaster differently from the limits specified in this sub-regulation.

- (6) The number of detonators issued to, and in the possession of, a blastr during his shift shall not exceed the maximum number of shots that he is permitted to fire under sub-regulation (5).

161 Shotfiring tools. - (1) Every blaster on duty shall be provided with –

- (a) a suitable electric lamp or torch ;
- (b) a tool, made entirely of wood, suitable for charging and stemming shotholes;
- (c) a scraper made of brass or wood suitable for cleaning out shotholes;
- (d) where fuses are used, a knife for cutting off fuses an, unless machine-capped fuses are provided, also a pair of suitable crimpers for crimping detonators; and
- (e) where detonators are used, a pricker made of wood or a non-rerrous metal for priming cartridges.

(2) No tool or appliance other than that provided as above shall be used by a blaster.

162. Drilling, charging, stemming and firing of shotholes. – (1) No rill shall be used for boring a shothole unless it allows a clearance of at least 0.3 centimetre over the diameter of the cartridge of explosive which it is intended to use.

(2) No shothole shall be charged before it is thoroughly cleaned.

(3) Before any shothole is charged, the direction of the hole shall, where practicable, be distinctly marked on the roof or other convenient place.

(4) No detonator shall be inserted into a priming cartridge until immediately before it is to be use : however that in case of wt workings, priming cartridges may be prepared at the nearest convenient dry place; and such primed cartridges shall be cartied to the working place in a securely closed case or container. Detonators once inserted into a priming cartridge shall not be taken out.

- (5) Unless otherwise permitted by the Chief Inspector by an order in writing and subject to such conditions as he may specify therein, the charge in any shothole shall consist of one or more complete cartridges of the same diameter and the same type of explosive.
- (6) The blaster shall, to the best of his judgment, ensure that no charge in a shothole is over-charged of under-charged, having regard to the task to be performed.

- (7) No shothole shall be fired by a fuse less than 1.2 metres in length.
- (8) Every shothole shall be stemmed with sufficient and suitable non-inflammable stemming so as to prevent the shot from blowing out. Only sand loosely filled in, or soft clay lightly pressed home, or a compact but not hard mixture of sand and clay or water shall be used as stemming.
- (9) In charging or stemming a shothole, no metallic tool, scraper or rod shall be used; and no explosive shall be forcibly pressed into a hole of insufficient size.
- (10) No shot shall be fired except in a properly drilled, charged and stemmed shothole.
- (11) Blasting gelatine or other high explosives shall not be lighted in order to set fire to fuses; but specially prepared 'kai-pieces' of such explosives may be so used. Such 'kai-pieces' shall be prepared only in the magazine, and a correct record of the issue, use and return of such 'kai-pieces' shall be maintained in the books kept under regulations 156(4) and 169(b).
- (12) All surplus explosives shall be removed from the vicinity of a shothole before a light is brought near it for the purpose of lighting the fuse.
- (13) As far as practicable, a shot shall be fired by the same blaster who charged it.
- (14) In any mine in which explosives other than gunpowder are used, every shot shall, if so required by the Regional Inspector, be fired electrically.
- (15) No more than 10 holes shall be fired in one round unless they are fired electrically or by means of an igniter cord.
- (16) No shothole shall be charged except those which are to be fired in that round; and all shotholes which have been charged shall be fired in one round.
- (17) Where a large number of shots has to be fired, a shotfiring shall, as far as practicable, be carried out between shifts.
- (18) No person shall remove any stemming otherwise than by means of water or an approved device, or pull out any detonator lead or remove any explosive from any charged shothole.

163. Electric Shotfiring. – Where shots are fired electrically, the following provisions shall have effect, namely :-

- (1) (a) No shot shall be fired except by means of a suitable shotfiring apparatus; and the number of shots fired at any one time by the apparatus shall not exceed the number for which it is designed.
- (b) Every electrical shotfiring apparatus shall be so constructed and used that –
  - (i) it can only be operated by a removable handle or plug. This handle or plug shall not be placed in position until a shot is about to be fired and shall be removed as soon as a shot has been fired; and
  - (ii) the firing circuit is made to break either automatically or by means of a push-button switch.
- (c) (i) No apparatus shall be used which is defective; and every apparatus shall be examined at least in every three months, be cleaned and thoroughly overhauled by a competent person.

(ii) If the apparatus fails to fire all the shots in a properly connected circuit, the blaster shall return the apparatus to the manager or assistant manager or underground manager as soon as possible, and it shall not be used again unless it has been tested on the surface and found to be in safe working order.

(iii) The result of every overhaul test or repair as aforesaid shall be recorded in a bound page book kept for the purpose and shall be signed and dated by the person making the overhaul, test or repair.

- (2) No current from a signalling, lighting or power circuit shall be used for firing shots.
- (3) The blaster shall –
- (a) retain the key of the firing apparatus in his possession throughout his shift;
  - (b) use a well-insulated cable of sufficient length to permit him to take proper shelter, and in no case, shall this cable be less than 20 meters in length;
  - (c) before coupling the cable to the firing apparatus, couple up the cable himself to the detonator leads;
  - (d) take care to prevent the cable from coming into contact with any power or lighting cable or other electrical apparatus;
  - (e) take adequate precautions to protect electrical conductors and apparatus from injury;
  - (f) himself couple the cable to the firing apparatus; and before doing so, see that all persons in the vicinity have taken proper shelter as provided under regulation 164; and
  - (g) after firing the shots and before entering the place of firing, disconnect the cable from the firing apparatus.
- (4) Where more than one shot are to be fired at the same time :-
- (a) care shall be taken that all connections are properly made;
  - (b) all shots if fired underground shall be connected in series;
  - (c) the circuit shall be tested either for electrical resistance or for continuity before connecting it to the firing apparatus. Such a test shall be made with an apparatus specifically designed for the purpose and after the provisions of regulation 164 have been complied with; and
  - (d) the cable to the shotfiring apparatus shall be connected last.

164. Taking shelter etc. – (1) The blaster shall, before a shot is charged, stemmed or fired, see that all persons other than his assistants, if any, in the vicinity, have taken proper shelter and he shall also take suitable steps to prevent any person approaching the shot and shall himself take adequate shelter, along with his assistants if any, before firing the shots.

(1-A) in the case of an opencast working the blaster shall not charge or fire a shot

- (a) unless he has taken the precautions laid down in sub-regulation (1).
- (b) Unless sufficient warning, by efficient signals or other means approved by the manager, is given over the entire area falling within a radius of 300 metres from the place of firing (hereinafter referred to as the danger zone) and also he has ensured that all persons within such area have taken proper shelter, and
- (c) Where any part of a public road or railway lies within the danger zone, unless two persons are posted, one in either direction at the two extreme points of such road or railway which fall within the danger zone who have, by an efficient system of telephonic communication or hooter or loudspeakers or other means approved by the Chief Inspector or Regional Inspector intimated clearance of traffic to the blaster and have also warned the passers by and whenever possible the vehicle also, if any, which have passed by such road or railway :

Provided that if blasting is done in such a manner approved in writing, by the Chief Inspector or Regional Inspector, that the flying fragments from blasting cannot project beyond a distance of ten metres from the place of firing, the provisions of clauses (b) and (c) need not be complied with,

(1-B) (a) In the case of an opencast working, where any permanent building or structure of permanent nature, not belonging to the owner, lies within the danger zone, the aggregate maximum charge in all the holes fired at one time shall not exceed two kilograms unless permitted in writing by the Chief Inspector or the Regional Inspector and subject to such conditions as he may specify therein :

Provided that if blasting is done with delay detonators or other means and that there is a delay of at least half a second between successive shots fired, a maximum charge of two kilograms can be used in each hole;

Provided further that if the shortest distance from the place of firing to any part of such building or structure is less than 50 metres irrespective of the amount of the charge, no blasting shall be done except with the permission in writing of the Chief Inspector or the Regional Inspector and subject to such conditions as he may specify therein.

(b) Notwithstanding anything contained in clause (a) the Chief Inspector may, by an order in writing and subject to such conditions as he may specify, exempt any mine or part thereof from the operation of all or any of the provisions of clause (a) on the ground that the observance of its provisions is not necessary or reasonably practicable on account of the special conditions existing thereat].

(2) Where the workings, either above or belowground, offer insufficient protection against flying fragments or missiles, adequate shelter or other protection shall be provided.

(3) When two working places belowground have approached within three metres of each other, the blaster shall not fire any shot in any one of the said workings unless all persons have been withdrawn from the other working place and the same has been so fenced off as to prevent persons inadvertently coming in direct line of the shot.

(4) In any mine to which regulation 142 applies, the following provisions shall have effect, namely :-

- (a) Notwithstanding anything contained in the regulations, no shot shall be stemmed or fired by any person who does not hold either a Manager's Certificate, or Foreman's or Mate's Certificate together with a Gas-testing Certificate.
- (b) Where more shots than one are charged for firing, the shots shall be fired simultaneously. No delay-action detonator shall be used, except with the previous permission in writing of the Chief Inspector and subject to such conditions as he may specify therein.
- (c) If in ventilating district, presence of inflammable gas is detected in any place, no shothole shall be charged, stemmed or fired in that place or in any other place situated on its return side till such place has been cleared of gas and declared safe.
- (d) Immediately before charging a shothole or a round of shotholes, and again before firing the shots, the blaster shall carefully test for inflammable gas at all places within a radius of 20 metres of the place of firing.

166. Inspections after shotfiring. – (1) After a shot has been fired, no person other than the blaster or any other competent person holding a Manager's or Foreman's Certificate appointed for the purpose by the Manager shall enter, or allow any other person to enter, the place until the area is free from dust, smoke or fumes. The blaster or other competent person shall, before any other person enters the place, make a careful examination and with his assistants, if any, make the place safe. No other person shall enter the place and where guards have been posted, they shall not be withdrawn until the examination has been made and the place has been declared to be safe in all respect. In the case of opencast workings, after shots have been fired, an all clear signal shall be given except in the case of a misfire.

(2) After shots have been fired, all persons engaged in clearing mineral, rock or debris shall look for unexploded cartridges and detonators. If such a cartridge and detonator is found, it shall be removed and shall as soon as possible be handed over to a blaster or other official.

167. Misfires. – (1) The number of shots which explode shall, unless shots are fired electrically or by means of an igniter cord, be counted by the blaster and another competent person authorized for the purpose; and unless it is certain that all the shots have been exploded, no person shall re-enter or be permitted to re-enter the place until 30 minutes after the firing of shots :

Provided that where shots are fired electrically, this interval may be reduced to not less than five minutes after the source of electricity has been disconnected from the cable.

(2) In the event of a misfire, the entrance or entrances to the working place shall be barricaded or fenced so as to prevent inadvertent access; and no work other than that of locating or relieving the misfire shall be done therein until the misfire has been located and relieved. In opencast workings, it shall be sufficient to mark the place of the misfire with a red flag.

(3) In the event of a misfire, the tamping may be sludged out with compressed air or water under pressure or removed by such other means as may be approved in writing by the Chief Inspector and subject to such conditions as he may specify therein. The hole shall thereafter be reprimed and fired.

- (4) If the misfire contains a detonator, the leads or fuse thereof shall be attached by a string to the shotfiring cable or some distinctive marker.
- (5) Except where the misfire is due to faulty cable or a faulty connection, and the shot is fired as soon as practicable after the defect is remedied, or where a shot has been reprimed and fired under sub-regulation (3) another shot shall be fired in a relieving hole which shall be so placed and drilled in such a direction that at no point shall it be nearer than 30 centimetres from the misfired hole. The new hole shall be bored in the presence of a blaster, preferably the same person who fired the shot.
- (6) After a relieving shot has been fired, a careful search for cartridges and detonators, if any, shall be made in the presence of the blaster or other competent person holding a Manager's or Forman's certificate approved for the purpose by the Manager amongst the material brought down by the shot :

Provided that in the case of workings belowground if such cartridge or detonator is not recovered, the tubs into which the material is loaded shall be marked and a further search made on the surface. As far as practicable the search for the detonators and cartridges and the loading of any ore stone or debris which may contain a detonator, shall be carried out without the aid of tools.

- (7) If a misfired hole is not dislodged by a relieving shot, the procedure laid down in sub-regulation (5) and (6) shall be repeated. A misfired hole which cannot be dealt with in the manner so prescribed, shall be securely plugged with a wooden plug; and no person other than a blaster, a mining official or a person authorised for the purpose shall remove or attempt to remove such plug.
- (8) When a misfired shot is not found, or when a misfired shot is not relieved or reblasted, the blaster shall, before leaving the mine, give information of the failure to such official as may relieve or take over charge from him. He shall



also record, in a bound paged book kept for the purpose, a report on every misfire, whether suspected, and whether relieved or not relieved. It shall be the responsibility of the relieving blaster or official also to sign the report and later to record in the said book the action taken for relieving the misfired shothole.

- (9) The blaster of the next shifts shall locate and reblast the misfired hole, but if after a thorough examination of the place where the misfire was reported to have occurred, the blaster or other competent person holding a Manager's or Foreman's certificate appointed for the purpose by the Manager, is satisfied that no misfire had actually occurred, he may permit drilling in the place.

168. Precaution in case of sockets etc. – (1) Before the commencement of drilling in any working place, the competent person in charge of the place shall see that all loose rock is removed from the face and the area lying within a radius of two metres of the proposed shothole is thoroughly cleaned or washed down with water and carefully examined for the presence of misfires or sockets :

Provided that where special conditions exist, the Chief Inspector may, by an order in writing and subject to such conditions as he may specify therein, grant a relaxation from these provisions.

(2) If any socket is found, it shall be dealt with in the manner prescribed in regulation 167.

(3) No person shall bore out a hole that has once been charged, or attempt to withdraw a charge either before firing or after a misfire, or deepen or tamper with any empty hole or socket left after shotfiring.

169. Duties of blaster at the end of his shift . \_Immediately after the end of his shift, the blaster –

- (a) shall return all unused explosive to the magazine, or where a store or premises or underground magazine is provided under regulation 153, to such store or premises or magazine; and
- (b) shall record, in a bound paged book kept for the purpose, the quantity of explosive taken, used and returned, the places where shots were fired and the number of shots fired by him, and misfires, if any. Every such entry shall be signed and dated by him.

170. General precautions regarding explosives. (1) No person, whilst handling explosives or engaged or assisting in the preparation of charges or in the charging of holes, shall smoke or carry or use a light other than an enclosed light, electric torch or lamp :

Provided that nothing in this sub-regulation shall be deemed to prohibit the use of an open light for lighting fuses.

- (2) No person shall take any light other than an enclosed light, electric torch or lamp into any explosive magazine or store or premises.
- (3) No person shall have explosives in his possession except as provided for in these regulation, or secret or keep explosives in a dwelling house.
- (4) Any person finding any explosives in or about a mine shall deposit the same in the magazine or store or premises. Every such occurrence shall be brought to the notice of the manager in writing.

### **CHAPTER XVI - Machinery and Plant**

171. Use of certain machinery belowground. – (1) No internal combustion engine or steam boiler shall be used belowground in a mine except with the permission in writing of the Chief Inspector and subject to such conditions as he may specify therein.

- (2) In every mine or part of a mine to which regulation 142 applies, only flameproof electric apparatus and equipment shall be used belowground unless otherwise provided for under the Indian Electricity Rules, 1956.

172. General provisions about construction and maintenance of machinery. – All parts and working gear whether fixed or movable, including the anchoring and fixing appliances, of all machinery and apparatus used as or forming part of the equipment of amine, an all foundations in or to which any such appliances are anchored or fixed shall be of good construction, suitable material, adequate strength and free from visible defect, and shall be properly maintained.

173. Apparatus under pressure. – (1) All apparatus, used as or forming part of the equipment of a mine, which contains or produces air, gas or steam at a pressure greater than atmospheric pressure shall be so constructed, installed and maintained as to obviate any risk of fire, bursting, explosion or collapse or the production or noxious gases.

- (2) Every air receiver forming part of a compressing plant shall be fitted with a safety valve and an air gauge which shows pressure in excess of the atmospheric pressure.

- (3) Before an air-received is cased in or put in commission, the engineer or other competent person shall subject it to a hydraulic test at a pressure at least one-and-a-half times the maximum permissible working pressure. A similar test shall be made after every renewal or repair and in any case at intervals of not more than three years. The result of every such test shall be recorded in a bound paged book kept for the purpose and shall be signed and dated by the person carrying out the test.
- (4) The supply of air for air-compressors shall be drawn from a source free from dust and fumes.

174. Precautions regarding moving parts of machinery – (1) Every winch or windlass shall be provided with a stopper, pawl or other reliable holder.

(2) Every fly-wheel and every other dangerous exposed part of any machinery used as, or forming part of, the equipment of a mine shall be adequately fenced by suitable guards of substantial construction to prevent danger; and such guards shall be kept in position while the parts of the machinery are in motion or in use, but they may be removed for carrying out any examination, adjustment or repair if adequate precautions are taken.

(3) No person shall, or shall be allowed to, repair, adjust, clean or lubricate machinery in motion where there is risk of injury.

(4) No person shall, or shall be allowed to, shift or adjust a driving belt or rope while the machinery is in motion unless a proper mechanical appliance is provided and used for the purpose.

(5) No person in close proximity to moving machinery shall wear, or be permitted to wear, loose outer clothing.

(6) No unauthorised person shall enter any engine room or in any way interfere with the engine.

175. Engine rooms and their exits. – Every engine, motor and transformer room on the surface and every room in which highly inflammable materials are stored on the surface shall be kept clean, and be provided with at least two exits. Every such exit shall be properly maintained and kept free from obstruction.

176. Working and examination of machinery. (1) No machinery shall be operated otherwise than by or under the constant supervision of a competent person.

(2) In every mine to which regulation 142 applies, no person shall be appointed to supervise or operate any electrical machinery, apparatus or appliance other than a telephone or signalling vice or an electric lamp or light unless he holds a Gas-testing Certificate.

(3) Every person in charge of any machinery, apparatus or appliance shall, before commencing work, see that it is in proper working order; and if he observes any defect therein, he shall immediately report the fact to the manager, engineer or other competent person.

(4) Every person in charge of an air-receiver shall see that no extra weight is added to the safety valves and that the permissible pressure of air is not exceeded.

(5) A competent person or persons appointed for the purpose shall, once at least in every seven days, make a thorough inspection of all machinery and plant in use, and shall record the result thereof in a bound page book kept for the purpose.

## **CHAPTER XVII – Miscellaneous**

177. Fences. (1) Every tank or reservoir or other dangerous place in or about a mine, which has been formed as a result of, or is used in connection with, mining operations, shall be kept securely fenced.

(2) Every fence erected on the surface shall, once at least in every seven days, be examined by a competent person. A report on every such inspection shall be recorded in a bound pagged book kept for the purpose, and shall be signed and dated by the person who made the examination.

(3) Any fence, gate or barricade may be temporarily removed for the purpose of repairs or other operations, if adequate precautions are taken.

(4) If any doubt arises as to whether any fence, guard, barrier or gate provided under these regulations is adequate, proper or secure, or as to whether the precautions taken under sub-regulation(3) are adequate, it shall be referred to the Chief Inspector for decision.

178. Notices. – where at any place smoking or unauthorised entries prohibited, notices to that effect shall be posted at conspicuous places at every entrance to the place.

179. Storage belowground of calcium carbide. – Calcium carbide shall not be taken or kept belowground until about to be used, except in a secure metal case or container containing not more than half a kilograme in weight thereof. No person shall have in the mine at any one time more than one such case or container.

180. Danger from poisonous substances. - (1) At every mineral dressing or separating plant where cyanide or other poisonous substance is used, there shall be kept a sufficient supply of a satisfactory and efficient antidose for poisoning.

(2) Water containing poisonous or injurious matter in suspension or solution must be effectively fenced off to prevent inadvertent access to it, and notice boards shall be put up at suitable places to warn persons from making use of such water.

(3) In no case shall water containing any poisonous matter in suspension or solution in a dangerous concentration be permitted to escape.

181. General Safety. – No person shall negligently or wilfully do anything likely to endanger life or limb in the mine, or negligently or wilfully omit to do anything necessary for the safety of the mine or of the persons employed therein.

1[182. Use, Supply maintenance of protective Footwear. – (1) No person shall go into, or work in, or be allowed to go into, or work in, a mine, unless he wears a protective

footwear of such type as may be approved by the Chief Inspector by a general or special order in writing.

(2) The protective footwear referred to in sub-regulation(1) shall be supplied free of charge, at intervals not exceeding six months, by the owner, agent or manager of a mine, who shall at all times maintain a sufficient stock thereof in order to ensure immediate supply as and when need for the same arises. Where a protective footwear is provided otherwise than as aforesaid, the supply shall be made on payment of full cost.

(3) The owner, agent or manager of a mine shall provide at suitable places in the mine dubbing and revolving brushes or make other suitable alternative arrangements for the cleaning of protective footwear by the persons using them. It shall however be the responsibility of the person supplied with the protective footwear to arrange the repair of the same at his own cost.

182A. Use and supply of helmet. (1) No person shall go into, or work, in or be allowed to go into or work in, a mine, other than the precincts of a mine occupied by an office building, canteen, creche, rest shelter, first aid room or any other building of a similar type, unless he wears a helmet of such type as may be approved by the Chief Inspector by a general or special order in writing :

Provided that where the Chief Inspector is of the opinion that due to special circumstances it is not necessary or reasonably practicable for any person or class of persons going into, or working in, a mine to wear a helmet, he may, by a general or special order in writing and subject to such conditions as he may specify therein, exempt such person or class of persons, from the operation of the provisions of this sub-regulation.

(2) The helmet referred to in sub-regulation(1) shall be supplied free of charge, at intervals not exceeding three years or such other interval as the Chief Inspector may specify by a general or special order in writing by the owner, agent or manager of a mine, who shall at all times maintain a sufficient stock thereof in order to ensure immediate supply as and when need for the same arises :

Provided that when a helmet is accidentally damaged during legitimate use, the owner, agent or manager shall immediately replace the damaged helmet free of cost.

(3) Where a helmet is provided otherwise than as aforesaid, the supply shall be made on payment of full cost.

182B. Supply of other protective equipment. – (1) Where it appears to the Regional Inspector or the Chief Inspector that any person or class of persons employed in a mine is exposed to undue hazard by reason of the nature of his employment, he may, by a general or special order in writing, require the owner, agent or manager of the mine to supply to such person or class of persons, free of charge, gloves, goggles, shinguards, or such other protective equipment as may be specified in the order.

(2) The protective equipment provided under sub-regulation(1) shall be replaced free of charge by the owner, agent or manager whenever it is rendered unserviceable by legitimate use. In any other event, the replacement shall be made on payment of full cost.

(3) If any dispute arises as to the life of any protective equipment, it shall be referred to the Chief Inspector for decision.

182C. Obligation of persons provided with protective equipment. – Whenever any person is supplied by the owner, agent or manager of a mine with any protective equipment, he shall use the same while doing the work for which he is supplied with such protective equipment.]

183. Information about sickness. – Every official or competent person shall, in case of sickness or of absence, give early and sufficient notice thereof to his superior official or the underground manager or the assistant manager or the manager, as the case may be, so that a substitute may be arranged.

184. Man power Distribution Plan. – During the first week of every month, a survey shall be made of the number of persons normally employed in every district and other places belowground in the mine; an a sketch plan showing the results of such a manpower survey, and signed and dated by the manager, shall be kept in the office of the mine and a copy thereof shall be kept with the attendance clerk.

185. Mining Mates and Mine Foreman. – (1) No person shall be appointed as a competent person under regulations 37(1), 72, 101, 120(2), 123(4), 135(5), 136(3) and 140(2) unless he is the holder of either a Foreman's or a Manager's Certificate :

Provided that in the case of mine having working belowground, the certificate aforesaid shall be one which is not restricted to mines having opencast workings only.

(2) No person shall be appointed as a competent person under regulations, 116,117,125,128(2)(c), 140(1) and 141, unless he is the holder of either a Mate's or a Foreman's or a Manager's Certificate :

Provided that –

- (a) in the as of a mine having workings belowground, the certificate aforesaid shall be one which is not restricted to mines having opencast workings only; and
- (b) in the case of a mine to which regulation 142 applies, every person holding a Mate's or Foreman's Certificate shall also hold a Gas-testing Certificate.

186. Delayed application of certain provisions. – The provisions of regulations 32, 34, 35, 37, 38, 160(2), 176(2) and 185 shall not come into force<sup>1</sup> in respect of any mine and the provisions of Regulation 78(1) shall not come into force<sup>1</sup> in respect of any mine other

than a gold mine until such date or dates as the Central Government may notify in that behalf in the Official Gazette :

Provided that, till such date as aforesaid, if any doubt arises as to whether any person appointed as a manager, assistant manager, underground manager, surveyor, mine foreman, mining mate, winding engine man or blaster is competent to perform the duties assigned to that post, it shall be referred to the Chief Inspector for decision.

187. Officials to be literate. – After coming into force of these regulations, no person shall be appointed as an official of a mine unless he is literate and is conversant with the language of the district in which the mine is situated or with the language understood by a majority of the persons employed in the mine :

Provided that this regulation shall not apply to any official employed in any mine on the date of coming into force of these regulations :

Provided further that so much of this regulation as requires a person to be conversant with the language of the district or of the majority of persons shall not apply to assistant managers, underground managers, engineers, and surveyors.

188. Writing of reports. – If any person required to make any report is unable to write, he shall be present when his report is written for him, and shall have it read over to him, and shall then attach his thumb mark to it or sign it. The person writing the report shall certify that it has been read over to the person for whom it was written, and shall sign the certificate and date his signature.

189. Payment of fees. – Any fees payable under these regulations shall be paid directly into the Treasury or a branch of the State Bank of India or by means of a Crossed Indian Postal Order and the receipt of the Treasury or Bank or Postal Order shall be sent to the Chief Inspector along with the application to which the fee relates.

2[190. Place of accident. – (1) Whenever an accident occurs in or about a mine causing loss of life or serious bodily injury to any person, the place of accident shall not be disturbed or altered before the arrival or without the consent of the Chief Inspector or the Inspector to whom notice of the accident is required to be given under sub-section (1) of section 23 of the Act unless such disturbance or alteration is necessary to prevent any further accident, to remove bodies of the deceased, or to rescue any person from danger, or unless discontinuance of work at the place of accident would seriously impede the working of the mine:

Provided that the work may be resumed at the place of accident in case the chief inspector or the inspector fails to inspect the place of accident within seventy-two hours.

(2) Before the place of accident involving a fatal or serious accident is disturbed or altered due to any reason whatsoever, a sketch of the site illustrating the accident and all relevant details shall be prepared (in duplicate) and such sketch shall be duly signed

by the manager or assistant manager, safety officers, surveyor and the workmen's inspector or, where there is no workmen's inspector by a work person nominated by the workers in this behalf :

Provided that, if the place is disturbed or altered to prevent further accident or rescue persons from danger before the sketch could be prepared, the same shall be prepared immediately thereafter giving all relevant details as existed before the place was disturbed or altered.

(3) One of the authenticated sketches shall be delivered or sent to the concerned inspector or Mines.

190A. Emergency plan. – (1) The manager of every mine having workings below ground shall prepare a general plan of action for use in time of emergency. The plan shall outline the duties and responsibilities of each mine official and men including the telephone operators, so that each person shall know his duties in case fire, explosion or other emergency occurs. All official and key men shall be thoroughly instructed in their duties so as to avoid contradictory orders and confusion at the time when prompt and efficient action is needed. The emergency plan shall also provide for mock rehearsals at regular intervals.

(2) The manager shall submit a copy of the aforesaid emergency plan prepared by him to the regional inspector, within 60 days of the coming into force of the Metalliferous Mines (Amendment) Regulations, 1985, or in the case of a mine which is opened or re-opened thereafter, within 30 days of such opening or re-opening. The regional inspector may, by an order in writing approve of such action plan, either in the Form submitted to him or with such additions and alterations as he may think fit, and the action plan so approved shall be enforced at the mine.

(3) On receiving information of any emergency, the manager and his absence the principal official present at the surface, shall immediately put emergency action plan in operation.]

191. Taking samples from mines. – Where for official purposes, an Inspector considers it necessary to take samples of any mineral, rope or other material, the owner, agent or manager shall make over to him such samples in such quantities as he may require.

1[192. \* \* \* \* \*

193. Chief Inspector etc. to exercise powers of the Regional Inspector. – Any power granted under these regulations to the Regional Inspector may be exercised by the Chief Inspector or an Additional Chief Inspector or a Deputy Chief Inspector or any other Inspector authorised in writing in this behalf by the Chief Inspector.

194. Appeals to the Chief Inspector.- Against an order made by the Regional Inspector under any of these regulations, an appeal shall lie, within 15 days of the receipt of the



order by the appellant, to the Chief Inspector who may confirm, modify or cancel the order.

195. Appeals to the Mining Boards or the Central Government. – (1) Against any order of the Chief Inspector specified below an appeal shall lie, within 20 days of the receipt of the order by the appellant, to the 2[Committee constituted under section 12 of the Act[]:

- (i) Original orders passed under proviso to regulation 34(2), regulation 107(3), regulation 109(1), and regulation 109(4), regulation 110, regulation 111(2), regulation 123(1), regulation 127(2), and regulation 128(2).
- (ii) Orders passed on appeal against Regional Inspector's orders made under regulation 108, clause (a) of regulation 112(2), clause (e) of regulation 119(3) and clause (b) of regulation 123(3) .

(2) Every order of the Chief Inspector, against which an appeal is preferred under sub-regulation(1) shall be complied with pending the receipt at the mine of the decision of 3[the committee] :

Provided that 3[the committee] may on application by the appellant, suspend the operation of the order appealed against pending the disposal of the appeal.

196. Repeal and Saving. – The Indian Metalliferous Mines Regulations, 1926 and the Mysore Gold Mines Regulations, 1953 are hereby repealed :

Provided that all acts done or orders issued under any of the said regulations shall, so far as they are not inconsistent with these regulations, be deemed to have been done or issued under the corresponding provisions of these regulations.

#### FIRST SCHEDULE

##### FORM I

(See Regulations, 3,6,7,8)

Notice of opening, closing or change etc.

From

.....  
.....

To

1. The Chief Inspector of Mines
2. The regional Inspector of Mines .....
3. ....
4. ....

Dhanbad, E.R.

Sir,

I have to furnish the following particulars in respect of (I) ..... at .....(Name)  
 .....(mineral) mine of .....(owner) :

1. \*In case of CHANGE OF NAME OR MINE :  
 old name of mine ..... date of change .....
- 
2. (a) Situation of the mine : Village ..... Police Station .....Sub-  
 Division (Taluq) .....State.....  
 \* (b) In case of ANEW MINE, particulars of situation of mine :  
 Post Office ..... Telegraph Office .....  
 Railway Station ..... Rest House .....  
 (Give distance therefrom)  
 Means of travelling .....

	Present	Previous*
3. (a) Name and Postal address of (ii)		
(a) Owner .....		
(b) Managing agent ,if any .....		
(c) Agents, if any.....		
(d) Manager .....		
* (b) In case of change, date of change .....		

\*4. (a) Name and qualifications etc. of Manager/Assistant Manager/Underground Manger/  
 Engineer/Surveyor (iii) whose appointment is terminated/who is appointed (iii):  
 (b) Date of appointment/termination of appointment (iii) :

\*5 Date on which it is intended to open/re-open/abandon/discontinue (iii) the mine :  
 \*6 Actual date of opening/Re -opening abandonment/discontinuance (iii) of the mine :

Yours faithfully,  
 Signature .....  
 Designation : Owner/Agent/Manager  
 Date .....

**INSTRUCTIONS**  
 (i) Mention the matter to which the notice refers.  
 (ii) Need not be filled in if the notice relates to Item 4,  
 (iii) Delete whatever is not applicable.  
 \*Only such columns to be filled in respect of which notice in given.  
 -----

**FORM II**  
 (See Regulation 4)  
 Quarterly Return for the quarter ending .....19

1. Name of mine .....Mineral worked .....postal address of mine .....  
 2. Situation of Mine : Place District .....

State .....

3. Name of Owner .....  
Postal address of owner.....
4. Name of managing agents, if any .....  
Postal address of managing agents, .....
5. Name of agent, if any.....  
Postal address of agent .....
6. Name of manager .....  
Postal address of manager .....
7. Tables A to C duly filled in, are attached.  
Certified that the information given above and in Tables A to C below is correct to the best of my knowledge.

Yours faithfully,  
Signature .....  
Designation : Owner/Agent/Manager

TABLE A  
MACHINERY

(I)	Number in use
-----	---------------

1. Rock drills :
  - (i)
  - (ii)
  - (iii)
2. Heavy earth moving machinery :
  - (i)
  - (ii)
  - (iii)
  - (iv)
  - (v)
3. Mechanical loaders used below ground :
  - (i)
  - (ii)
  - (iii)
4. Conveyors : (2)
  - (i)
  - (ii)
  - (iii)

---

Signature of person  
Signing the return

INSTRUCTIONS

- (1) Give types separately.  
 (2) Give length in metres.

1[TABLE A-I – OUTPUT, DESPATCH AND STOCK OF MICA\* (in kilogrammes)

1	2	3	4	5	6
	Stock at the beginning of the quarter	Output during the quarter	Sale or Dispatches during the quarter		Stock at the end of the quarter
			Consigned by rail or road	Sold locally	
Crude mica					
Dressed Mica					
Mica Splittings					
Waste Mica					

Signature of person  
 Signing the return

#### INSTRUCTIONS

\*If any other mineral, such as beryl, is also produced from the mine, particulars relating to such minerals shall be given in Table A-II

TABLE A-II – OUTPUT, DESPATCH AND STOCK OF MINERALS OTHER THAN MICA (a)

Mineral worked (b)	Stock at the beginning of the quarter	Output of mineral (c) during the quarter	Sale or dispatches during the quarter		Stock at the end of the quarter	Metal extracted if any (b)
			For export market	For home consumption		
						Name Qty.

Signature of person  
 Signing the return

#### INSTRUCTIONS

- (a) The figures should be stated
- (i) in the case of gem-stones, in carats ;
  - (ii) in the case of gold, silver and other precious metals, in grams;
  - (iii) in the case of alum, amber, asbestos, beryl, graphite, jadestone, stealite, tin-ore, tungsten-ore, radio active minerals and rare minerals, such as, molybdenite, monazite, pitch blende, samarskite, tantalite and triplite, and also in case of tin, in kilogrammes; and
  - (iv) in the case of clay, limestone, magnesite, marble, phosphetic rock, slate, salt and other stone, and all metalliferous ores except those referred to above, and also in case of other metals, in tonnes.
- (b) If more than one mineral are raised or metals extracted, separate figures should be given for each one of them.
- (c) If the mineral is dressed, processed or treated before despatch, the output of the dressed, processed or treated mineral (instead of crude ore), as the case may be, should be given].

**TABLE B**  
NUMBER OF MAN-DAYS ETC.

Give maximum number of persons employed on any one day during the quarter-

- (i) in workings belowground on .....(a).....  
 (ii) in all in the mine on .....(a).....

Number of working days during the quarter :

	Aggregate number of mandays worked		Aggregate number of man days lost on account of absence					Total
	(b)	(c)	(d)	(e)	(f)	(g)		
Below ground	Men		Women		sickness	Accident	Leave	Other cause
(i) Face Workers and Loaders								
(ii) Others								
Opencast Workings :								
(i) Miners & Loaders								
(ii) Others(f)								
Above ground :								
Total								

If there is any marked increase or decrease in attendance or absence, please account for it.

Signature of person  
 Signing the return \_\_\_\_\_

**INSTRUCTIONS**

- (a) Give day of the week and the date and month.
- (b) The information should cover all persons "Employed" in the mine as defined in clause(h) of section 3 of the Mines Act, 1952, including clerical and subordinate supervisory staff.
- (c) Total number of man-days worked should be obtained by adding the daily attendance for the whole quarter
- (d) Total number of man-days lost by absence should be obtained by adding the daily absences for the whole quarter.
- (e) Absences should include all cases in which a person is "scheduled to work" or is expected to turn up for work, but does not. All permanent employees are to be treated as "Scheduled" to work. So far as temporary or casual employees are concerned a person who attended work during the preceding week should be considered as scheduled to work during the week under consideration unless :
  - (i) He has reported his intention to quit, or
  - (ii) His services have been terminated by the management, or
  - (iii) He does not turn up for work during the whole week.

A person who has not worked during the preceding week, should be considered as “scheduled to work” only from the day in which he joins work during the week under consideration. Absence due to strike, lockout, lay-off or maternity leave should not be included as absence here.

- (f) Persons employed in the removal of over burden should be included amongst “others” and not among “miners and Loaders”.

TABLE C  
HOURS OF WORK AND EARNING

Information should be furnished in respect of one complete working week during the last month of the quarter(a).

1. Attendance, man-hours worked and cash earnings.

	Average daily attendance during the week (b)	Aggregate number of man-hours worked during the week(c)	Total cash payments for work done during the week (d)			
			Basic wages	Dearness allowance	Other cash payments (e)	total
			Rs.	Rs.	Rs.	Rs.
Below Ground: (i) Mine Foreman and Mining Mates (ii) Face Workers and Loaders (iii) Others						
Opencast Workings (i) Mine Forman and Mining Mates (ii) Mines & Loaders (iii) Others (Men) (f) Women						
Above Ground: (i) Clerical and Supervisory staff (ii) Others (men) women						

2. total estimated value of concessions in kind (g) given during the week : Rs. –

3. Normal hours of production shifts :

From                      To

- 1<sup>st</sup> Shift  
2<sup>nd</sup> Shift

3<sup>rd</sup> Shift

4. Number of workings days in the week :
5. If there is any major change in wages or hours of work as compared to the preceding quarter, please account for the change here.

Signature of person  
Signing the return \_\_\_\_\_

### INSTRUCTIONS

- I. the information should cover all persons "employed" as in Table C. Particulars relating to payments etc., to monthly paid staff should be included on a pro-rata basis.
- II. Average daily attendance should be obtained by dividing the aggregate number of attendances on all the shifts on all days during the week by the number of working days. Any day on which the mine did not work, for any cause whatsoever, should not be treated as a working day.
- III. Aggregate number of man-hours worked during the week should be obtained by adding for the whole week, the number of man-hours worked every day. The number of man-hours worked on a day is obtained by summing up the number of hours worked by each person attending work on each of the shifts during the day, including overtime worked, if any.
- IV. Total cash payments should include all remuneration payable (and paid) for work done during the week before making deductions, if any, towards fines, provident fund contributions, etc., Employer's contributions to the provident fund or on account of welfare provisions should not be included. Bonuses not payable for every pay-period should also not be included.
- V. Including over-time payments.
- VI. Persons employed in the removal of overburden should be included among "Others" and not among "Miners and Loaders" or "Face Workers and Loaders".
- VII. Concessions in kind (such as supply of food-stuff etc. Free or at subsidised prices) should be estimated in terms of the difference between the monetary value of the food stuffs, etc. at cost price and the value realised by sale at concessional price.

### FORM III (See Regulation 5)

Annual Return for the year ending on the 31<sup>st</sup> December, 19

1. Name of mine .....Mineral worked.....
2. Postal address of mine .....
3. Date of opening .....
4. Date of closing (if closed)
5. Situation of mine District.....  
State .....
6. Name of Owner.....  
Postal address of Owner.....
7. Name of Managing Agents (if any).....  
Postal address of Managing Agents.....
8. Name of Agent (if any) as defined in section 2(c) of the Mines Act, 1952.....  
Postal address of Agent .....
9. Name of Manager.....  
Postal address of Manager.....
10. Other superior supervisory staff employed as at the end of the year. (Please give designations and numbers employed).  
.....

- .....
11. (a) Whether machinery is used .....
- (b) Nature of power used, if any (e.g., electricity, steam, compressed air, etc.)
12. Tables A to E2 duly filled in, are attached.

Certified that the information given above and in Tables A to E2 below is correct to the best of my knowledge.

Yours faithfully,  
 Signature .....

Designation : Owner/Agent/Manager

TABLE A.-EMPLOYMENT

Maximum number of persons employed on any one day during the year \_\_\_\_\_

(i) in workings below ground on .....(a).....

(ii) in all in the mine on .....(a).....

Classification	Total number of man-days worked during the year (b)			Number of days worked during the year (3)	Average daily number of persons employed (c)				Total wages or salary bill for the year(d)
	(2A)	(2B)	(2C)		(4A)	(4B)	(4C)	(4D)	
Below ground:									
(i) Foremen and Mining Mates									
(ii) Face workers and loaders									
(iii) Others									
Opencast Working :									
(i) Foremen and Mining Mates									
(ii) Miners and Loaders									
(iii) Others (e)									
Above ground :									
(i) Clerical and Supervisory staff (excluding the superior supervisory staff mentioned in item 10 of Form III)									
(ii) Workers in any attached factory, workshop or mineral dressing plant.									
(iii) Others.									
Total									

Signature of person  
 Signing the Return .....



**INSTRUCTIONS**

- (a) Give day of the week and the date and month.
- (b) Obtained by adding the daily attendance for the whole year.
- (c) Obtained by dividing the number of man-days worked by the number of working days. The total shown in column (4D) should agree with the quotient obtained by dividing the total shown in column (2C) by the number of working days shown in column (3)
- (d) Includes all cash payments including bonuses. Employer's contributions to provident funds, welfare activities, etc., and concessions in kind should not be included.
- (e) Persons employed in the removal of overburden should be included among "Others" and not among "Miners and Loaders" or "Face Workers and Loaders".

**TABLE B – TYSPE AND AGREGATE HORSE-POWER OF ELECTRICAL APPARTATUS**

1. Electricity generated, purchased or received otherwise (in kwh).

	Generated	Purchased or received
(a) For own use		
(b) For sale		

2. System of supply (whether direct current or alternating current) :-

- (i) Voltage of supply
- (ii) Periodicity
- (iii) Source of supply

3. Voltage at which current is used for :

	Above ground	Below ground
(a) Lighting		
(b) Power		

4. Length of cables (in metres)

- (i) High pressure
- (ii) Medium pressure

5. Total number and aggregate horse-power of motors

	In use		In reserve	
	Number of units	Total h.p.	Number of units	Total h.p.
(a) Installed above ground for :				
(i) Winding				
(ii) Ventilation				
(iii) Haulage				
(iv) Pumping				
(v) Mineral treatment plants				
(vi) Workshops including foundry, smithy etc.				
(vii) Miscellaneous (specify)				
<hr/>				

Total :				
(b) Installed above ground for :				
(i) Winding				
(ii) Haulage				
(iii) Ventilation				
(iv) Pumping				
(v) Other portable machines (drill, etc.)				
(vi) Conveyors, loaders, scrapers, etc.				
(vii) Electric traction (locomotives, etc.)				
(viii) Miscellaneous (specify)				
<hr/>				
Total :				

Signature of person  
Signing Return .....

TABLE. C- TYPE AND AGGREGATE HORSE-POWER OF MACHINERY AND EQUIPMENT OTHER THAN ELECTRICAL APPARATUS

	In use		In reserve	
	Number of units	Total h.p.	Number of units	Total h.p.
(I) Power generators :				
(a) Boilers				
(b) Steam Turbines				
(c) Diesel Engines				
(d) Gasoline, Gas or Oil Engines other than Diesel Engines				
(e) Hydraulic Turbines or Water Wheels				
(f) Air Compressors				
Total :				
(II)Machinery Installed above ground for :				
(i) Winding				
(ii) Ventilation				
(iii) Haulage				
(iv) Pumping				
(v) Mineral dressing plants				
(vi) Workshops including foundry, smithy etc.				
(vii) Miscellaneous (specify)				
<hr/>				
Total :				
(III)Machinery Installed above				

ground for : (i) Winding (ii) Haulage (iii) Ventilation (iv) Pumping (v) locomotives, etc. (vi) Miscellaneous (specify) <hr/> <hr/> <hr/> Total :				
---	--	--	--	--

Signature of person  
Signing Return .....

TABLE D. - EXPLOSIVES, SAFETY LAMPS, ROCK DRILLS AND MECHANICAL VENTILATORS

1. Explosives :

Name of explosive	Quantity used (in kgm)	Number of detonators used	
		Electric	Ordinary

2. Safety Lamps :

Name and type of safety lamps*	Number of safety lamps according to method of locking		
	Lead rivet	Magnetic	Other

- Mention type, such as flame type, electric hand type, electric cap., etc.

3. Rock drills.

Name and type etc. of rock drill	Number in use

4. Mechanical Ventilators.

Name and size of Mechanical Ventilator	Position where installed	Average total quantity of air delivered per minute	Water gauge obtained (in centimeters)

Signature of person  
Signing the Return .....

(a) (b)  
TABLE E1. – OUTPUT ETC. OF MICA

	Opening Stocks on 1 <sup>ST</sup> Jan. , 19	Output during the year	Value of mica produced (c)	Despatches		Closing stock on 31 <sup>ST</sup> Dec. , 19
				Consigned by rail or road	Sold locally	

Cruda Mica						
Dressed Mica						
Mica Splittings						
Waste Mica						

Signature of person  
Signing the return .....

### INSTRUCTIONS

- (a) In Kilogrammes.
- (b) If any other mineral such as beryl is also produced from the mine, give particulars regarding such minerals in Table E2
- (c) The value required is the pit-head or ex-factory value. Royalty figures will not be accepted in place of value.

(a)  
TABLE E2 : OUTPUT ETC. OF MINERALS OTHER THAN MICA

Name of Mineral raised(b)	Opening stock on 1 <sup>st</sup> Jan., 19	Out put of the Mineral(c)		Value of the mineral produced (d)	Despatches		Closing stock on 31 <sup>st</sup> Dec., 19	Metal extracted, if an, at the mine(e)		
		As received from the mine	After processing if any		For export market	For home consumption		Name	Quantity	Value
1	2	3A	3B	4	5A	5B	6	7A	7B	7C

Signature of person  
Signing the Return.....

### INSTRUCTIONS

- (a) The figures should be stated :
  - (i) in the case of gem-stones, in carats;
  - (ii) in the case of gold, silver and other precious metals, in grammes;
  - (iii) in the case of alum, amber, asbestos, beryl, graphite, jadestone, steatite, tin-ore, radio-active minerals and rare minerals such as molybdenite monazite, pitch blende, samarskite, tantalite and triplite, and also in case of tin, in kilogrammes; and
  - (iv) in the case of clay, limestone, magnesite, marble, phosphetic rock, slate, salt and other stone, and all metalliferous ores except those referred to above, and also in case of other metals in tons.
- (b) If more than one minerals are raised or metals extracted, separate figures should be given for each of them.
- (c) If the mineral is dressed, processed or treated before despatch, the output of the dressed, processed or treated mineral (instead of crude ore), as the case may be, should be given.

- (d) "Value" should be calculated upon actual or estimated selling price at the pit-head. Any charges incurred in transporting the mineral outside the mine property should not be included. Royalty figures will not be accepted.
- (e) Each metal should be shown separately.

**FIRST SCHEDULE  
FORM IV-A  
(See Regulation 9)**

Notice of Accident/Occurrence

From :

.....  
.....

1. The Chief Inspector of Mines, .....Dhanbd, E.Rly.
2. The Regional Inspector of Mines .....
3. The District Magistrate/District Collector .....
4. The Electric Inspector of Mines (in case of electrical accidents only, Dhanbad).E .R. ....

Sir,

I have to furnish the following particulars of a fatal accident/a serious accident/a dangerous occurrence (I) which occurred at the..... Mine (also state name of mineral produced) of ..... (owner) :

1. PARTICULARS OF THE MINE :

Situation of mine	Mineral worked	Name and postal address of owner
Village		
Post office		
Police station		
Sub-Division (Taluq)		
District		
State		

2. PARTICULARS OF THE ACCIDENT :

Date and hour of accident /occurrence	Place and Location in mine	Number of persons(s)	
		Killed	Seriously injured
Classification of accident / occurrence(ii)		Its cause and description	

3. PARTICULARS OF INJURIES ETC. :

Name of person(s)(iii)	Nature of employment	age	sex	Nature of injury and if fatal, cause of death (iv)
Killed				
1				
2				
3				
Injured				

1  
2  
3

Particulars in respect of every person, killed or injured, in form IV-B are enclosed/ shall be forwarded within a week (I)

Yours faithfully,  
Signature .....  
Designation : Owner/Agent/Manager  
Date .....

#### INSTRUCTIONS

- (I) Delete whatever is not applicable ;
- (II) Under one or other of the following heads, namely :-
1. Explosion and ignition of inflammable gas ;
  2. Falls of ground :
    - (a) falls of roof;
    - (b) falls of side, wall or face;
    - (c) rockburst;
  3. Haulage :
    - (a) above ground
    - (b) below ground
  4. In shafts :
    - (a) Overwinding of cages or other means of conveyance ;
    - (b) Breakage of ropes, chains or drawgear;
    - (c) While ascending or descending by machinery;
    - (d) By falling;
    - (e) By falling objects (excluding falls of ground);
    - (f) Miscellaneous;
  5. Explosives;
  6. Machinery :
    - (a) Above ground;
    - (b) Below ground;
  7. Suffocation by gases;
  8. Irruption of water
  9. Premature collapse of workings;
  10. Outbreak of fire or spontaneous heating;
  11. At railway sidings belonging to the mine;
  12. Electricity; or
  13. Miscellaneous :
    - (a) above ground
    - (b) below ground
- (iii) In block capital.
- (iv) Attach separate sheet, if necessary.

FIRST SCHEDULE  
FORM IV-B  
(See Regulation 9)

Particulars of Deceased/Injured person  
(To be given separately in respect of every person killed or injured in an accident in the mine)

1. General :
  - (i) Name of mine .....
  - (ii) Mineral produced .....
  - (iii) Owner .....
  - (iv) District .....(v) State .....
2. Name of Injured Worker .....
3. Time of Accident :
  - (i) Date .....(ii) Time .....(iii) Shift .....
  - (iv) Number of shifts worked per day at the mine .....
  - (v) Time when the worker began work on the day of the accident.....
4. Occupation and Experience of the Worker :
  - (i) State the nature of job he was doing at the time of accident.....
  - (ii) Was it his regular occupation ? .....
    - (a) If yes, state length of experience at the occupation :  
At your mine .....  
Previous experience , if any .....
    - (b) If no, state how long employed at this job.....
  - (iii) State total experience in mining , coal and metalliferous .....
  - (iv) Give details of experience in mining work .....
5. Place of accident :
  - (i) if belowground, state :
    - (a) Whether development area or depillaring/stoping area.....
    - (b) Number or Name of Seam/Vein.....
    - (c) Dimensions at the place of accident .....
  - (ii) If on surface, state whether on railway, tramway, power plant or elsewhere (to be specified)....
  - (iii) If other, state whether open-workings, shaft or elsewhere (to be specified) .....
6. Nature of Injury :
  - (i) State whether fracture, amputation, laceration, bruise, sprain, crushing injury or other (to be specified).....
  - (ii) Part of body injured (to be specified precisely) .....
7. Degree of Disability :
  - (i) if fatal, date and time of expiry .....
  - (ii) If permanent disablement, specify :-
    - (a) the part or parts of the body lost, if any .....
    - (b) the part or parts of body gone out of use .....
    - (c) Whether disablement, was total or partial .....
  - (iii) If temporary disablement, state number of days forced to remain idle .....
8. Responsibility for the Accident :
  - (i) Was any safety provision(s) contravened ? .....
  - (ii) If so, by whom ? .....
  - (iii) What action was taken against the offender ? .....
  - (iv) Could the accident have been avoided ? .....
  - (v) If so, how ? .....

Signature .....

Designation : Owner/Agent/Manager

Date .....

FIRST SCHEDULE

FORM IV-C

(See Regulation 9)

Particulars of Injured person returned to duty

(To be given separately in respect of every person within 15 days of his return to duty )

1. General :

- (i) Name of mine .....
- (ii) Mineral produced .....
- (iii) Owner .....
- (iv) District .....
- (v) State .....

2. Name of Injured Worker .....

3. Return to duty :

- (i) Date when returned to work .....
- (ii) Whether returned to regular job or some other job (to be specified) .....

4. Compensation :

State amount of compensation paid, or to be paid, if any .....

Signature .....

Designation : Owner/Agent/Manager

Date .....

FIRST SCHEDULE

FORM V

(See Regulation 10)

Notice of Disease notified under section 25

From :

.....  
.....

- 1. The Chief Inspector of Mines, .....Dhanbd, E.Rly.
- 2. The Regional Inspector of Mines .....
- 3. The Inspector of Mines (in case of electrical accidents only, Dhanbad).E .R. ....
- 4. The District Magistrate/District Collector .....

Sir,



I have to furnish the following particulars with respect to an occupational disease contracted by a person employed in the..... Mine (also state name of mineral produced) of ..... (owner) :

1. PARTICULARS OF THE MINE ETC:

- (i) Situation of mine.....
  - Village.....
  - Post office.....
  - Police station.....
  - Sub-Division (Taluq).....
  - District.....
  - State.....
- (ii) Mineral worked .....
- (iii) Name and postal address of owner .....

2. PARTICULARS OF PERSON AFFECTED :

- (I) Name (in Block Capitals) .....
- (II) Caste or surname .....
- (III) Permanent address –

- Village.....
- Post office.....
- Police station.....
- Sub-Division (Taluq).....
- District.....
- State.....

- (iv) Sex.....
- (v) Date of birth (or age).....
- (vi) Occupation .....
- How long engaged ? .....
- (vii) Date of commencement of employment :
  - (a) in your mine .....
  - (b) In mining .....
  - (c) .....

3. PARTICULARS OF DISEASE ETC. :

- (i) nature of disease from which the person is suffering (state stage) .....
- (ii) Date of detection of disease .....
- (iii) Name, registration number and address of Medical Practitioner suspecting disease.....

Signature .....

Designation : Owner/Agent/Manager

Date .....

1[FORM VI  
(See regulation 108A)

Name of Mine .....Owner .....Manager .....

Seam/vein etc. Section/Area etc. ....

Inspected by .....Accompanied by Shri .....on .....19.

Places Inspected	Mines Act/Metalliferous Mines Regulations/Mines Rules/Section/Clause number etc.	Contravention observed	Action taken by Management to remedy the contravention	Date of rectification of the contravention	Remarks, if any

The contraventions mentioned above are not exhaustive. A letter giving the details of other contravention observed may follow in due course,

Signature of Inspection Officer [Signature of Mine Official]

(IO)

Date

Designation

2\*\*\*\*\*

accompanying I.O

Date

Designation]

#### STATUTORY ORDERS ISSUED UNDER THE METALLIFEROUS MINES REGULATIONS, 1961

##### Approval of Institutions and their degrees, diplomas and certificates under the MMR, 1961

S.O. 2792, dated the 23<sup>rd</sup> September, 1963. – In pursuance of the provisions of proviso (b) to sub-regulation (1) of regulation 16 of the Metalliferous Mines Regulations, 1961, the Central Government hereby approves the educational institutions mentioned under column I of the table below in respect of such diplomas, certificates, degrees or other qualifications awarded by the them as are specified in the corresponding entry under column II of the said table.

TABLE

I Name of Institution	II Degrees, Diplomas or Certificates awarded
1. Any University in India established by law	Degree in applied Geology or in Civil, Mechanical engineering
2. Indian School of Mines, Dhanbad.	(i) Certificate in Geology (Awarded upto 1950-51) (ii) Diploma of Associateship in Geology (Awarded upto 1950-51) (iii) Diploma of Associateship in Applied Geology,
3. Delhi Polytechnic	Diploma in Civil, Electrical or Mechanical Engineering

S.O. 2793, dated the 23<sup>rd</sup> September, 1963. – In pursuance of the provisions of proviso (b) to sub-regulation (1) of regulation 16 of the Metalliferous Mines Regulations, 1961, the Central Government hereby approves the educational institutions mentioned under column I of the table below in respect of such diplomas, certificates, degrees or other qualifications awarded by the them as are specified in the corresponding entry under column II of the said table.

TABLE

I	II
Name of Institution	Degrees, Diplomas, Certificates awarded
1. Any University in India established by law	Degree in mining.
2. Indian School of Mines, Dhanbad.	(i) Certificate in Metal Mining (Awarded upto 1938-39)
1[3. The Institution of Engineers (India) incorporated by Royal Charter 1935.	(ii) Diploma of Associateship in Mining Engineering. Pass in Sections A and B of the Associate Membership Examination in Mining Engineering Branch.]
“INDIA” (only for the purpose of Manager’s Certificates restricted to open cast mines)	
1. Indian School of Mines, Dhanbad	M. Tech. (opencast Mining) D.I.S.M. (Opencast Mining)

UNITED KINGDOM

1. London University	(i) Degree in B.Sc. in Mining for Internal Students subject to the Degree being endorsed by the University with a certificate of four months’ practical experience in a mine.
	(ii) Degree of B.Sc. in Mining for External Students.
2[2 University of Sheffield	Bachelor of Engineering (Mining)
3. Leeds University	Degree of B.Sc. in Mining.
4. Birmingham University	Degree of B.Sc. in Mining
5. Camborne School of Metalliferous Mining, Cornwall (England)	Diploma of Associateship in Metalliferous Mining]
6. University of Wales	Degree of B.Sc. in Mining Engineering.

U.S.A.

1. Colorado School of Mines	Degree in Mining Engineering
3[2. Wisconsin State College and Institute of Technology, Platteville, Wisconsin	Bachelor of Science in Mining.

1[PORTUGAL REPUBLIC

1. Higher Technical Institute of the University of Lisbon	Technical Degree in Mining Engineering.
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S.O. 2795, dated the 23<sup>rd</sup> September, 1963. – In pursuance of the provisions of proviso to regulation 17 of the Metalliferous Mines Regulations, 1961, the Central Government hereby approves for the purpose of said regulation the educational institutions mentioned under column I of the table below in respect of such diplomas, certificates, degrees or other qualifications awarded by the them as are specified in the corresponding entry under column II of the said table.

TABLE

I	II
Name of Institution	Degrees, Diplomas, Certificates awarded

## INDIA

(List of Institution and authorities awarding Degree/Diploma in Mining, after full time course of study)

- |  |   |
|--|---|
| 1. Any University in India established by law  | Degree in mining.   |
| 2. Indian School of Mines, Dhanbad.  | (i) Certificate in Coal Mining (Awarded upto 1950-51)<br>(ii) Certificate in Metal Mining (Awarded upto 1938-39)<br>(iii) Diploma of Associateship in Mining Engineering. |
| 3. Bengal Engineering College, Sibpore   | Diploma in Mining (awarded up to 1929)  |
| 4. State Council for Engineering and Technical Education, West Bengal.                     | Licentiate Diploma in Mining Engineering.   |
| 5. Board of Technical Education, Rajasthan, Jodhpur  | Diploma in Mining   |
| 6. State Council of Technical Education and Training, Orissa                               | Diploma in Mining Engineering   |
| 7. Central Board of Technical Examination, Mysore  | Licentiate in Mining Engineering  |
| 8. Shri Jayachamarajendra Occupational Institute, Bangalore                                | Diploma in Mining   |
| 9. State Board of Technical Education and Training, Andhra Pradesh.                        | Diploma in Mining Engineering   |
| 10. State Board of Technical Education (formerly Technological Examination Board.), Madras | Licentiate in Mining Engineering  |
| 11. State Board of Technical Education, Bihar  | Diploma in Mining and Mine Surveying  |
| 12. Madhya Pradesh Board of Technical Education, Bhopal                                    | Diploma in Mining and Mine Surveying  |
| 13. Board of Technical Examination, Mysore   | Diploma in Mining and Mine Surveying  |
| 14. Board of Technical Examinations, Maharashtra, Bombay                                   | Diploma in Mining and Mine Surveying  |
| 15. The Institution of Engineers (India) incorporated by Royal Charter 1935.               | Pass in Sections A and B of the Associate Membership Examination in Mining Engineering Branch]  |

**5(List of Institution and authorities awarding Degree/Diploma in Mining, after part time course of study)**

- |   |   |
|---|---|
| 1. State Board of Technical Education, Bihar    | Diploma in Mining and Mine Surveying (Re-organised Mining Classes, Bhaga, Dhanbad).                                       |
| 2. Mining Education Advisory Board, West Bengal | Final Merit Certificate (Evening Mining Classes run by the Directorate of Mines and Minerals, Government of West Bengal]. |

### I

**(List of Institution and authorities awarding Degree/Diploma in Mining, after full time course of study)**

- |   |   |
|---|---|
| 1. Any University in India established by law   | Degree in Civil Engineering   |
| 2. All India Council of Technical Education   | National Certificate in Civil Engineering                               |
| 3. Assam Engineering Institute, Gauhati   | Certificate in Civil Engineering  |
| 4. Bihar College of Engineering, Patna  | (1) Surveyor's Certificate<br>(2) Civil Engineering Subordinate Diploma |
| 5. Board of Technical Education, Kerala   | Diploma in Civil Engineering  |
| 6. Board of Technical Education, Rajasthan, Jodhpur   | Diploma in Civil Engineering  |
| 7. Board of Technical Examination, Mysore (formerly Central Board of Technical Examination, Mysore) | L.C.E./ Diploma in Civil Engineering                                    |
| 8. Civil Engineering School, Allahabad  | Overseers Certificate   |
| 9. Civil Engineering School, Lucknow  | Overseers Certificate   |
| 10. College of Engineering, Poona   | Civil Engineering diploma prior to 1950                                 |

### II

11. College of Engineering, Guidy	Upper Subordinate Diploma, L.C.E. from 1942 to 1953.
12. College of Engineering, Osmania University (formerly Osmania Engineering College), Hyderabad	Upper Subordinate (Ist Class) Overseer Certificate from 1941
13. College of Engineering and Technology, Jadhavpur	Diploma of the Overseer Course
14. College of Military Engineering, Kirkee	Overseers' Building and Road Course
15. Department of Technical Education, Bombay	Diploma in Civil Engineering
16. Department of Technical Education, Gujarat State, Ahmedabad (previously Bombay)	Overseers Diploma
17. Director General of employment and Training (Ministry of Labour and Employment, Government of India)	Surveyor's Diploma
18. Director of Industries, Punjab	Common Civil Overseer's Certificate
19. Government Polytechnic, Nagpur University (formerly Government Engineering School, Nagpur)	(1) Surveyor's Certificate
20. Government School of Engineering, Rasool	(2) L.C.E.
(21) Government's Technical College, Hyderabad (formerly Osmania Technical College, Hyderabad)	Overseership Certificate
(22) Howett-Engineering School, Lucknow	L.C.E.
23. H.R.H. the Prince of Wales Institute of Engineering and Technology, Jorhat	Overseers Certificate (Granted by the Department of Public Instruction from 1936 to 1944 and by the U.P. Government from 1946)
24. Kalikata Shilpa Vidya Pith	Certificate in Civil Engineering.
25. Kerala University (formerly Travancore University)	L.C.E. awarded by the Adhoc Committee. Provincial Council for Engineering and Technical Education. West Bengal.
26. Mainamati Survey Institute, Tripura	Diploma in Civil Engineering
27. M.E.M. Engineering College, Jodhpur	Survey Final Examination.
28. Murlidhar Gajan and Technical Institute, Hathras	Diploma in Civil Engineering
29. Muslim University, Aligarh	Diploma in Civil Engineering
30. Nagpur University	L.C.E.
31. National Council for Rural Higher Education	Diploma in Civil Engineering
32. Orissa School of Engineering, Cuttack	(1) Surveyor's Certificate
33. Overseer Examination Board (Bengal) (Before partition)	(2) Civil Engineering Subordinate Diploma, L.C.E
34. Polytechnical Faculty of Technological (including engineering)	L.C.E.
35. Punjab Polytechnic (formerly Punjab Government School of Engineering, Nilokheri).	Diploma in Civil Engineering (obtained after a course of at least three years)
36. Ramgarhia Polytechnic, Phagwara (formerly Vishwakarma polytechnic Institute).	Overseer's Diploma in Civil Engineering from December, 1947
37. Saugar University	Diploma in Civil Engineering Course, Overseer Course.
38. School of Engineering, Bangalore	Diploma in Civil Engineering
39. Shri Jaichamarajendra Occupational Institute, Bangalore	Diploma in Civil Engineering
40. State Board of Technical Education and Vocational Training, Bihar	Diploma in Civil Engineering
41. State Board of Technical Education and Training, U.P. (formerly in adhoc Board of Engineering Education, UP)	Diploma in Civil Engineering after a course of study lasting for 2 and half years
	Overseer Diploma in Civil Engineering

42. State Board of Technical Education, Pubjab	Overseer Diploma in Civil Engineering
43. State Board of Technical Education and Training, AP	LCE
44. State Board of Technical Education (formerly Technological Diploma Examination Board,) Madras	LCE/Diploma in Civil Engineering
45. State Council of Technical Education, Assam	Diploma in Civil Engineering
46. State Council of Engineering and technical Education, West Bengal	LCE
47. Technological Diploma Examinations Board, AP	LCE
48. Trihat School of Engineering, Muzaffarpur	Supordinate Engineering Course in Civil Engineering from 1952.
49. University of Roorkee (formerly Thomson Civil Engineering College, Roorkee)	Diploma in Civil Engineering (formerly Civil Overseership)
50 West Bengal Survey Institute, Bandal	Senior Surveyor's Certificate
51. State Council of Technical Education and Training, Orissa	Diploma in Civil Engineering

**FOREIGN**

1. N.E.D Engineering College, Karachi	Diploma in Engineering
2. Ashanulla School of engineering, Dacca	Sub Overseer's Diploma, LCE
3. Government Technical Institute, Insein, Burmah	Diploma in Civil Engineering
4. London University, UK	(1) B.Sc. Degree in Mining for Internal Students subject to the degree being endorsed by the University with a certificate of four months' practical experience in a mine. (2) Degree of B.Sc. in Mining for External Students.
5. Colorado School of Mines, USA	Degree in Mining Engineering
1[6. University of Sheffield	Bachelor of Engineering (Mining)
7. Leeds University	Degree of B.Sc. in Mining
8. Birmingham University	Degree of B.Sc. in Mining
2[9. Wisconsin State College and Institute of Technology, Platteville, Wisconsin	Bachelor of Science in Mining
10. Comborne School of Metalliferous Mining, Cornwall (England).	Diploma of Associateship in Metalliferous Mining
3[11. Higher Technical Institute of the Technical University of Lisbon, (Portugal ) Republic	Degree in Mining Engineering

S.O. 1675, dated the 30th May, 1966. – In pursuance of clause (b) of the proviso to Sub- regulation (1) and clause (b) of the proviso to sub regulation (2), of regulation 18 of the Metalliferous Mines Regulations, 1961. And in supersession of all the notifications issued on the subject, the Central Government hereby approves institutions and authorities mentioned in column I of the table below in respect of such diplomas, certificates, degrees or other qualifications awarded by the them as are specified in the corresponding entry under column II of the said table.

TABLE

I Name of Institution	II Degrees, Diplomas, Certificates awarded
<b>INDIA</b>	
1. Any University in India established by law	Degree in mining.
2. Indian School of Mines, Dhanbad	(i) Certificate in Metal Mining (awarded upto 1938-39)

- (ii) Diploma of Associateship in Mining Engineering)
- 4[3. “The Institution of Engineers (India) incorporated by Royal Charter, 1935 Pass in Sections A and B of the Associate Membership Examination in Mining Engineering Branch].

**UNITED KINGDOM**

1. London University (i) Degree in B.Sc. in Mining for Internal Students. Subject to the Degree being endorsed by the University with a certificate of four month’s practical experience in a mine.  
(ii) Degree of B.Sc. in Mining for External students.
2. University of Sheffield Bachelor of Engineering (Mining)
3. Leeds University Degree of B.Sc in Mining
4. Birmingham University Degree of B.Sc. in Mining
5. Camborne School of Metalliferous Mining, Cornwall Diploma of Associateship in Metalliferous Mining

**U.S.A.**

1. Colorado School of Mines Degree in Mining Engineering
2. Wisconsin State College and Institute of Technology, Platteville, Wisconsin Bachelor of Science in Mining.

**[PORTUGAL REPUBLIC**

1. Higher Technical Institute of the Technical University of Lisbon Degree in Mining Engineering]

S.O. 1676, dated the 30th May, 1966. – In pursuance of clause (a) of the proviso to Sub- regulation (1) and clause (a) of the proviso to sub regulation (2), of regulation 18 of the Metalliferous Mines Regulations, 1961. And in supersession of all the notifications issued on the subject, the Central Government hereby approves institutions and authorities mentioned in column I of the table below in respect of such diplomas, certificates, degrees or other qualifications awarded by the them as are specified in the corresponding entry under column II of the said table.

**TABLE**

I Name of Institution	II Degrees, Diplomas, Certificates awarded
<b>INDIA</b>	
1. Board of Technical Education, Rajasthan, Jodhpur	Diploma in mining.
2. Central Board of Technical Examination, Mysore	Licentiate in Mining Engineering
3. Madhya Pradesh Board of Technical Education, Bhopal	Diploma in Mining and Mining Surveying
4. Shri Jayachamarajendra Occupational Institute, Bangalore	Diploma in Mining
5. State Board of Technical Education and Training, Andhra Pradesh	Diploma in Mining Engineering
6. State Board of Technical Education, Bihar	Diploma in Mining and Mine Surveying
7. State Board of Technical Education (Formerly Technological Diplomas Examination Board), Madras	Licentiate in Mining Engineering
8. State Council for Engineering and Technical Education, West Bengal	Licentiate in Mining Engineering

9. State Council of Technical Education and Training, Orissa	Diploma in Mining Engineering
2[10. Board of Technical Examination, Mysore	Diploma in Mining and Mine Surveying
3[11. Board of Technical Examinations, Maharashtra, Bombay	Diploma in Mining and Mine Surveying
4[12. Mining Education Advisory Board, Bihar and West Bengal	Final Merit Certificate
13. State Board of Technical Education, Bihar	Final Merit Certificate

S.O 1455, dated, the 17<sup>th</sup> May, 1963. – In pursuance of the provision of sub-clause (ii) of clause (a) of sub-regulation (1) of regulation 23 of the Metalliferous Mines Regulations, 1961, the Central Government hereby approves the educational institutions mentioned under column I of the Table below in respect of such diploma certificates or degrees awarded by them as are specified in the corresponding entries under column II of the said Table.

TABLE

I Name of Institution	II Degrees, Diplomas, Certificates awarded
<b>INDIA</b>	
1. Any University in India established bylaw	Degree in mining or 5[in applied geology] or in civil, mechanical or electrical engineering.
2. Indian School of Mines and Applied Geology, Dhanbad	(i) Certificate in Metal Mining (awaded up to 1938-39). (ii) Diploma of Associateship in Geology (awarded up to 1950-51). (iii) Diploma of Associateship in Mining Engineering (iv) Diploma of Associateship in Applied Geology
3. Delhi Polytechnic	Diploma in Civil, Electrical or Mechanical Engineering
<b>UNITED KINGDOM</b>	
1. London University	(i) Degree of B.Sc. in Mining for Internal Students subject to the Degree being endorsed by the University with a certificate of four months' practical experience in a Mine. (ii) Degree of B.Sc. in Mining for External Students
1[2. University of Sheffield	Bachelor of Engineering (Mining).
3. Leeds University	Degree of B.Sc. in Mining.
4. Birmingham University	Degree of B.Sc. in Mining
2[5. Camborne School of Metalliferous Mining Cornwall - England	Diploma of Associateship in Metalliferous Mining.]
<b>U.S.A.</b>	
1. Colorado School of Mines	Degree in Mining Engineering
3[2 Wisconsin State College and Instistute of Technology, Platteville, Wisconsin	Bachelor of Science in Mining].
<b>4[“Portugal Republic”</b>	
1. Higher Technical Institute of the Technical University of Lisbon	Degree in Mining Engineering].



S.O. 250 dated the 6<sup>th</sup> January, 1966 – In pursuance of sub-clause (ia) of clause (a) of sub-regulation(1) of regulation 23 of the Metalliferous Mines Regulation, 1961, the Central Government hereby approves the qualifications mentioned in column 2 of the Table below of the institutions mentioned in the corresponding entry in column 1 thereof as equivalent qualifications for the purposes of the said sub-clause, namely :-

TABLE

I	II
Name of Institution	Degrees, Diplomas, Certificates awarded
<b>Mining Indian</b>	
1. Bengal Engineering College, Sibpore	Diploma in Mining (awarded up to 1929)
2. Mining Education Advisory Board, Bihar and West Bengal	Final Merit Certificate (awarded up to 1958)
3. Mining Education Advisory Board, West Bengal	Final Merit Certificate (Evening Mining Classes run by the Directorate of Mines and Minerals, Government of West Bengal.)
4. State Board of Technical Education, Bihar	(a) Final Merit Certificate (awarded in 1959 and 1960 to students of Evening Mining Classes, Bhaga). (b) Diploma in Mining and Mine Surveying (including students of re-organised Mining Classes, Bhaga, Dhanbad-awarded from 1961 onwards)
5. Shri Jayachamarajendra Occupational Institute, Bangalore	Diploma in Mining
6. State Board of Technical Education and Training, Andhra Pradesh	Diploma in Mining Engineering
7. Madhya Pradesh Board of Technical Education, Bhopal	Diploma in Mining and Mine Surveying
8. State Board of Technical Education (Formerly Technological Diplomas Examination Board), Madras	Licentiate in Mining Engineering
9. Central Board of Technical Examination, Mysore	Licentiate in Mining Engineering
10. State Council of Technical Education and Training, Orissa	Diploma in Mining Engineering
11. Board of Technical Education Rajasthan, Jodhpur	Diploma in Mining.
12. State Council for Engineering and Technical Education, West Bengal	Licentiate Diploma in Mining Engineering
<b>Geology - Indian</b>	
13. Any University in India established by Law	(a) Honours Degree in Geology. 5[(b) Degree of M.A. or M.Sc. in Geology]
<b>Mining – Foreign</b>	
14. Camborne School of Metalliferous Mining, Cornwall (England)	Diploma of Associateship I Metalliferous Mining.

S.O. 2796, dated the 23<sup>rd</sup> September, 1963. – In pursuance of clause (ii) of sub-regulation (1) of regulation 24 of the Metalliferous Mines Regulations, 1961, the Central Government hereby approves for the purpose of said regulation the educational institutions mentioned under column I of the table below in respect of such diplomas, certificates, degrees or other qualifications awarded by the them as are specified in the corresponding entry under column II of the said table.

TABLE

I Name of Institution	II Degrees, Diplomas, Certificates awarded
<b>INDIA</b>	
(List of Institution and authorities awarding Degree/Diploma in Mining, after full time course of study)	
1. Any University in India established by law	Degree in mining.
2. Indian School of Mines, Dhanbad.	(1) Certificate in Coal Mining (Awarded upto 1950-51) (2) Certificate in Metal Mining (Awarded upto 1938-39) (2) Diploma of Associateship in Mining Engineering.
3. Bengal Engineering College, Sibpore	Diploma in Mining (awarded up to 1929)
4. State Council for Engineering and Technical Education, West Bengal.	Licentiate Diploma in Mining Engineering.
5. Board of Technical Education, Rajasthan, Jodhpur	Diploma in Mining
6. State Council of Technical Education and Training, Orissa	Diploma in Mining Engineering
7. Central Board of Technical Examination, Mysore	Licentiate in Mining Engineering
8. Shri Jayachamarajendra Occupational Institute, Bangalore	Diploma in Mining
9. State Board of Technical Education and Training, Andhra Pradesh.	Diploma in Mining Engineering
10. State Board of Technical Education (formerly Technological Examination Board.), Madras	Licentiate in Mining Engineering
11. State Board of Technical Education, Bihar	Diploma in Mining and Mine Surveying
12. Madhya Pradesh Board of Technical Education, Bhopal	Diploma in Mining and Mine Surveying

I	II
(List of Institution and authorities awarding Degree/Diploma in Mining, after full time course of study)	
1. Any University in India established by law	Degree in Civil Engineering
2. All India council of Technical Education	National Certificate in Civil Engineering
3. Assam Engineering Institute, Gauhati	Certificate in Civil Engineering
4. Bihar College of Engineering, Patna	(3) Surveyor's Certificate (4) Civil Engineering Subordinate Diploma
5. Board of Technical Education, Kerala	Diploma in Civil Engineering
6. Board of Technical Education, Rajasthan, Jodhpur	Diploma in Civil Engineering
7. Board of Technical Examination, Mysore (formerly Central Board of Technical Examination, Mysore)	L.C.E./ Diploma in Civil Engineering
8. Civil Engineering School, Allahabad	Overseers Certificate

9. Civil Engineering School, Lucknow	Overseers Certificate
10. College of Engineering, Poona	Civil Engineering diploma prior to 1950
11. College of Engineering, Guidy	Upper Subordinate Diploma, L.C.E. from 1942 to 1953.
12. College of Engineering, Osmania Univeristy (formerly Osmania Engineering College), Hyderabad	Upper Subordinate (Ist Class) Overseer Certificate from 1941
13. College of Engineering and Technology, Jadhavpur	Diploma of the Overseer Course
14. College of Military Engineering, Kirkee	Overseers' Building and Road Course
15. Department of Technical Education, Bombay	Diploma in Civil Engineering
16. Department of Technical Education, Gujarat State, Ahmedabad (previously Bombay)	Overseers Diploma
17. Director General of employment and Training (Ministry of Labour and Employment, Government of India)	Surveyor's Diploma
18. Director of Industries, Punjab	Common Civil Overseer's Certificate
19. Government Polytechnic, Nagpur University (formerly Government Engineering School, Nagpur)	(3) Surveyor's Certificate
20. Government School of Engineering, Rasual	(4) L.C.E.
(21) Governments Technical College, Hydrabad (formerly Osmania Technical College, Hyderabad)	Overseership Certificate
(22) Howett-Engineering School, Lucknow	L.C.E.
23. H.R.H. the Prince of 'wales Institute of Engineering an Technology, Jorhat	Ovearseers Certificate (Granted by the Department of Public Instruction from 1936 to 1944 and by the U.P. Government from 1946)
24. Kalikata Shilpa Vidya Pith	Certificate in Civil Engineering.
25. Kerala University (formerly Travancore University)	L.CE. awarded by the Adhoc Committee. Provincial Council for Engineering and Technical Education. West Bengal.
26. Mainamati Survey Institute, Tripura	Diploma in Civil Engineering
27. M.B.M. Engineering College, Jodhpur	Survey Final Examination.
28. Murlidhar Gajan and Technical Institute, Hathras	Diploma in Civil Engineering
29. Muslim University, Aligarh	L.C.E.
30. Nagpur University	Diploma in Civil Engineering
31. National Council for Rural Higher Education	(1) Surveyor's Certificate
32. Orissa School of Engineering, Cuttack	(2) Civil Engineering Subordinate Diploma, L.C.E
33. Overseer Examination Board (Bengal ) (Before partition)	L.C.E
34. Polytechnicl Faculty of Technological (including engineering) M.S., University of Baroda (formerly Kalabhavan renamed as Faculty of Technology including Engineering M.S. University, Baroda)	Diploma in Civil Engineering (obtained after a course of at least three years)
35. Punjab Polytechnic (formerly Punjab Government School of Engineering, Nilokheri).	Overseer's Diploma in Civil Engineering from December, 1947
36. Ramgarhia Polytechnic, Phagwara (formerly Vishwakarma polytechnic Institute.	Diploma in Civil Engineering Course, Overseer Course.
37. Saugar University	Diploma in Civil Engineering
38. School of Engineering, Bangalore	Diploma in Civil Engineering
39. Shri Jaichamarajendra Occupational Institute, Banglore	Diploma in Civil Engineering

40. State Board of Technical Education and Vocational Training, Bihar	Diploma in Civil Engineering after a course of study lasting for 2 and half years
41. State Board of Technical Education and Training, U.P. (formerly in adhoc Board of Engineering Education , UP)	Overseer Diploma in Civil Engineering
42. State Board of Technical Education, Punjab	Overseer Diploma in Civil Engineering
43. State Board of Technical Education and Training, AP	LCE
44. State Board of Technical Education (formerly Technological Diploma Examination Board,) Madras	LCE/Diploma in Civil Engineering
45. State Council of Technical Education, Assam	Diploma in Civil Engineering
46. State Council of Engineering and technical Education, West Bengal	LCE
47. Technological Diploma Examinations Board, AP	LCE
48. Trihat School of Engineering, Muzaffarpur	Supordinate Engineering Course in Civil Engineering from 1952.
49. University of Roorkee (formerly Thomson Civil Engineering College, Roorkee)	Diploma in Civil Engineering (formerly Civil Overseership)
50 West Bengal Survey Institute, Bandal	Senior Surveyor's Certificate
51. State Council of Technical Education and Training, Orissa	Diploma in Civil Engineering
<b>FOREIGN</b>	
1. N.E.D Engineering College, Karachi	Diploma in Engineering
2. Ashanulla School of engineering, Dacca	Sub Overseer's Diploma, LCE
3. Government Technical Institute, Insein, Burma	Diploma in Civil Engineering
4. London University, UK	(1) B.Sc. Degree in Mining for Internal Students subject to the degree being endorsed by the University with a certificate of four months' practical experience in a mine.
	(2) Degree of B.Sc. in Mining for External Students.
5. Colorado School of Mines, USA	Degree in Mining Engineering
1[6. University of Sheffield	Bachelor of Engineering (Mining)
7. Leeds University	Degree of B.Sc. in Mining
8. Birmingham University	Degree of B.Sc. in Mining].
2[9. Wisconsin State College and Institute of Technology, Platteville, Wisconsin	Bachelor of Science in Mining
10. Comborne School of Metalliferous Mining, Cornwall (England).	Diploma of Associateship in Metalliferous Mining].
3[11. Higher Technical Institute of the Technical University of Lisbon, (Portugal ) Republic	Degree in Mining Engineering

## PART - A

### FOREST (CONSERVATION) ACT, 1980 WITH AMENDMENTS MADE IN 1988

An Act to provide for the conservation of forests and for matters connected therewith or ancillary or incidental thereto.

Be it enacted by Parliament in the Thirty-first Year of the Republic of India as follows:-

#### 1. Short title, extent and commencement-

- (1) This Act may be called the Forest (Conservation) Act, 1980
- (2) It extends to the whole of India except the State of Jammu & Kashmir.
- (3) It shall be deemed to have come into force on the 25th day of October, 1980.

Short title, extent  
and  
commencement

#### 2. 2.

#### **Restriction on the dereservation of forests or use of forest land for non-forest purpose –**

Restriction on  
the reservation  
of the forest or  
use of forest land  
for non-forest  
purpose

Notwithstanding anything contained in any other law for the time being in force in a State, no State Government or other authority shall make, except with the prior approval of the Central Government, any order directing-

- (i) that any reserved forest (within the meaning of the expression "reserved forest" in any law for the time being in force in that State) or any portion thereof, shall cease to be reserved;
- (ii) that any forest land or any portion thereof may be used for any non-forest purpose;
- (iii) that any forest land or any portion thereof may be assigned by way of lease or otherwise to any private person or to any authority, corporation, agency or any other organisation not owned, managed or controlled by Government;
- (iv) that any forest land or any portion thereof may be cleared of trees which have grown naturally in that land or portion, for the purpose of using it for reafforestation.

*Explanation* - For the purpose of this section, "non-forest purpose" means the breaking up or clearing of any forest land or portion thereof for-

- (a) the cultivation of tea, coffee, spices, rubber, palms, oil-bearing plants, horticultural crops or medicinal plants;
- (b) any purpose other than reafforestation,

but does not include any work relating or ancillary to conservation, development and management of forests and wildlife, namely, the establishment of check-posts, fire lines, wireless communications and construction of fencing, bridges and culverts, dams, waterholes, trench marks, boundary marks, pipelines or other like purposes.

### 3. **Constitution of Advisory Committee -**

Constitution of  
Advisory  
Committee

The Central Government may constitute a Committee consisting of such number of persons as it may deem fit to advise that Government with regard to-

- (i) the grant of approval under Section 2 ; and
- (ii) any other matter connected with the conservation of forests which may be referred to it by the Central Government.

### 3A. **Penalty for contravention of the provisions of the Act –**

Penalty for  
contravention of  
the provisions of  
the Act

Whoever contravenes or abets the contravention of any of the provisions of Section 2, shall be punishable with simple imprisonment for a period which may extend to fifteen days.

### 3B. **Offences by authorities and Government Departments –**

Offences by  
authorities and  
Government  
Departments

- (1) Where any offence under this Act has been committed -
  - (a) by any department of Government, the head of the department; or
  - (b) by any authority, every person who, at the time the offence was committed, was directly in charge of, and was responsible to, the authority for the conduct of the business of the authority as well as the authority;

shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly :

Provided that nothing contained in this sub-section shall render the head of the department or any person referred to in clause (b), liable to any punishment if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

- (2) Notwithstanding anything contained in sub-section (1), where an offence punishable under the Act has been committed by a department of Government or any authority referred to in clause (b) of sub-section (1) and it is proved that the offence has been committed with the consent or connivance of; or is attributable to any neglect on the part of any officer, other than the head of the department, or in the case of authority, any person other than the persons referred to in clause(b) of sub-section (1), such officer or persons shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

4 **Power to make rules –**

Power to make  
rules

- (1) The Central Government may, by notification in the Official Gazette, make rules for carrying out the provisions of this Act.
- (2) Every rule made under this Act shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.

5. **5. Repeal and saving –**

Repeal and  
saving

- (1) (1) The Forest (Conservation) Ordinance, 1980 is hereby repealed.
- (2) Notwithstanding such repeal, anything done or any action taken under the provisions of the said Ordinance shall be deemed to have been done or taken under the corresponding provisions of this Act.

## PART - B

### FOREST CONSERVATION RULES, 2003 (published in Gazette of India: Extraordinary on the 10<sup>th</sup> January, 2003)

G.S.R. 23(E) - In exercise of the powers conferred by sub-section (1) of section 4 of the Forest (Conservation) Act, 1980 (69 of 1980), and in supersession of the Forest (Conservation) Rules, 1981, except as respects things done or omitted to be done before such supersession, the Central Government hereby makes the following rules, namely:-

**1. Short title, extent and commencement.-**

- (1) (1) These rules may be called the Forest (Conservation) Rules, 2003.
- (2) (2) They shall extend to the whole of India except the State of Jammu and Kashmir.
- (3) (3) They shall come into force on the date of their publication in the Official Gazette.

**2. Definitions.-** In these rules, unless the context otherwise requires:-

- (a) (a) "Act" means the Forest (Conservation) Act, 1980 (69 of 1980);
- (b) (b) "Committee" means the Advisory Committee constituted under section 3 of the Act;
- (c) (c) "Chairperson" means the Chairperson of the Committee;
- (d) (d) "Member" means a member of the Committee;
- (e) (e) "Nodal Officer" means any officer not below the rank of Conservator of Forests, authorised by the State Government to deal with the forest conservation matters under the Act;
- (f) (f) "Regional Office" means a Regional Office of the Central Government in the Ministry of Environment and Forests established as part of the Ministry to deal with the forest conservation matters under the Act;
- (g) (g) "Section" means a section of the Act;
- (h) (h) "User Agency" means any person, organisation or Company or Department of the Central or State Government making a request for diversion or de-notification of forest land for non-forest purpose or using forest land for non-forest purpose in accordance with the permission granted by the Central Government under the Act or the rules.

**3. 3. Composition of the Committee.-**

- (1) The Committee shall be composed of the following members:-
  - (i) (i) Director General of Forests, Ministry of Environment and Forests - Chairperson.
  - (ii) (ii) Additional Director General of Forests, Ministry of Environment and Forests- Member.
  - (iii) (iii) Additional Commissioner (Soil Conservation), Ministry of Agriculture- Member.
  - (iv) (iv) Three eminent experts in forestry and allied disciplines (non-officials)- Members.
  - (v) (v) Inspector General of Forests (Forest Conservation), Ministry of Environment and Forests - Member Secretary



- (2) Additional Director General of Forests shall act as the Chairperson in the absence of Director General of Forests.

- 4. Terms of appointment of non-official members shall be as follows.-**
- (i) (i) a non-official member shall hold his office for a period of two years;
  - (ii) (ii) a non-official member shall cease to hold office if he becomes of unsound mind, becomes insolvent or is convicted by court of law on a criminal offence involving moral turpitude;
  - (iii) (iii) a non-official member may be removed from his office if he fails to attend three consecutive meetings of the Committee without any sufficient cause or reasons;
  - (iv) (iv) any vacancy in the membership caused by any reason mentioned in clauses (ii) and (iii) shall be filled by the Government for the unexpired portion of two years term.
  - (v) (v) travelling and daily allowance shall be payable to the non-official members of the Committee at the highest rate admissible to the Government servants of Group 'A' under the rules and orders made by the Central Government and for the time being in force.

Provided that the payment of travelling allowance and daily allowance to a member who is a Member of the Parliament or a Member of a State Legislature shall be regulated in accordance with the Salary, Allowances and Pension of Members of Parliament Act, 1954 (30 of 1954) or the respective provisions of law pertaining to the member of the concerned State Legislature.

- 5. Conduct of business of the Committee.-**
- (i) (i) The Chairperson shall call the meeting of the Committee whenever considered necessary, but not less than once in a month.
  - (ii) (ii) The meeting of the Committee shall be held at New Delhi.
  - (iii) (iii) In a case where the Chairperson is satisfied that inspection of site or sites of forest land proposed to be used for non-forest purposes shall be necessary or expedient in connection with the consideration of the proposal or proposals received under sub-rule (3) of rule 6, he may direct that the meetings of the Committee to be held at a place other than New Delhi from where such inspection of site or sites is necessary.
  - (iv) (iv) The Chairperson shall preside over every meeting of the Committee at which he is present.
  - (v) (v) Every question upon which the Central Government is required to be advised shall be considered in the meeting of the Committee provided that in urgent cases if the meeting cannot be convened within a month, the Chairperson may direct that papers may be circulated and sent to the members for their opinion within the stipulated time.
  - (vi) (vi) The quorum of the meeting of the Committee shall be three.

**6. Submission of the proposals seeking approval of the Central Government under section 2 of the Act.-**

- (1) Every user agency, who wants to use any forest land for non-forest purposes shall make his proposal in the appropriate Form appended to these rules, i.e. Form 'A' for proposals seeking first time approval under the Act and Form 'B' for proposals seeking renewal of leases where approval of the Central Government under the Act had already been obtained earlier, to the concerned nodal officer authorized in this behalf by the State Government, alongwith requisite information and documents, complete in all respects, well in advance of taking up any non-forest activity on the forest land.

- (2) Every State Government or other authority, after having received the proposal under sub-rule (1) and after being satisfied that the proposal requires prior approval under section 2 of the Act, shall send the proposal to the Central Government in the appropriate forms, within ninety days of the receipt of the proposal from the user agency for proposals seeking first time approval under the Act and within sixty days for proposals seeking renewal of leases where approval of the Central Government under the Act had already been obtained earlier:

Provided that all proposals involving clearing naturally grown trees in forest land or portion thereof for the purpose of using it for reafforestation shall be sent in the form of Working Plan or Management Plan.

- (3) The proposal referred to in sub-rule (2) above, involving forest land of more than forty hectare shall be sent by the State Government to the Secretary to the Government of India, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110 003, with a copy of the proposal (with complete enclosures) to the concerned Regional Office.
- (4) The proposal referred to in sub-rule (2) above, involving forest land up to forty hectare shall be sent to the Chief Conservator of Forests or Conservator of Forests of the concerned Regional Office of the Ministry of Environment and Forests.
- (5) The proposal referred to in sub-rule (2) above, involving clearing of naturally grown trees in forest land or portion thereof for the purpose of using it for reafforestation shall be sent to the Chief Conservator of Forests or Conservator of Forests of the concerned Regional Office of the Ministry of Environment and Forests.

## **7. Committee to advise on proposals received by the Central Government.-**

- (1) The Central Government shall refer every proposal, complete in all respects, received by it under sub-rule (3) of rule 6 including site inspection report, wherever required, to the Committee for its advice thereon.
- (2) The Committee shall have due regard to all or any of the following matters while tendering its advice on the proposals referred to it under sub-rule (1), namely:-
- (a) Whether the forests land proposed to be used for non-forest purpose forms part of a nature reserve, national park wildlife sanctuary, biosphere reserve or forms part of the habitat or any endangered or threatened species of flora and fauna or of an area lying in severely eroded catchment;
  - (b) Whether the use of any forest land is for agricultural purposes or for the rehabilitation of persons displaced from their residences by reason of any river valley or hydro-electric project ;
  - (c) Whether the State Government or the other authority has certified that it has considered all other alternatives and that no other alternatives in the

circumstances are feasible and that the required area is the minimum needed for the purpose; and

- (d) (d) Whether the State Government or the other authority undertakes to provide at its cost for the acquisition of land of an equivalent area and afforestation thereof.

- (3) While tendering the advice, the Committee may also suggest any conditions or restrictions on the use of any forest land for any non-forest purpose, which in its opinion, would minimise adverse environmental impact.

**8. Action of the Central Government on the advice of the Committee.–**

The Central Government shall, after considering the advice of the Committee tendered under rule 7 and after such further enquiry as it may consider necessary, grant approval to the proposal with or without conditions or reject the same within sixty days of its receipt.

**9. Proceedings against persons guilty of offences under the Act.-**

- (1) The Central Government may, by notification, authorize any officer not below the rank of Conservator of Forests or the concerned forest officer having territorial jurisdiction over the forest land in respect of which the said offence is said to have been committed, to file complaints against the person (s) prima-facie found guilty of offence under the Act or the violation of the rules made thereunder, in the court having jurisdiction in the matter.

Provided that no complaint shall be filed in the court, without giving the person (s) or officer (s) or authority (s) against whom the allegations of offence exist, an opportunity to explain his or their conduct and to show cause, by issuing a notice in writing of not less than sixty days, as to why a complaint should not be filed in the court against him or them for alleged offences.

- (2) The officer authorised by the Central Government in sub-rule (1) may require any State Government or its officer or any person or any other authority to furnish to it within a specified period any reports, documents, statistics and any other information related to contravention of the Act or the rules made thereunder, considered necessary for making a complaint in any court of jurisdiction and every such State Government or officer or person or authority shall be bound to do so.

**APPENDIX  
(See Rule 6)**

**FORM – ‘A’**

**Form for seeking prior approval under section 2 of the proposals  
by the State Governments and other authorities**

**PART-I  
(to be filled up by user agency)**

1. Project details:
  - (i) Short narrative of the proposal and project/scheme for which the forest land is required.
  - (ii) Map showing the required forest land, boundary of adjoining forest on a 1:50,000 scale map.
  - (iii) Cost of the project:
  - (iv) Justification for locating the project in forest area.
  - (v) Cost-benefit analysis (to be enclosed).
  - (vi) Employment likely to be generated.
2. Purpose-wise break-up of the total land required:
3. Details of displacement of people due to the project, if any:
  - (i) (i) Number of families.
  - (ii) (ii) Number of Scheduled Castes/Scheduled Tribe families
  - (iii) (iii) Rehabilitation plan. (to be enclosed)
4. Whether clearance under Environment (Protection) Act, 1986 required? (Yes/No).
5. Undertaking to bear the cost of raising and maintenance of compensatory afforestation and/or penal compensatory afforestation as well as cost for protection and regeneration of Safety Zone, etc. as per the scheme prepared by the State Government (undertaking to be enclosed).
6. 6. Details of Certificates/documents enclosed as required under the instructions.

Signature  
(Name in Block letters)  
Designation  
Address (of User Agency)

Date:- \_\_\_\_\_

Place:- \_\_\_\_\_

State serial No. of proposal \_\_\_\_\_  
(To be filled up by the Nodal Officer with date of

receipt)

**PART-II**  
**(To be filled by the concerned Deputy Conservator of Forests)**

State serial No. of proposal \_\_\_\_\_

7. Location of the project/Scheme:
  - (i) (i) State/Union Territory
  - (ii) (ii) District.
  - (iii) (iii) Forest Division
  - (iv) (iv) Area of forest land proposed for diversion (in ha.)
  - (v) (v) Legal status of forest
  - (vi) (vi) Density of vegetation.
  - (vii) (vii) Species-wise (scientific names) and diameter class-wise enumeration of trees (to be enclosed. In case of irrigation/hydel projects enumeration at FRL, FRL- 2 meter & FRL-4 meter also to be enclosed.)
  - (viii) (viii) Brief note on vulnerability of the forest area to erosion.
  - (ix) (ix) Approximate distance of proposed site for diversion from boundary of forest.
  - (x) (x) Whether forms part of National Park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, etc. (If so, the details of the area and comments of the Chief Wildlife Warden to be annexed).
  - (xi) (xi) Whether any rare/endangered/unique species of flora and fauna found in the area- if so details thereof.
  - (xii) (xii) Whether any protected archaeological/heritage site/defence establishment or any other important monument is located in the area. If so, the details thereof with NOC from competent authority, if required.
8. Whether the requirement of forest land as proposed by the user agency in col. 2 of Part-I is unavoidable and barest minimum for the project. If no, recommended area item-wise with details of alternatives examined.
9. Whether any work in violation of the Act has been carried out (Yes/No). If yes, details of the same including period of work done, action taken on erring officials. Whether work in violation is still in progress.
10. Details of compensatory afforestation scheme:
  - (i) (i) Details of non forest area/degraded forest area identified for compensatory afforestation, its distance from adjoining forest, number of patches, size of each patch.
  - (ii) (ii) Map showing non-forest/degraded forest area identified for compensatory afforestation and adjoining forest boundaries.
  - (iii) (iii) Detailed compensatory afforestation scheme including species to be planted, implementing agency, time schedule, cost structure, etc.
  - (iv) (iv) Total financial outlay for compensatory afforestation scheme.
  - (v) (v) Certificates from competent authority regarding suitability of area identified for compensatory afforestation and from management point of view. (To be signed by the concerned Deputy Conservator of Forests).
11. 11. Site inspection report of the DCF (to be enclosed) especially highlighting facts asked in col. 7 (xi, xii), 8 and 9 above.
12. Division/District profile:
  - (i) (i) Geographical area of the district.
  - (ii) (ii) Forest area of the district.

- (iii) (iii) Total forest area diverted since 1980 with number of cases.
- (iv) (iv) Total compensatory afforestation stipulated in the district/division since 1980 on (a) forest land including penal compensatory afforestation, (b) non-forest land.
- (v) (v) Progress of compensatory afforestation as on (date) \_\_\_\_\_ on  
(a) forest land  
(b) non-forest land.

13. Specific recommendations of the DCF for acceptance or otherwise of the proposal with reasons.

Signature  
Name  
Official Seal

Date:- \_\_\_\_\_

Place:- \_\_\_\_\_

### PART-III

**(To be filled by the concerned Conservator of Forests)**

- 14. Whether site, where the forest land involved is located has been inspected by concerned Conservator of Forests (Yes/No). If yes, the date of inspection & observations made in form of inspection note to be enclosed.
- 15. Whether the concerned Conservator of Forests agree with the information given in Part-B and the recommendations of Deputy Conservator of Forests.
- 16. Specific recommendation of concerned Conservator of Forests for acceptance or otherwise of the proposal with detailed reasons.

Signature  
Name

Official Seal

Date:- \_\_\_\_\_

Place:- \_\_\_\_\_

### PART-IV

**(To be filled in by the Nodal Officer or Principal Chief Conservator of Forests or Head of Forest department)**

17. Detailed opinion and specific recommendation of the State Forest Department for acceptance or otherwise of the proposal with remarks.

(While giving opinion, the adverse comments made by concerned Conservator of Forests or Deputy Conservator of Forests should be categorically reviewed and critically commented upon).

Signature  
Name & Designation  
(Official Seal)

Date:- \_\_\_\_\_

Place:- \_\_\_\_\_

## PART- V

(To be filled in by the Secretary in charge of Forest Department or by any other authorised officer of the State Government not below the rank of an Under Secretary)

18. Recommendation of the State Government:  
(Adverse comments made by any officer or authority in Part-B or Part-C or Part-D above should be specifically commented upon)

Signature  
Name & Designation  
(Official Seal)

Date:- \_\_\_\_\_

Place:- \_\_\_\_\_

### INSTRUCTIONS (for Part-I):-

1. 1. The project authorities may annex a copy of the approved project/plan in addition to filling Col. 1 (i) e.g. IBM approved mining plan for major minerals/CMPDI plan with subsidence analysis reports, etc.
2. 2. Map has to be in original duly authenticated jointly by project authorities and concerned DCF – Col. 1 (ii).
3. 3. Complete details of alternative alignments examined especially in case of project like roads, transmission lines, railway lines, canals, etc. to be shown on map with details of area of forest land involved in each alternative to be given - Col. 1 (iii).
4. 4. For proposals relating to mining, certificate from competent authority like District Mining Officer about non-availability of the same mineral in surrounding/nearby non-forest areas.
5. 5. In case the same company/individual has taken forest land for similar project in the State, a brief detail of all such approvals/leases be given as an enclosure along with current status of the projects.
6. 6. The latest clarifications issued by the Ministry under Forest (Conservation) Act, 1980 may be kept in mind. In case such information do not fit in the given columns, the same shall be annexed separately.

### GENERAL INSTRUCTIONS:-

1. 1. On receipt of proposal, Nodal Officer shall issue a receipt to the user agency indicating therein the name of the proposal, user agency, area in hectare, serial number and date of receipt.
2. 2. If the space provided above is not sufficient to specify any information, please attach separate details/documents.
3. 3. While forwarding the proposal to the Central Government, complete details on all aspects of the case as per Form prescribed above read with the clarifications issued by the Ministry of Environment and Forests, Government of India, New Delhi should be given. Incomplete or deficient proposals shall not be considered and shall be returned to the State Government in original.
4. 4. The State Government shall submit the proposal to the Central Government within stipulated time limits. In case of delay while forwarding, the reasons for the same to be given in the forwarding/covering letter.



**FORM – ‘B’**  
**(See Rule 6)**

**Form for seeking prior approval under section 2 of the proposals by the State Governments and other authorities in respect of renewal of leases, which have been earlier granted clearance under Forest (Conservation) Act, 1980**

**PART-I**

**(to be filled up by user agency)**

1. 1. Letter No. & date vide which clearance under Forest (Conservation) Act, 1980 accorded by the Central Government (copy to be enclosed):
2. 2. Project details:
  - (i) Short narrative of the proposal and project/scheme for which the forest land is required.
  - (ii) Map showing the required forest land, boundary of adjoining forest on a 1:50,000 scale map.
  - (iii) Cost of the project:
3. Purpose-wise break-up of the total land required (already broken & to be broken):
4. Details of Certificates/documents enclosed as required under the instructions.

Signature  
(Name in Block letters)  
Designation  
Address (of User Agency)

Date:- \_\_\_\_\_

Place:- \_\_\_\_\_

State serial No. of proposal \_\_\_\_\_  
(To be filled up by the Nodal Officer with date of

receipt)

**PART-II**

**(To be filled by the concerned Deputy Conservator of Forests)**

State serial No. of proposal \_\_\_\_\_

5. Location of the project/Scheme:
  - (i) (i) State/Union Territory
  - (ii) (ii) District.
  - (iii) (iii) Forest Division
  - (iv) (iv) Area of forest land proposed for diversion (in ha.)
  - (v) (v) Legal status of forest
  - (vi) (vi) Density of vegetation.
  - (vii) (vii) Species-wise (scientific names) and diameter class-wise enumeration of trees in unbroken area.
  - (viii) (viii) Whether forms part of National Park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, etc. (If so, the details of the area and comments of the Chief Wildlife Warden to be annexed).
6. Whether any work in violation of the Act has been carried out (Yes/No). If yes, details of the same including period of work done, action taken on erring officials. Whether work in violation is still in progress.

7. Site inspection report of the DCF (to be enclosed) in respect to status of compliance of conditions stipulated during earlier approval.
8. Division/District profile:
  - (i) (i) Geographical area of the district.
  - (ii) (ii) Forest area of the district.
  - (iii) (iii) Total forest area diverted since 1980 with number of cases.
  - (iv) (iv) Total compensatory afforestation stipulated in the district/division since 1980 on (a) forest land including penal compensatory afforestation, (b) non-forest land.
  - (v) (v) Progress of compensatory afforestation as on (date) \_\_\_\_\_ on  
(a) forest land  
(b) non-forest land.
9. Specific recommendations of the DCF for acceptance or otherwise of the proposal with reasons.

Signature  
Name  
Official Seal

Date:- \_\_\_\_\_  
Place:- \_\_\_\_\_

### PART-III

**(To be filled by the concerned Conservator of Forests)**

10. Whether site, where the forest land involved is located has been inspected by concerned Conservator of Forests (Yes/No). If yes, the date of inspection & observations made in form of inspection note to be enclosed.
11. Whether the concerned Conservator of Forests agree with the information given in Part-B and the recommendations of Deputy Conservator of Forests.
12. Specific recommendation of concerned Conservator of Forests for acceptance or otherwise of the proposal with detailed reasons.

Signature  
Name  
Official Seal

Date:- \_\_\_\_\_  
Place:- \_\_\_\_\_

### PART-IV

**(To be filled in by the Nodal Officer or Principal Chief Conservator of Forests or Head of Forest department)**

13. Detailed opinion and specific recommendation of the State Forest Department for acceptance or otherwise of the proposal with remarks.

(While giving opinion, the adverse comments made by concerned Conservator of Forests or Deputy Conservator of Forests should be categorically reviewed and critically commented upon).

Signature  
Name & Designation  
(Official Seal)

Date:- \_\_\_\_\_  
Place:- \_\_\_\_\_

## **PART- V**

**(To be filled in by the Secretary in charge of Forest Department or by any other authorised officer of the State Government not below the rank of an Under Secretary)**

14. Recommendation of the State Government:

(Adverse comments made by any officer or authority in Part-B or Part-C or Part-D above should be specifically commented upon)

Signature  
Name & Designation  
(Official Seal)

Date:-\_\_\_\_\_

Place:-\_\_\_\_\_

### **INSTRUCTIONS (for Part-I):-**

1. 1. The project authorities may annex a copy of the approved project/plan in addition to filling Col. 2 (i) e.g. IBM approved mining plan for major minerals/CMPDI plan with subsidence analysis reports, etc.
2. 2. Map has to be in original duly authenticated jointly by project authorities and concerned DCF – Col. 2 (ii).
3. 3. In case the same company/individual has taken forest land for similar project in the State, a brief detail of all such approvals/leases be given as an enclosure along with current status of the projects.
4. 4. Item-wise requirement (Col. 3) should be separately shown for broken up and fresh areas.
5. 5. The latest clarifications issued by the Ministry under Forest (Conservation) Act, 1980 may be kept in mind. In case such information do not fit in the given columns, the same shall be annexed separately.

### **GENERAL INSTRUCTIONS:-**

1. 1. On receipt of proposal, Nodal Officer shall issue a receipt to the user agency indicating therein the name of the proposal, user agency, area in hectare, serial number and date of receipt.
2. 2. If the space provided above is not sufficient to specify any information, please attach separate details/documents.
3. 3. While forwarding the proposal to the Central Government, complete details on all aspects of the case as per Form prescribed above read with the clarifications issued by the Ministry of Environment and Forests, Government of India, New Delhi should be given. Incomplete or deficient proposals shall not be considered and shall be returned to the State Government in original.
4. 4. The State Government shall submit the proposal to the Central Government within stipulated time limits. In case of delay while forwarding, the reasons for the same to be given in the forwarding/covering letter.

(File No. 5-5/98-FC)

DR. V.K. BAHUGUNA, Inspector General of Forests (Forest Conservation)

Note:- The principal rules were published vide G.S.R. No. 719 dated the 1<sup>st</sup> August, 1981 in part II, Section 3, sub-section (i) of the Gazette of India and subsequently amended vide

- (1) (1) G.S.R. 14, dated the 28<sup>th</sup> December, 1987
- (2) (2) G.S.R. 640(E), dated the 26<sup>th</sup> June, 1989
- (3) (3) G.S.R. 563 (E), dated the 21<sup>st</sup> May, 1992.

## PART - C

### CHAPTER 1:- Application of Forest (Conservation) Act, 1980

#### 1.1. Definition

- (i) The term 'Forest land' mentioned in Section 2 of the Act refers to reserved forest, protected forest or any area recorded as forest in the government records. Lands which are notified under Section 4 of the Indian Forest Act would also come within the purview of the Act. (Supreme Court's Judgement in NTPC's case). It would also include "forest" as understood in the dictionary sense (Supreme Court orders dated 12.12.1996 in WP No. 202/1995- Annexure-I). All proposals for diversions of such areas to any non-forest purpose, irrespective of its ownership, would require the prior approval of the Central Government.

**Clarification:-** The term "forest" shall not be applicable to the plantations raised on private lands, except notified private forests. However, felling of trees in these private plantations shall be governed by various State Acts and Rules. Felling of trees in notified private forests will be as per the working plan / management plan duly approved by Government of India.

- (ii) The term "tree" for the purpose of this Act will have the same meaning as defined in Section 2 of the Indian Forest Act, 1927 or any other Forest Act which may be in force in the forest area under question.

#### 1.2 Clarifications

- (i) The cases in which specific orders for de-reservation or diversion of forest areas in connection with any project were issued by the State Government prior to 25.10.1980, need not be referred to the Central Government. However, in cases where only administrative approval for the project was issued without specific orders regarding dereservation and/or diversion of forest lands, a prior approval of the Central Government would be necessary.
- (ii) Harvesting of fodder grasses, legumes etc. which grow naturally in forest areas, without removal of the tree growth, will not require prior approval of the Central Government. However, lease of such areas to any organisation or individual would necessarily require approval under the Act.
- (iii) The forest policy, as well as provisions of the Forest (Conservation) Act, 1980, do not interfere in any manner or restrict the Nistar, recorded rights, concessions and privileges of the local people for bonafide domestic use as granted by the State Governments under Indian Forest Act, 1927 or State Forest Acts/Regulations. However, it has to be ensured that while allowing such rights, concessions and privileges to be exercised, the right holders do not resort to felling of trees or break up the forest floor so as to procure stones, minerals, or take up constructions, etc. The forest produce so obtained shall not be utilised for any commercial purposes. The collection of such forest produce should be manual and should be transported through local modes or transport like bullock carts, camel carts, etc. and no mechanised vehicles shall be allowed to be used in transporting such forest produce and only in exceptional cases with the approval of concerned Divisional Forest Officers, tractors mounted with trolley may be used. (No. 11-12/98-FC(Pt.II) dated 3.5.1999 -96/c and dated 22.11.2000)

Clarification:- The Supreme Court has passed an order on 14.02.2000 restraining removal of dead, diseased, dying or wind-fallen trees, drift wood and grasses etc. from any National Park or Game Sanctuary.....” Annexure-II A may be referred to. In view of this, rights and concessions cannot be enjoyed in the Protected Areas (PAs).

### **1.3 Investigation and Survey**

- (i) Investigations and surveys carried out in connection with development projects such as transmission lines, hydro-electric projects, seismic surveys, exploration for oil drilling, mining etc. will not attract the provisions of the Act as long as these surveys do not involve any clearing of forest or cutting of trees, and operations are restricted to clearing of bushes and lopping of tree branches for purpose of sighting.
- (ii) If, however, investigations and surveys involve clearing of forest area or felling of trees, prior permission of the Central Government is mandatory.
- (iii) Notwithstanding the above, survey, investigation and exploration shall not be carried out in wildlife sanctuaries, national parks and sample plots demarcated by the Forest Department without obtaining the prior approval of the Central Government, whether or not felling of trees is involved.

**Clarification:-** The Supreme Court has passed several orders regarding taking up of non-forestry activities in the National Parks/Sanctuaries. Annexure-II A may be referred to. In view of this, the State Governments should not submit any proposal for diversion of forest land in National Parks and Sanctuaries without seeking prior permission of the Indian Board for Wildlife (Now National Board of Wildlife) and Supreme Court. (No. 11-9/98-FC dated 04.12.1998 and 04.05.2001).

- (iv) The work of actual construction would however, fully attract the provisions of the Act and prior clearance of the Central Government must be obtained even if such work does not require felling of trees.
- (v) Prospecting of any mineral, done under prospecting license granted under MMRD Act, which requires collection/ removal of samples from the forest land, would be a stage between survey & investigation and grant of mining lease and as such permission under Forest (Conservation) Act 1980 would be required. (No. 11-56/2000-FC dated 12.06.2001). However, test drilling upto 10 bore holes of maximum 4’’ diameter per 100 sq. km. for prospecting, exploration or reconnaissance operations, without felling of trees, shall not attract the provisions of the Act. In all other cases involving more number of drilling of bore holes, prior permission of the Central Government under the Act would be required.
- (vi) It is clarified that the permission to survey, exploration or prospection would not ipso facto imply any commitment on the part of the Central Government for diversion of forest land.

### **1.4 Explanation Regarding Non-Forest Purpose**

- (i) Cultivation of tea, coffee, spices, rubber and palm is a non-forestry activity, attracting the provisions of the Act.
- (ii) Cultivation of fruit-bearing trees or oil-bearing plants or medicinal plants would also require prior approval of the Central Government except when:

- (a) The species to be planted are indigenous to the area in question; and
- (b) Such planting activity is part of an overall afforestation programme for the forest area in question.

### **1.5 Tusser Cultivation**

- (i) Tusser cultivation in forest areas by the tribals as a means of their livelihood without undertaking monocultural Asan or Arjun plantations shall be treated as a forestry activity. Therefore, no prior approval of the Central Government under the Act is necessary.
- (ii) Tusser cultivation in forest areas for which specific plantation of Asan or Arjun trees are undertaken for providing host trees to the silk cocoons shall be treated as forestry activity not requiring prior approval of the Central Government provided such plantation activity does not involve any felling of existing trees; provided further that while undertaking such plantations, at least three species are planted, of which no single species shall cover more than 50% of the planted area.
- (iii) Plantation of mulberry for silkworm rearing is a non-forestry activity attracting the provisions of the Act.

### **1.6 Mining**

- (i) Mining including underground mining is a non-forestry activity. Therefore, prior approval of the Central Government is essential before a mining lease is granted in respect of any forest area. The Act would apply not only to the surface area which is used in the mining but also to the entire underground mining area beneath the forest. A renewal of an existing mining lease in a forest area also requires the prior approval of the Central Government. Continuation or resumption of mining operation on the expiry of a mining lease without prior approval would amount to contravention of the Act.
- (ii) The advice of the Ministry of Law, Government of India in regard to the Supreme Court Order in Civil Appeal No.2349 of 1984 dated 7.5.1985 is at Annexure-III.
- (iii) Boulders, bajri, stone, etc., in the riverbeds located within forest areas would constitute a part of the forest land and their removal would require prior approval of the Central Government.

### **1.7 Clarification on Sub-clause 2(iii) of the Act**

- (i) The Sub-clause shall not be attracted when any forest land or any portion thereof is assigned to any authority, corporation, agency or any other organisation wholly owned, managed or controlled by the concerned State/Union Territory Government and/or the Central Government. Such Government owned, managed or controlled authority/corporation/ agency, which has been assigned such forest land shall not reassign it or any part thereof to any other organisation or individual.
- (ii) Any scheme or project which involves assignment of any forest land by way of lease or similar arrangement, for any purpose whatsoever, including afforestation, to any private person or to any authority/agency/organisation not wholly owned, managed or controlled by the Government (such as private or joint sector ventures) shall attract the provisions of this sub-clause.

## **1.8 Clarification on Sub-clause 2(iv) of the Act**

- (i) Sub-clause 2(iv) of the Act prohibits clearing of naturally grown trees in forest land for the purpose of using it for reforestation. The provisions of this sub-clause will be attracted if the forest area in question bears naturally grown trees and are required to be clear-felled, irrespective of their size, for harnessing existing crop and/or raising plantation through artificial regeneration techniques, which may include coppicing, pollarding or any other mode of vegetative propagation.
- (ii) All proposals involving clearing of naturally grown trees in any forest area, including for the purpose of reforestation, shall be sent by the concerned State/UT Government in the form of Management Plans/Working Plans to the Regional Chief Conservator of Forests of the concerned Regional Office of the Ministry of Environment and Forests.
- (iii) All proposals in respect of sanction of Working Plans/Management Plans shall be finally disposed of by the Regional Office, under Section 2 of the Act. While examining the proposal, the Regional Office would ensure that the final decision is in conformity with the National Forest Policy, Working Plan guidelines and other relevant rules and guidelines issued by the Central Government from time to time. The Regional Office will however, invariably seek prior clearance of the Ministry whenever the proposal involves clear-felling of forest area having density above 0.4 irrespective of the area involved. Also, prior clearance would be required when the proposal is for clear felling of an area of size more than 20 ha. in the plains and 10 ha. in the hilly region, irrespective of density.
- (iv) In National parks and Sanctuaries where fellings are carried for improvement of wildlife and its habitat only, forests would be managed according to a scientifically prepared management plan approved by the Chief Wildlife Warden, provided that the removed forest produce shall be used for meeting bona fide needs of the people living in and around the National Park/Sanctuary and shall not be used for any commercial purposes. But in cases where large scale felling/removal of timber and non-timber products is required in a national park/sanctuary, which need disposal through sales, approval of the Central Government would be necessary. However, this shall be subject to the orders of the Supreme Court, which may be referred to at Annexure-II A. (No. 5-5/86-FC(Pt) dated 10.08.1999).

## **1.9 Clarification of Section 3 B of the Act**

- (i) Each case of the violation of the Act shall be reported by the concerned State/Union Territory Government to the Central Government.
- (ii) The report of violation shall be described in a self-contained note and supported by requisite documents, including particularly the names and designations of the officials/persons who are prima-facie responsible for the contravention of the Act.
- (iii) In case it is not possible to fix the responsibility for commission/omission of any action leading to the violation of the Act, a full explanation with relevant supporting documents shall be appended to the report.
- (iv) Any person and/or authority nominated by the Central Government may be required to discharge any of the duties, including prosecution under the Act in any Court as may be deemed appropriate for this purpose. In such an eventuality, the Government

of the concerned State/Union Territory shall make available all such records or documents as may be called upon by the investigation officer.

**Clarification:** The provisions of this Section are applicable to the cases where the State Government or any authority passes any order for permitting activities covered by Section 2 of the Forest (Conservation) Act, 1980 without prior approval of the Central Government. Cases of illicit felling/encroachment/illegal mining, etc. have to be dealt under the provisions of the Indian Forest Act, 1927, State Forest Acts, Environment (Protection) Act, 1986, etc. (No. 5-5/86-FC dated 07.12.1999)

#### **1.10 Diversion of Forest Land for Regularisation of Encroachments**

- (i) Detailed guidelines issued in this regard vide this Ministry's No.13.1/90-F.P.(1) dated 18.9.90 shall be strictly followed. These are included in Annexure IV.
- (ii) The State Governments/UT Administrations may send the proposals as follows:-
  - (a) A consolidated proposal for the whole State in the prescribed application form.
  - (b) Detailed information as per the enclosed Table/format – Annexure-IV-A. Division wise proposals, maps, names of encroachers, etc. should be kept ready at Division level, which may be made available whensoever required for inspection and need not be appended with the consolidated proposal.
  - (c) Detailed compensatory afforestation scheme with areas proposed for raising compensatory afforestation Division-wise, phased planning, fund requirement, commitment of the State Government to provide funds for the purpose, etc. Maps of proposed areas for compensatory afforestation should be kept ready at Division level, which may be made available whensoever required for inspection.
  - (d) A time plan for eviction of ineligible encroachers.  
(No. 8-67/2000-FC dated 04.12.2000)

#### **1.11 Review of Disputed Claims over Forest Land, arising out of Forest Settlement**

Detailed guidelines issued in this regard vide this Ministry's No.13.1/90-F.P.(2) dated 18.9.90 shall be strictly followed. These are included in Annexure IV-B.

#### **1.12 Disputes Regarding Pattas/Leases/Grants involving Forest Land – Settlement thereof**

Detailed guidelines issued in this regard vide this Ministry's No.13.1/90-F.P.(3) dated 18.9.90 shall be strictly followed. These are included in Annexure IV-C.

#### **1.13 Conversion of Forest Villages into Revenue Villages**

Detailed guidelines issued in this regard vide this Ministry's No.13.1/90-F.P.(5) dated 18.9.90 shall be strictly followed. These are included in Annexure IV-D.



## **CHAPTER 2:- Submission of Proposals**

### **2.1 General**

- (i) Rule 6 of the Forest (Conservation) Rules, 2003 prescribes the procedure for submission of proposals for seeking prior approval of the Central Government under Section 2 of the Act. The form appended to the Rules, specifies the particulars to be furnished with the proposal. Only proposal in the prescribed format, and complete in all respects, will be considered. The user agency, if they so desire, for monitoring purpose only, may submit the proposal along with a copy of the receipt from Nodal Officer of having received complete application to the Assistant Inspector General of Forests (FC)/Director in-charge of the Monitoring cell.
- (ii) All proposals relating to diversion of forest land up to 40 hectares and proposals for clearing of naturally grown trees for reforestation shall be sent directly to the concerned Regional Office of the MoEF by the State/UT Government or other authority. All other proposals shall be sent by the State/UT Government or other authority to the Secretary to the Government of India, MoEF mentioning "Attention - FC Division" on covering letter as well as on envelope. Moreover, a copy of all these proposals irrespective of area should also be sent to concerned Regional Office of the MoEF. (No. 5-5/86-FC(Pt) dated 30.10.1998).

For small development and public utility projects involving diversion of forest land upto 5 hectare, the State Government may authorize the Nodal Officer or any other Officer to submit the proposals directly to the Regional Offices.
- (iii) Adverse recommendations of subordinate officers in prescribed form or in the documents attached with the form should invariably be commented upon by the Principal Chief Conservator of Forests/Chief Conservator of Forests. Similarly, adverse recommendation by the PCCF/CCF should be commented upon by the State Government to emphasis that a conscious decision has been taken in the matter.
- (iv) Wherever re-diversion of forest land becomes essential, State Government should seek the prior permission of the Central Government giving details of the earlier approval and the proposed activity details in letter form rather than initiating a fresh proposal. (No. 11-29/2000 - FC dated 24.3.2000)
- (v) In cases of irrigation projects or projects involving linear diversion of forest land, when during execution, some realignment is needed due to technical reasons and where the re-alignment is of a minor nature, i.e. deviation from the original alignment is at a few points and the number of trees to be cut does not exceed the number given in the original proposal, the State government need not submit a fresh proposal. Rather, they may send this information through a covering letter giving maps of the original alignment and fresh alignment with details of the additional forest land required and the variation in the number of trees which will be affected due to the realignment. (No. 11-16/98-FC dated 29.10.1998)
- (vi) The State Governments are advised not to consider/process cases, which are pending in various Courts or are sub-judice, to avoid all sorts of administrative and legal complications. (No. 10-236/-FCE dated 06.10.1998)
- (vii) In order to ensure that the forest lands are diverted only for site specific projects, that too where it is inescapable, so that the ecological balance of the country is well protected, the respective State/UT Administration, should give due consideration to the following and should submit proposal accordingly after detailed scrutiny.

1. Diversion of forest land within Reserve Forest:- As per the Status of Forest Report, 1997 published by Forest Survey of India, out of 76.25 million ha. of total forest area, roughly 54.4% is Reserve Forest area. These forests are considered as good forests with plenty of bio diversity and it is necessary to keep these forests intact. As such, any proposal for diversion in Reserve Forest should be very carefully examined and detailed justification after exhausting all alternatives for locating the project in this forest area should be given while forwarding the proposal.

2. Regarding Mining proposals:- It has been observed by the Central Government that a large number of proposals relating to mining are submitted which are located deep inside the forest areas. Locating such proposals inside entire forest area vulnerable due to ancillary activities like construction of approach road, movement of vehicles and coming up of colonies for the workers. It has also been observed that whatever area has already been opened up for mining of different minerals, have not been worked and reclaimed systematically and scientifically. There is a tendency to open up new pits without exhausting the existing ones to its full depth/potential. Therefore, Ministry has decided that whenever a proposal for fresh mining is submitted a brief profile of the lessee/company should be submitted giving details of their existing mining leases in the State with their capacity of production, the present level of average annual production, location of these pits and the status of reclamation of forest land that are exhausted of minerals. Alongwith this, the State Government should also submit details of all other mining leases for that particular mineral with their capacity and average annual production and projected future requirements. They should fully justify the necessity of opening new mining leases for that particular mineral. Mining plan should be approved by the competent authority for concerned minerals e.g. for coal it should be approved by Controller of Coal and for major minerals by IBM and so on.

Even in the case of renewals, it has been observed that the State Governments are not giving complete picture of mining activity in the particular block or compartment of the forest block. Whenever such proposal is sent, complete details of existing or proposed leases in that particular forest area with their present status should be indicated on Survey of India topo-sheet on 1:50,000 scale.

3. Diversion for non-site specific projects:- A large number of proposals for diversion of forest land for non-site specific projects like industries, construction of residential colonies, institutes, disposal of fly ash, rehabilitation of displaced persons, etc. are received by the Central Government. Attention is drawn to items 1(iv) and 8 of the Form 'A' in which the proposal is to be submitted by the State Government. In these columns, justification for locating the project in the forest area giving details of the alternatives examined and reasons for their rejection has to be furnished. Normally, there should not be any justification for locating non site-specific projects on forest land. Therefore, the State Government should scrutinize the alternatives in more details and must give complete justification establishing its in-escapability for locating the project in forest area.

4. It has been observed that in respect of many proposals, the Central Government receives representation from NGOs/local public bodies against the diversion of forest land on loss of forest land, environment and ecological grounds. It is felt that it is essential to have the opinion of the local people, whenever a project is coming up in that area. Therefore, whenever any proposal for diversion of forest land is submitted, it should be accompanied by a resolution of the 'Aam Sabha' of Gram Panchayat/Local Body of the area endorsing the proposal that the project is in the interest of people living in and around the proposed forest land except in cases wherever consent of the local people in one form or another has been obtained by the State or the project proponents and the same is indicated in the proposal explicitly.

However, it would be required where the project activity on forest land is affecting quality of life of the people residing in nearby areas of the site of diversion; like mining projects, displacement of people in submergence area, etc. It is further clarified that such resolution would not be required in following cases:

- a. a. Project requires public hearing in order to get environment clearance. However, a copy of public hearing may be furnished along with the proposal in such cases.
- b. For projects like construction of roads, canals, laying of pipelines/optical fibers and transmission lines etc., where linear diversion of forest land in several villages are involved.
- c. Proposals involving diversion of private forest lands.
- d. In case of small public utility projects like drinking water, schools, hospitals which are for the welfare of local people.

(No. 11-30/96-FC(Pt) dated 26.02.1999 and dated 17.08.2000, No.5-5/86-FC dated 09.03.2000)

## **2.2 Particulars to be Furnished along with the Proposal**

- (i) Map of the forest area required showing boundary of the adjoining forests, etc., is to be furnished along with the prescribed form. This should normally be on 1:50,000 scale original Survey of India toposheet. However, if maps on 1:50,000 scale are not available, map on 1"=1 mile or 1"= 4 miles or any other suitable scale would be acceptable. If the area is very small, an index map may be submitted showing forest boundaries and a location map on a larger scale with a land use of the area required.
- (ii) Species-wise and diameter class-wise abstract of trees to be felled should be furnished in the prescribed form. Total enumeration is necessary only up to 10 hectares. For larger areas, species-wise and diameter class-wise abstract of trees may be computed either from the working plans or by standard sampling methods.
- (iii) The projects for roads and railway line construction will be processed in their entirety. Therefore, proposals in piecemeal should not be submitted. A note on the present and future requirement of forest land is required to be submitted along with the proposal.
- (iv) The user agency shall submit the proposal for renewal of mining lease to the Forest Department one year prior to date of expiry of existing lease, failing which the proposal may be liable for rejection. The State Government shall send the complete proposal to the MOEF at least 6 months prior to the expiry of the existing lease. In case of any delay, a detailed report elaborating the cause of delay shall be sent alongwith the proposal. (substituted vide No. 5-5/86-FC dated 25.11.1994)
- (v) Special guidelines in regard to laying of transmission lines in forest area are at Annexure V.
- (vi) All proposals seeking prior approval of the Central Government should invariably contain the following information:
  - (a) (a) Extent of forest cover in the concerned district/State.
  - (b) (b) Extent of forest land diverted so far under Forest (Conservation) Act 1980 in the concerned district/State.
  - (c) (c) Extent of forest land diverted for same/similar purpose/project so far in the concerned district/State.
  - (d) (d) Progress of compensatory afforestation in the concerned district/State under earlier forest clearances.

However, the States/UTs may submit the above information on a consolidated, calendar year basis every year as per the proforma at Annexure-VII so as to avoid duplication/re-iteration in each proposal. (No. 11-30/96-FC (Pt) dated 28.06.2001)

(vii) Mining proposals in forest areas in respect of coal and other major minerals should be accompanied with the following documents:-

1. In respect of Underground mining in stratified deposits in forest areas

The mining plan in stratified deposits in forest areas should include the predicted subsidence, slope and strain values and their impact on forests and surface and their mitigation. The maximum tensile strain of 20 mm per meter and thereby the surface cracks of width of about 200 - 300 mm is to be permitted in forest areas. Accordingly, the mine plans should be made to restrict the subsidence movement within these limits with the provision of mitigation measures. All mining plans in respect of coal and other major minerals should be accompanied with numerical modelling in 3-Dimension for subsidence prediction through an expert mining engineer/organisation to assess long term damage on surface vegetation due to underground mining preferably from Banaras Hindu University; ISM, Dhanbad; any of the IITs located at Delhi, Kanpur, Mumbai, Kharagpur, Madras, Roorkee & Guwahati; or M/s CMRI alongwith the mitigation measures suggested by them should be submitted along with the proposal. The surface layout of mining area should be designed so as to use minimum possible land, and wherever feasible, the surface facilities should be planned over non-forest areas.

2. Open cast mining in forest areas.

In respect of open cast mining in forest areas, a comprehensive study of solid waste management and land reclamation with post mining land use plan and decommissioning should be made and the plan should envisage the minimum possible overburden dumping outside the mine. In place where the non-forest land is available, the external dumping of the overburden should be planned on non-forest land. Special attention should be given to top-soil and sub-soil handling and management.

3. Use of Fly ash in reclamation of open cast mines

Wherever feasible, depending upon the characteristic of fly ash and its availability nearby, use of fly ash in reclamation of open pits should be looked into and planned. Fly ash for this purpose should be characterized from the point of view of leaching potential with special reference to heavy metals.

While forwarding the proposals, the State Government may also bear in mind the para 7.13 of The National Mineral Policy, 1993 (For non-fuel & non-atomic mineral) wherein it states that “ --- Mining operation shall not ordinarily be taken up in identified ecologically fragile and biologically rich areas.....”. (No. 2-2/2000-FC dated 27.03.2000)

4. Mining Plan

Ministry is receiving a large number of proposals for grant of/renewal of mining leases. In order to take a holistic view, it is essential that a copy of the mining plan duly approved by the IBM, Nagpur should be enclosed with the proposal alongwith map of forest area on printed original copy of Survey of India topo sheet 1:50,000 scale showing boundaries of forest area and other mining leases of forest block within that sheet. (No. 5-5/86-FC (Pt) dated 26.02.1999)

### **2.3 Proposals Requiring Clearance from Environmental Angle**

- (i) The projects covered under notifications issued from time to time under Environment (Protection) Act, 1986, shall require clearance separately from environmental angle, as per procedure laid down by the Environment Wing of the MOEF. Environmental clearance where required should be applied for separately and simultaneously.
- (ii) Notwithstanding the above, if in the opinion of the Ministry or the Advisory Committee, any proposal should be examined from the environmental angle, it may be required that the project proponent refer the case to the Environment Wing of the MOEF.
- (iii) For projects requiring clearance from forest as well as environment angles, separate communications of sanction will be issued, and the project would be deemed to be cleared only after clearance from both angles.  
(paras (i) & (iii) substituted No. 5-5/86-FC dated 25.11.1994)

### **2.4 Simplified Procedure for Certain Categories of Proposals**

- (i) In respect of proposals for laying of transmission lines, pipelines for drinking water supply, laying of telephone/optical fibre lines and exploratory drilling for prospecting of oil which do not involve any felling or cutting of tree, only the following particulars may be furnished in the prescribed form:
  - (a) (a) Map of the area required along with geographical location of the project.
  - (b) (b) Purpose for which forest land is required to be used.
  - (c) (c) Extent of forest area to be diverted.
  - (d) (d) Legal status of forest land.
  - (e) (e) Whether forest land forms part of national park, wildlife sanctuary, biosphere reserve or forms part of the habitat of any endangered or threatened species of flora and fauna.
  - (f) (f) Whether no alternative alignment is possible to avoid or minimise use of forest land and, whether, the required forest area is the minimum needed for the purpose. A certificate in this regard is to be furnished by the concerned Divisional Forest Officer after personal inspection of the spot.
  - (g) (g) Compensatory afforestation scheme.
  - (h) (h) A certificate stating specifically that no cutting or felling of trees is involved.
- (ii) Other cases involving forest area up to 2 ha. which are devoid of tree cover, may also be dealt with as per above simplified procedure except for proposals for mining and regularisation of encroachments.  
(paras (d) & (e) interchanged vide No. 11-9/98-FC dated 23.07.01998)

### **2.5 Diversion of Forest Land for Widening or Expansion or Realignment of Road/Rail/Canal**

- (i) (i) Such lands which had been acquired by Government Departments like Railway, Irrigation, PWD, etc. for specific purposes like laying of roads, railway lines and canals and the vacant area was planted up with trees and these lands are not yet notified as protected forests will not attract the provisions of Forest (Conservation) Act, 1980 for the purposes of widening or expansion or re-alignment. However, the

concerned agency will seek permission under local laws, if any, from appropriate authority.

- (ii) (ii) Such lands which were acquired by the above departments and the vacant areas were subsequently planted and notified as protected forests for management purposes will need approval from the Central Government under Forest (Conservation) Act, 1980. The user agency will submit the proposal in the prescribed format through the State Forest Department to the concerned Regional Office of the Ministry. The Regional Offices shall be competent to finally dispose of all such proposals irrespective of the area, preferably within 30 days from the date of receipt of the proposal. While issuing the approval, in place of normal provision for compensatory afforestation, the Regional Offices will stipulate a condition that for every tree cut at least two trees should be planted.
- (iii) (iii) However, if the decision is not ordered by the concerned Regional Office within 30 days of the receipt of fully completed application, the Central Government/State may proceed with the widening/modernisation under intimation to the local State Forest Department and Central Government.  
(Substituted vide No. 4-1/97-FC dated 18.02.1998)

**Clarification:-** This guideline is applicable to only such projects, where plantations have been raised on the lands acquired by the user agency and subsequently notified as Protected Forest. This guideline will not be applicable if the forest land involved is reserved/protected forests belonging to the Forest Department.  
(No. Nil dated 16.07.1999)

## **2.6 Cost-benefit Analysis**

- (i) While considering proposals for dereservation or diversion of forest land for non-forest use, it is essential that ecological and environmental losses and socio-economic distress caused to the people who are displaced are weighed against economic and social gains.
- (ii) Annexure VI (a) details the types of projects for which cost-benefit analysis will be required. Annexure VI (b) lists the parameters according to which the cost aspect will be determined, while Annexure VI (c) gives the parameters for assessing the benefits accruing.
- (iii) A cost-benefit analysis as above should accompany the proposals sent to the Central Government for clearance under the Act.

## **2.7 Plan for Rehabilitation of Oustees**

- (i) If the project involves displacement of people, a detailed Rehabilitation Plan shall be submitted along with the proposal for diversion of forest land. The Scheduled Tribe and Scheduled Caste population should be separately considered, and a plan for their rehabilitation should be in consonance with their socio-economic, cultural and emotional lifestyle.
- (ii) The Government of India do not allow diversion of forest land for rehabilitation of people. However, such diversion may be considered as a special case, if diversion of forest land is essentially required for the rehabilitation of persons belonging to Scheduled Tribes, Scheduled Castes and other people who may have to be shifted from the core zone of a national park or reserve.

## **2.8 Transfer of Lease**

Where transfer of lease on forest land, from one user agency to another for the same purpose for which the forest land was diverted, becomes necessary, prior permission of the Central Government would be required. For this purpose, the State Government and the original user agency is required to submit no-objection certificate for such transfer and; the new user agency has to submit an undertaking that they shall abide by all the conditions on which the forest land was leased to the original user agency and any other condition which may be stipulated by the Central Government/ State Government in future.

## **2.9 Participation of private sector through involvement of NGOs & Forest Department in afforestation/rehabilitation of degraded forests.**

Detailed guidelines issued in this regard vide this Ministry's No. 8-21/96-FC dated 07.06.1999 shall be strictly followed. These are included in Annexure VIII.  
(No. 8-21/96-FC dated 07.06.1999)

## **2.10 Cluster mining**

Detailed guidelines issued in this regard vide this Ministry's No. 11-8/2001-FC dated 15.11.2001 shall be strictly followed. These are included in Annexure IX.  
(No. 11-8/2001-FC dated 15.11.2001)

## CHAPTER 3:- Compensatory Afforestation

### 3.1 Compensatory Afforestation

- (i) Compensatory afforestation is one of the most important conditions stipulated by the Central Government while approving proposals for de-reservation or diversion of forest land for non-forest uses. It is essential that with all such proposals, a comprehensive scheme for compensatory afforestation is formulated and submitted to the Central Government.
- (ii) The comprehensive scheme shall include the details of non-forest/degraded forest area identified for compensatory afforestation, maps of areas to be taken up for compensatory afforestation, year-wise phased forestry operations, details of species to be planted and a suitability certificate from afforestation/management point of view alongwith the cost structure of various operations.
- (iii) Sometimes the compensatory afforestation schemes are being submitted at such a cost structure, which is at variance with the cost norms for the same area. The compensatory afforestation schemes no doubt has to be site specific and thus per hectare rate will vary according to species, type of forest and site. In this regard, it has been decided that henceforth the compensatory afforestation schemes which are being submitted alongwith the proposals for forestry clearance, must have technical and administrative approvals from the competent authority and should be in conformity with cost norms based on species, type of forest and site.  
(No. 8-80/99-FC dated 07.11.2001)

### 3.2 Land for Compensatory Afforestation

- (i) (i) Compensatory afforestation shall be done over equivalent area of non-forest land.  
**Clarification:-** As a matter of pragmatism, the revenue lands /zudpi jungle/ chhote/bade jhar ka jungle/jungle-jhari land/civil-soyam lands and all other such category of lands, on which the provisions of Forest (Conservation) Act, 1980 are applicable, shall be considered for the purpose of compensatory afforestation provided such lands on which compensatory afforestation is proposed shall be notified as RF under the Indian Forest Act, 1927.
- (ii) (ii) As far as possible, the non-forest land for compensatory afforestation should be identified contiguous to or in the proximity of Reserved Forest or Protected Forest to enable the Forest Department to effectively manage the newly planted area.
- (iii) (iii) In the event that non-forest land of compensatory afforestation is not available in the same district, non-forest land for compensatory afforestation may be identified anywhere else in the State/UT as near as possible to the site of diversion, so as to minimise adverse impact on the micro-ecology of the area.
- (iv) (iv) Where non-forest lands are not available or non-forest land is available in less extent to the forest area being diverted, compensatory afforestation may be carried out over degraded forest twice in extent to the area being diverted or to the difference between forest land being diverted and available non-forest land, as the case may be.
- (v) (v) The non-availability of suitable non-forest land for compensatory afforestation in the entire State/UT would be accepted by the Central Government only on the Certificate from the Chief Secretary to the State/UT Government to that effect.



- (vi) (vi) As an exception to 3.2 (i) above, compensatory afforestation may be raised over degraded forest land twice in extent of the forest area being diverted/dereserved in respect of following types of proposals :
- (a) (a) For extraction of minor minerals from the river beds. (However, if forest area to be diverted is above 500 hectares, compensatory afforestation over equivalent area of degraded forest shall be required to be done instead of twice the area being diverted subject to a minimum of 1000 hectares compensatory afforestation).
  - (b) (b) For construction of link roads, small water works, minor irrigation works, school building, dispensaries, hospital, tiny rural industrial sheds of the Government or any other similar work excluding mining and encroachment cases, which directly benefit the people of the area - in hill districts and in other districts having forest area exceeding 50% of the total geographical area, provided diversion of forest area does not exceed 20 hectares.
  - (c) (c) For laying of transmission lines upto 220 KV.
  - (d) (d) For mulberry plantation undertaken for silk-worm rearing without any felling of existing trees.
  - (e) (e) For diversion of linear or 'strip' plantation declared as protected forest along the road/rail/canal sides for widening or expansion of road/rail/canal.
  - (f) (f) For laying of telephone/optical fibre lines.  
(inserted vide No. 11-9/98-FC dated 23.07.1998)
- (vii) The field firing ranges, which are used temporarily by the defence establishments for arms practice, comprises of safety zone encompassing the field firing range and danger area/impact zone. Keeping in view that the impact area is only a small portion of the entire firing range and as an exception to 3.2 (i) above, compensatory afforestation may be raised over equivalent degraded forest land of the forest area being diverted for impact zone of the field firing range.  
(No. 11-9/96-FC dated 07.01.1997), No. 11-55/2000-FC dated 06.09.2000 and No. 8-58/98-FC dated 06.11.2001)
- (viii) No compensatory afforestation shall be insisted upon in respect of the following :-
- (a) (a) For clearing of naturally grown trees in forest land or in portion thereof for the purpose of using it for reforestation.
  - (b) (b) Proposals involving diversion of forest land up to one hectare. (However, in such cases, plantation of ten times the number of trees likely to be felled will have to be carried out by way of compensatory afforestation or any number of trees specified in the order).
  - (c) (c) For underground mining in forest land below 3 metres. (However, in respect of forest area required for surface right, compensatory afforestation shall be required as per relevant provisions).
  - (d) (d) Cases of renewal of mining lease, for the forest area already broken/used for mining, dumping or overburden, construction of roads, ropeways, buildings, etc. For the balance area, compensatory afforestation shall be required to be done as stipulated, provided that no compensatory afforestation had been stipulated and done in respect of this area at the time of grant/renewal of lease earlier.  
(substituted vide No. 5-5/86-FC dated 25.11.1994)

- (ix) Special provisions for Central Government/Central Government Undertaking Projects.
- (a) (a) Compensatory afforestation may be raised on degraded forest land twice in extent of forest area being diverted. Certificate of Chief Secretary regarding non-availability of non-forest land for compensatory afforestation will not be insisted.
  - (b) (b) The user agency will deposit the amount for compensatory afforestation with the concerned State Govt. on receiving the demand and the actual transfer/use of forest land will be effected only after the receipt of the demanded amount.
  - (c) (c) The State Governments will identify 'blank forest' or degraded forest lands for compensatory afforestation. The State Governments of Madhya Pradesh and Rajasthan will identify such degraded forest land in their States for compensatory afforestation of central projects in their respective States as indicated by the Chief Secretaries of these two States in the meeting of Committee of Secretaries held on 15.11.96.
  - (d) (d) The pool of degraded forest land in Madhya Pradesh and Rajasthan will also be available for the Central Government projects of other States if the concerned State Government fail to identify the requisite land, as mentioned at (a) above, for compensatory afforestation in its own territory within one month of the submission of the proposal to the State Government.
  - (e) (e) While identifying the pool of degraded forest land, blank forest lands in reserved forests in compact/sizeable blocks should be identified as first priority as "plantation bank". An appropriate treatment plan with choice of species should be prepared by the beneficiary States. Only when such areas are not available, the choice of compensatory afforestation will fall on protected, unprotected forests and unclassified forests in declining order of priority.
  - (f) (f) The Nodal Officer (Forest Conservation), State Forest Department will identify the pool of such degraded forest lands in consultation with the concerned Chief Conservator of Forests (C), Regional Offices of the MOEF.  
(No. 11-30/96-FC dated 10.04.1997 – 40/c, dated 11.09.1997)

**Clarification:-** The provisions of the above guideline would be applicable to only Central Sector projects and not on State Sector projects which are being undertaken by Central PSUs on turnkey basis. In such cases, compensatory afforestation on equivalent non-forest land/a certificate of Chief Secretary regarding non-availability of equivalent non-forest land anywhere in the State shall be insisted upon.

(No. 11-30/96-FC (pt.I) dated 16.04.2003)

### **3.3 Elements of Schemes for Compensatory Afforestation**

- (i) The scheme for compensatory afforestation should contain the following details:-
  - (a) (a) Details of equivalent non-forest or degraded forest land identified for raising compensatory afforestation.
  - (b) (b) Delineation of proposed area on suitable map.
  - (c) (c) Agency responsible for afforestation.
  - (d) (d) Details of work schedule proposed for compensatory afforestation.
  - (e) (e) Cost structure of plantation, provision of funds and the mechanism to ensure that the funds will be utilized for raising afforestation.

- (f) (f) Details of proposed monitoring mechanism.

### **3.4 Lands Identified for Compensatory Afforestation to be Transferred to the Forest Department**

- (i) Equivalent non-forest land identified for the purpose are to be transferred to the ownership of the State Forest Department, and declared as protected forests so that the plantation raised can be maintained permanently. The transfer must take prior to the commencement of the project.
- (ii) (ii) The compensatory afforestation should clearly be an additional plantation activity and not a diversion of part of the annual plantation programme.
- (iii) (iii) In each case where the afforestation target is over 500 hectares in plains, and 200 hectares in hills, a Monitoring Committee shall be established with a nominee of the Central Government to oversee that the stipulations, including those pertaining to compensatory plantation are carried out.

### **3.5 Special Fund**

- (i) The State/UT Government should create a special fund to which the individual user agency will make its deposits for compensatory afforestation. The Forest Department, or any other technically competent agency which is assigned the job of compensatory afforestation should fully utilise this amount for implementation of the afforestation scheme approved by the Government of India, and keep separate and meticulous account thereof.
- (ii) In order that a uniform procedure is followed by all departments, the Controller General of Accounts, Department of Expenditure, Ministry of Finance vide letter No. T-14018/14/90-Codes/485 dated 23.06.1992 has informed that the aforesaid deposit may be booked under the head “J-Reserve Fund (b) Reserve Funds not bearing interest – 8235 – General and Other Reserve Funds – 200 – Other Funds – Special Fund for Compensatory Afforestation.  
(No. T-14018/14/90-Codes/485 dated 23.06.1992)

**Clarification:-** The Supreme Court has passed orders on 30-10-2002 in I.A. No.566 in Writ Petition (Civil) No. 202 of 1995, regarding creation of a body for management of compensatory afforestation fund. Annexure-II B may be referred to. In compliance with the orders, creation of a body namely, “Compensatory Afforestation Management & Planning Agency (CAMPA)” is under consideration. As soon as this body comes into existence, all the funds received by the State/UT Governments towards compensatory Afforestation, additional compensatory Afforestation, penal compensatory Afforestation, Net Present Value of forest land, Catchment Area Treatment Plan Funds, Wildlife Management Plan etc. for the conditions stipulated by the Central Government, shall be transferred to the CAMPA. Further, Compensatory Afforestation Funds which have not yet been realized as well as the unspent funds already realized by the States shall be transferred to the said body within six months of its constitution by the respective States and the user-agencies.

Further, Supreme Court in its order dated: 1.8.2003 in I.A. No.826 & 859 in I.A. No. 566 in Writ Petition (Civil) No.202 of 1995 re-iterated that no approval shall be granted without imposing the condition indicated in this Court’s order

dated:30.10.2002 relating to the payment of net present value of the forest land. Annexure-II C may be referred to.

- (iii) Guidelines for collection of Net Present value (NPV) of forest land in compliance to the orders of the Supreme Court have been issued vide letter no. 5-1/98-FC(pt II) dated 18/09/2003 and 22/09/2003 (Appendix).

## **CHAPTER 4:- Some Clarifications**

### **4.1 Delegation of Powers**

- (i) All proposals involving diversion/dereservation of forest land up to 40 hectares, and proposals for clearing of naturally grown trees in forest area or portion thereof shall be sent by the concerned State/UT Government to the concerned Regional Office of MOEF.
- (ii) Chief Conservator of Forests of the concerned Regional Office shall be competent to finally dispose of all proposals (including decision regarding violation of Act) involving diversion/dereservation of forest land up to 5 hectares, except in respect of proposals for regularisation of encroachments and mining (including renewal of mining leases). Similarly, proposals involving clearing of naturally grown trees in forest area or portion thereof for reforestation shall also be finally disposed of by the Chief Conservator of Forests of the concerned Regional Office, subject to guidelines/instructions issued in this regard (refer to para 1.8) and any other instructions issued from time to time.
- (iii) In the absence of Chief Conservator of Forests, these powers shall be exercised by the concerned Conservator of Forests of the Regional Office in case the post of Chief Conservator of Forests is vacant due to transfer, long leave, etc.  
(In respect of Regional Office at Chandigarh, these powers shall be exercised by Conservator of Forests of the Regional Office of Chandigarh).
- (iv) (iv) A list of all cases finally disposed of and a list of cases rejected along with reasons thereof for rejection would be required to be sent every month to the MOEF by the Regional Office.
- (v) (v) (a) In respect of proposals involving diversion of forest area above 5 hectares and up to 40 hectares and all proposals for regularisation of encroachments and mining up to 40 ha., the proposals shall be examined by the Regional Chief Conservator of Forests/Conservator of Forests in consultation with an Advisory Group consisting of representatives of the State Government from Revenue Department, Forest Department, Planning and/or Finance Department and concerned Department whose proposal is being examined. The views of the Advisory Group shall be recorded by the Regional Chief Conservator of Forests and along with the same, the proposal shall be sent to Secretary, MOEF for consideration and final decision. It is to be clarified that views of this Advisory Group in no way shall be binding while deciding the proposal. The meeting of the Advisory Group may be held at the State Capital. The proposal will not be deferred for want of quorum.  
(b) (b) The meeting of the State Advisory Group will normally be held once in a month at concerned State Capital. The Regional Chief Conservator of Forests shall act as Chairman of the Advisory Group and Nodal Officer may be nominated to work as Member Secretary of the State Advisory Group.  
(No. 5-5/86-FC (Pt) dated 01.03.1993)  
(c) (c) State Governments may take immediate steps to nominate representatives of the State Government not below the rank of Joint Secretary for the Advisory Group. Nodal Officer may be nominated to work as Member-Secretary of the State Advisory Group.  
(d) (d) The details of the officers alongwith addresses, telephone number, etc. may be directly communicated to the concerned Regional Chief Conservator of Forests under intimation to this Ministry to facilitate early processing of the proposals by the Advisory Group.

- (e) (e) The meeting of the Advisory Group will normally be held once a month at concerned State capital. (No. 5-5/86-FC (Pt) dated 17.12.1992)

#### **4.2 Two Stage Clearance of Proposals**

- (i) Forestry clearance will be given in two stages. In Ist stage, the proposal shall be agreed to in principle in which usually the conditions relating to transfer, mutation and declaration as RF/PF under the Indian Forest Act, 1927 of equivalent non-forest land for compensatory afforestation and funds for raising compensatory afforestation thereof are stipulated and after receipt of compliance report from the State Government in respect of the stipulated conditions, formal approval under the Act shall be issued.
- (ii) However in cases where compliance of conditions stipulated in the in-principle approval is awaited for more than 5 (five) years from the State Governments, the in-principle approvals would summarily be revoked. After revocation of the in-principle approval, if the State Government/user agency is still interested in the project, they would be required to submit a fresh proposal which shall be considered de-novo. (No. 11-30/96-FC (Pt) dated 14.09.2001)
- (iii) Sometimes the proposals for renewal of mining leases are accorded in-principle approval/temporary working permission subject to compliance of certain conditions. It has come to the notice of the Ministry that many a times the user agency approaches the Courts against the very conditions on which the proposals are accorded in-principle approval. Ideally the user agency should sort out any grievance in respect of any stipulated condition with the Central Government/State Government. Therefore, it has been decided that in cases where the user agency decides to approach the Courts for redress, the in-principle approval and temporary working permission shall stand revoked/in abeyance unless the Court cases are withdrawn and conditions complied with or till the cases are decided by the Courts. (No. 8-82/93-FC dated 02.04.2003)
- (iv) Approved proposals shall not normally be reopened for review of the conditions, which have been stipulated earlier.

#### **4.3 Anticipatory Action by the State / UT Governments**

- (i) Cases have come to the notice of the Central Government in which permission for diversion of forest land was accorded by the concerned State Government in anticipation of approval of the Central Government under the Act and/or where work has been carried out in forest area without proper authority. Such anticipatory action is neither proper nor permissible under the Act which clearly provides for prior approval of the Central Government in all cases. Proposals seeking ex-post-facto approval of the Central Government under the Act are normally not entertained. The Central Government will not accord approval under the Act unless exceptional circumstances justify condonation. However, penal compensatory afforestation would be insisted upon by the MOEF on all such cases of condonation.
- (ii) The penal compensatory afforestation will be imposed over the area worked/used in violation. However, where the entire area has been deforested due to anticipatory action of the State Government, the penal compensatory afforestation will be imposed over the total lease area. (No. 5-5/86-FC (Pt) dated 03.02.1999)



#### **4.4 Projects Involving Forest as well as Non-forest Lands**

Some projects involve use of forest land as well as non-forest land. State Governments/project authorities sometimes start work on non-forest lands in anticipation of the approval of the Central Government for release of the forest lands required for the projects. Though the provisions of the Act may not have technically been violated by starting of work on non-forest lands, expenditure incurred on works on non-forest lands may prove to be infructuous if diversion of forest land involved is not approved. It has, therefore, been decided that if a project involves forest as well as non-forest land, work should not be started on non-forest land till the approval of the Central Government for release of forest land under the Act has been given.

#### **4.5 Diversion for Construction of Houses**

- (i) On a proposal for construction of houses the late Prime Minister had observed: "Destruction of our forest has already caused great damage to our environment. Therefore, I am not at all in favour of use of forest land for construction of houses..... The State Government should find other land for such purposes."

The Central Government will not entertain any proposal for diversion of forest land for construction of residential or dwelling houses.

- (ii) Diversion of forest land for construction of other buildings also will not be normally considered. However, such diversion may be allowed for construction of schools, hospitals/dispensaries, community halls, cooperatives, panchayats, tiny rural industrial sheds of the Government etc., which are to be put up for the benefit of the people of that area, but such diversion should be strictly limited to the actually needed area and further it should not exceed one hectare in each case.

#### **4.6 Extraction of Minor Minerals from the River Beds**

- (i) Extraction of minor minerals like boulders, bajri, stone, shell, etc. from the river beds shall not be permitted if the river bed is in a national park or a wildlife sanctuary unless such extraction is for the benefit of the forest or wildlife.
- (ii) There shall be no labour camp in the forest area for the labour involved in the extraction work.
- (iii) Extraction of minor minerals shall be from the middle of the river bed after leaving one fourth of the river bed on each bank untouched.

#### **4.7 Safety Zone for Mining Operations**

- (i) Forest area required for safety zone for mining operations should not be part of the forest area proposed for diversion. However, it should be indicated separately in the proposal. Such area will have to be fenced at the cost of the project authority. Further, project authority will have to deposit funds with the Forest Department for the protection and regeneration of such safety zone area and also will have to bear the cost of afforestation over one and a half times of the safety zone area in degraded forest elsewhere.
- (ii) Safety zone area calculation in the proposal should be done taking 7.5. metres strip of the forest land all along the outer boundary of the mining lease area. If it is a cluster proposal, then the outer boundaries of the cluster should be taken as the safety zone.



- (iii) In order to safeguard public roads, forest roads, natural streams and nallahs located in mining lease areas, it is necessary that no mining activities should be carried out up to certain reasonable extent. This area can also be included in the safety zone calculation and provision for its fencing and regeneration should be made in the proposal.  
(No. 11-17/98-FC dated 25.05.1999)

#### **4.8 Catchment Area Treatment Plan**

- (i) (i) Proposals for diversion of forest land for major and medium irrigation projects shall invariably be accompanied by detailed catchment area treatment plan. However, in respect of minor irrigation project, catchment area treatment plan will not be insisted.
- (ii) (ii) Proposals for diversion of forest land for Hydro-electric projects shall invariably be accompanied by detailed catchment area treatment plan. However, in respect of small hydel projects (maximum up to 10 MW capacity), which are either canal head or run-of the river projects without involving impounding of water/submergence of forest land, catchment area treatment plan will not be insisted.  
(No. 11-14/94-FC dated 01.11.2001)

#### **4.9 Special Arrangement in case of Large Projects**

In case of large projects, depots for fuel wood should be set up by project authorities who will also arrange alternate fuel like coal, kerosene, biogas, LPG, electricity etc. The supply should be free of cost to the labourers and free or at subsidised rates to the other staff as may be determined by the project authorities.

#### **4.10 Site Inspection**

- (i) The proposed forest area shall be inspected by a responsible Forest Officer of the State Government. If the area is very important from the forestry angle, the territorial Conservator should himself inspect the area and give complete information relating to the forest and aspects of wildlife. The scientific names of important timber species should be given while describing composition of the forest crop. If the area is relatively less important, the DFO could inspect the area. The Inspecting Officers should clearly record in the proforma if any violation is observed like tree felling, land breaking etc., in that area by the user agency. In any case the recommendations of the Chief Conservator of Forests should be categorical and specific and should be sent with photographs of inspected sites, highlighting the aspects observed, especially when the area is large or is sensitive and fragile. However, every proposal up to 40 hectare must be accompanied by a site inspection report from the DFO and proposals involving above 40 hectare should have a site inspection report of the CF. They should, apart from providing the information in the proforma, also attach a clear cut certificate as regards the violation of the Forest (Conservation) Act, 1980. In case, violation has taken place, a detailed report should be submitted by the DFO and countersigned by the CF along with the proposal.
- (ii) In respect of proposals involving diversion of forest land above 100 hectare., site inspections shall be carried out by the Regional Offices of the Ministry. However, the State /UT Governments are required to continue to send a copy of proposals involving diversion of forest land above 40 hectare to the concerned Regional Office as per

existing practice. The site inspection report should be on the prescribed proforma, which is at Annexure-X and it should be specific on alternatives examined by the project authority, minimum requirement of forest land and self explanatory particularly with regard to overall impact of the project and also contain site specific mitigating measures, in case of recommending a project. The report should also contain photographs of the site indicating main points mentioned in the report.

- (iii) However, site inspection of proposals involving diversion of forest land upto 100 hectares will be need based i.e. done by the Regional Officers as and when desired by the Forest Advisory Committee or Ministry. The Regional Office will, however, scrutinise the proposal (involving forest land between 40 to 100 hectares) and can send their observation or any feedback particularly violation of the Forest (Conservation) Act, 1980 for further processing of the proposal.
- (iv) In respect of proposals involving renewal of leases, the Regional Offices of the Ministry should submit a copy of the report of the latest monitoring done( one year before the expiry of lease period) along with the abstract of monitoring report of the project during the lease period specially highlighting the conditions which have not been fulfilled, with complete details of the reasons for not fulfilling. The conditions which have been complied with should also be highlighted with the quality of performance of the project authorities with short note on the desirability of renewal of lease and other recommendations.  
(No. 11-13/96-FC dated 04.06.1996, No. 2-2/2000-FC dated 16.10.2000 and No. 2-2/2000-FC dated 16.10.2000)

#### **4.11 Complete Details**

While forwarding the proposal to the Central Government, complete details in all aspects of the case should be given. Incomplete and deficient proposal will not be considered and will be returned to the State Government in Original.

#### **4.12 Specific Time Limits**

- (i) To ensure speedy disposal of proposals, specific time limits have to be laid down for disposal of references at various levels. Efforts should be made to dispose of each reference at the State Governments level within a maximum period of 90/60 days as per the Forest (Conservation) Rules, 2003. Specific instructions may be issued in this regard to officers at all levels.
- (ii) Cases which are complete in all respects shall be disposed of within 60 days by the Central Government.

#### **4.13 Quarterly Progress Report (QPR)**

A Monitoring Cell has been created in the Ministry of Environment & Forests, which shall be looked after by Director (FC) and an Asstt. Inspector General of Forests. In all cases, the States will submit quarterly progress reports to the Director (FC) regarding the implementation of the stipulations laid down by the Government of India while approving the project especially in respect of compensatory afforestation and future clearances of projects of the States and Union Territories concerned will depend upon the fulfillment of the stipulations and the achievements in compensatory afforestation. Monitoring Cell will also monitor the time taken by the authorities in

processing the case at different levels of the State Government as well as Central Government.

Along with quarterly progress report, a statement in tabular form as given below should also be submitted which will give status of the total number of proposals in the State :

- (a) (a) Name of State
- (b) (b) Total no. of proposals submitted since 1980.
- (c) (c) No. of proposals finally approved
- (d) (d) No. of proposals given Stage I approval
- (e) (e) No. of proposals rejected
- (f) (f) No. of proposals withdrawn by State Govt.
- (g) (g) No. of proposals closed for want of information
- (h) (h) No. of proposals pending with Central Govt.
- (i) (i) No. of proposals pending with State Govt. for want of information.
- (j) (j) Remarks.

(No. 4-2/99-FC dated 02.11.1999)

#### **4.14 Rejection/Reopening of Cases**

(i) In cases where the State Government is requested to furnish clarifications or additional information relating to a proposal, all particulars should be made available to the Central Government within 60 days. If such particulars are not received within a maximum of 90 days, the proposal may be rejected by the Central Government for non-furnishing of essential information. Such cases could be reopened provided the following conditions are satisfied:

- (a) all the required information has been made available.
- (b) delay in providing the information is satisfactorily explained, and
- (c) there is no change in the proposal in terms of scope, purpose and other important aspects.

(ii) In some cases, the State Government comes up with a request for reconsideration of the proposal after it has been considered and rejected by the Ministry. Such request should be made within three months from the date of the issue of the rejection letter. The request should give a detailed justification for reconsideration as well as comments on the grounds on which the proposal was rejected by the Ministry.

(No. 11-9/98-FC dated 04.11.1999)

#### **4.15 Nodal Officer**

(i) Separate cells for dealing with diversion of forest land cases should be opened at the State Government and PCCF levels. A whole-time senior officer not below the rank of Conservator of Forests should head the cell, who should be designated as the Nodal Officer.

(ii) The Nodal Officer should receive cases from the user agencies and entertain all correspondence from them. He should scrutinise and process the case and after obtaining views/certificate of the Chief Conservator of Forests, should put up the case to State Government. Besides office staff, the Nodal Officer should also be

given sufficient field staff to facilitate timely processing. The State Government while forwarding cases to the Central Government may endorse copies to the Chief Conservator of Forests and the Nodal Officer. The Central Government may also, while corresponding with the State Government, send copies to the Nodal Officer. The Nodal Officer should also obtain all additional information required by the Central Government about the proposals from the concerned authorities directly and endorse a copy directly to the Central Government.

- (iii) While approving a proposal the Government of India stipulates certain conditions to reduce the environmental damage on account of forest loss. The conditions must be enforced. Their non-compliance should be reported by the Nodal Officer to Regional Office who should inspect the site from time to time.
- (iv) In case of opencast mining, it should be the responsibility of the Nodal Officer and his staff to ensure that all necessary inputs like creation of nursery, storage of top soil for reuse and methodology for its reforestation, choice of species, etc. are so planned and implemented that the mined area is fully afforested by the time mining operations are completed.
- (v) The Nodal Officer should monitor the implementation of the conditions of compensatory afforestation and the survival ratio of the seedlings planted.
- (vi) The Nodal Officer may also report compliance of State-I conditions after getting it vetted by the State Government wherever it is called for mainly dealing with land and fund matters.
- (vii) The Nodal Officer may also inform violations/non-compliance of stipulations/conditions prescribed by the Central Govt. so that remedial actions could be taken up early since it is likely to be further delayed after these violations/non-compliance are to be received only from the State Govt. level. In case of gross violations, for which delay/time lag is crucial, such reports from territorial CCF/CF shall also be entertained by Government of India.  
(No. 5-5/86-FC (Pt) dated 26.02.1999)
- (viii) The Nodal Officer shall submit a monthly report on all the complete applications received by the State Government and their status of processing in the State. The report shall be sent to the Regional Office concerned and the Assistant Inspector General of Forests (FC)/Director incharge of the monitoring cell.

#### **4.16 Lease period for mining lease**

- (i) The approval under the Forest (Conservation) Act, 1980 for diversion of forest land for grant/renewal of mining leases shall normally be granted for a period co-terminus with the period of mining lease proposed to be granted/renewed under MMRD Act, 1957 or Rules framed thereunder, but not exceeding 30 years. While recommending cases for approval under the FC Act, the user agency/State Government shall indicate the period for which the mining lease is proposed to be granted/renewed under MMRD Act or Rules framed thereunder. However, in the event of non compliance of stipulations to the satisfaction of the MOEF, the clearance accorded may be summarily withdrawn.  
(No. 5-5/86-FC dated 25.11.1994)
- (ii) The conditions stipulated while giving approval under the Forest (Conservation) Act, 1980 for diversion/renewal of forest land for mining purposes shall be renewed/monitored every five years. If it is found that the lessee has violated or is not complying with the stipulated conditions, then the approval given under the Forest

(Conservation) Act, 1980 shall be revoked. Concerned Chief Conservators of Forests(C), Regional Offices of the Ministry will issue a certificate regarding fulfillment of these conditions after carrying out the monitoring.

These guidelines shall be applicable retrospectively for all the mining leases which have more than five years of lease period left.

(No. 5-5/86-FC (Pt) dated 12.12.1997)

- (iii) The Regional Office will monitor the main parameters/conditions of formal approval as frequently as possible at least once in a year. At least once in five years a comprehensive monitoring as to the effect of mining on air and water pollution will also be carried out. Regional Offices should send such reports/certificates in respect of the monitoring mechanism indicated above to this Ministry, so that a view can be taken on continuation of mining lease beyond five years.

(No. 8-79/91-FC dated 15.04.1998)

#### **4.17 Renewal of Mining Lease - Temporary Working Permission**

If an application for renewal of mining lease, complete in all respects, has been submitted by the user agency to the State Government one year before the expiry of the existing lease period, but the State Government has not been able to process and forward the proposal for approval of the Central Government, till the date of the expiry of existing lease period; in such cases, the Central Government on an application from the user agency, may grant the user agency, temporary working permission in the already broken up area till a final decision is taken on the proposal.

(Inserted vide No. 5-5/86-FC dated 25.11.1994, modified vide No. 5-5/86-FC dated 16.10.2002 and again vide No. 5-5/86-FC dated 23.12.2002)

- 4.18 In respect of proposals related to renewal of mining leases, the Central Government would grant one year working permission for already broken up areas so as to enable the State Government to comply with the conditions. This period can be extended by one more year subject to submission of reasonable progress report from the State Government as regards to the steps taken to comply with the stipulated conditions.

(Inserted vide No. 5-5/86-FC(pt) dated 30.10.1998 and modified vide No. 5-5/86-FC(Pt) dated 03.09.2001)

## **CHAPTER 5:-        Conditions stipulated in Forestry Clearances**

Whenever clearances are accorded for diversion/de-reservation of forest land under the provisions of the Forest (Conservation) Act, 1980, certain conditions to minimise impact on forest land are imposed by the Ministry. These conditions comprise of general conditions, which are stipulated in almost all the proposals; standard conditions, which are stipulated on types/category of projects and specific conditions, which are stipulated keeping in view the impact of the project on forest. However, the list of conditions given below is illustrative and the Central Government or the State Government may impose any other additional condition in the interest of conservation, protection or development of forests, wildlife and environment.

### **5.1    5.1    General Conditions**

- (i)    (i)    Legal status of forest land to remain unchanged.
- (ii)   (ii)   Compensatory afforestation as per guidelines.
- (iii)  (iii)   Transfer and mutation of non-forest land in favour of Forest Deptt., if applicable.
- (iv)   (iv)   Notification of such land as RF/PF under the Indian Forest Act, 1927.
- (v)    (v)    User agency to provide free fuelwood preferably alternate fuel to the labourers and the staff working at the site so as to avoid any damage & pressure on adjacent forest areas.
- (vi)   (vi)   The forest land shall not be used for any purpose other than that specified in the proposal.
- (vii)  (vii)   Demarcation of lease area to be done on the ground at project cost using four feet high reinforced cement concrete pillars with serial numbers, forward & back bearings and distance from pillar to pillar.
- (viii) (viii)  Rehabilitation of Project affected families, if any.
- (ix)   (ix)   Environmental clearance if required.

### **5.2    Standard conditions**

- (i)    Mining Proposals:
  - (a)    (a)    Phased reclamation of mined area.
  - (b)    (b)    Safety zone area, its afforestation and fencing.
  - (c)    (c)    Afforestation on 1 ½ times degraded forest land in lieu of the area used for safety zone.
  - (d)    (d)    In case of under ground mines, areas on surface to be fenced and afforested.
- (ii)   Hydel and irrigation proposals:
  - (a)    (a)    Catchment Area Treatment Plan for medium and major projects.
  - (b)    (b)    Minimum requirement of forest land for canals.
  - (c)    (c)    Afforestation along the reservoir & canals.
  - (d)    (d)    No tree felling between FRL (Full Reservoir Level) and FRL-4 meters.
  - (e)    (e)    Free water for forestry related projects.
- (iii)  Road proposals:
  - (a)    (a)    Minimum trees to be felled.
  - (b)    (b)    Strip plantation on sides and central verge.

- (iv) Transmission line proposals:
  - (a) Minimum trees to be felled.
  - (b) Plantation of dwarf species (preferably medicinal plants) in right of way under the transmission lines.

### **5.3 Specific conditions**

These conditions are specific to the nature of the project and are stipulated on case to case basis by the Central Government/State Government.

## **ANNEXURES**

### **ANNEXURE-I**

#### **SUPREME COURT ORDERS**

1. “..... The term “forest land” occurring in Section 2, will not only include “forest” as understood in the dictionary sense, but also any area recorded as forest in the Government record irrespective of its ownership. This is how it has to be understood for the purpose of Section 2 of the Act. The provisions enacted in the Forest Conservation Act, 1980 for the conservation of forests, and the matters connected therewith must apply clearly to all forests so understood irrespective of the ownership or classification thereof.....”  
(Supreme Court orders dated 12.12.1996 in WP No. 202/1995)



## **ANNEXURE-II A**

### **SUPREME COURT ORDERS IN RESPECT OF PROTECTED AREAS**

1. “..... In the meantime, we restrain respondents Nos. 2 to 32 from ordering the removal of dead, diseased, dying or wind-fallen trees, drift wood and grasses, etc. from any National Park or Game Sanctuary .....”  
(Supreme Court orders dated 14.02.2000 and 21.02.2000 in I.A. No. 548 in WP No. 202/1995)
2. “..... Pending further orders, no dereservation of forests/sanctuaries/national parks shall be effected.”  
(Supreme Court orders dated 13.11.2000 in I.A. No. 2 in WP No. 337/1995)
3. “..... In the meantime, no permission under Section 29 of the Wildlife (Protection) Act, 1972 should be granted without getting approval of the Standing Committee of Indian Board for Wildlife .....”  
(Supreme Court orders dated 09.05.2002 in I.A. No. 18 in WP No. 337/1995)

## ANNEXURE-II B

### **SUPREME COURT ORDERS DATED:30-10-2002 IN RESPECT OF COMPENSATORY AFFORESTATION FUND IN I.A.NO.566 IN WP(C) NO.202/1995.**

1. “The Union of India shall .....frame comprehensive rules with regard to the constitution of a body and management of the compensatory afforestation funds in concurrence with the Central Empowered Committee..... .
2. Compensatory Afforestation Funds which have not yet been realized as well as the unspent funds already realized by the States shall be transferred to the said body within six months of its constitution by the respective States and the user-agencies.
3. In addition to above, while according transfer under Forest Conservation Act, 1980 for change in user-agency from all non-forest purposes, the user agency shall also pay into the said fund the net value of the forest land diverted for non-forest purposes. The present value is to be recovered at the rate of Rs.5.80 lakhs per hectare to Rs.9.20 lakhs per hectare of forest land depending upon the quantity and density of the land in question converted for non-forest use. This will be subject to upward revision by the Ministry of Environment & Forests in consultation with Central Empowered Committee as and when necessary.
4. A ‘Compensatory Afforestation Fund’ shall be created in which all the monies received from the user-agencies towards compensatory Afforestation, additional compensatory Afforestation, penal compensatory Afforestation, net present value of forest land, Catchment Area Treatment Plan Funds, etc. shall be deposited. The rules, procedure and composition of the body for management of the Compensatory Afforestation Fund shall be finalized by the Ministry of Environment & Forests with the concurrence of Central Empowered Committee..... .
5. The funds received from the user-agencies in cases where forest land diverted falls within Protected Areas i.e area notified under Section 18, 26A or 35 of the Wild Life (Protection) Act, 1972, for undertaking activities related to protection of bio-diversity, wildlife, etc., shall also be deposited in this Fund. Such monies shall be used exclusively for undertaking protection and conservation activities in protected areas of the respective States/ Union Territories.
6. The amount received on account of compensatory Afforestation but not spent or any balance amount lying with the States/ Union Territories or any amount that is yet to be recovered from the user-agency shall also be deposited in this Fund.
7. Besides artificial regeneration (plantations), the fund shall also be utilized for undertaking assisted natural regeneration, protection of forests and other related activities. For this purpose, site specific plans should be prepared and implemented in a time bound manner.

8. The user agencies especially the large public sector undertaking such as Power Grid Corporation, N.T.P.C, etc which frequently require forest land for their projects should also be involved in undertaking compensatory Afforestation by establishing Special Purpose Vehicle. Whereas the private sector user agencies may be involved in monitoring and most importantly, in protection of compensatory Afforestation. Necessary procedure for this purpose would be laid down by the Ministry of Environment and Forests with the concurrence of the Central Empowered Committee.
9. Plantations must use local indigenous species since exotics have long term negative impacts on the environment.
10. An independent system of concurrent monitoring and evaluation shall be evolved and implemented through the Compensatory Afforestation Fund to ensure effective and proper utilization of funds.

#### ANNEXURE II C

**Supreme Court's Order dated: 1.8.2003 in I.A. No.826 & 859 in I.A. No. 566 in Writ Petition (Civil) No.202 of 1995 in the matter of compensatory afforestation fund regarding collection of Net Present Value (NPV)**

“.....In the meantime, no approval shall be granted without imposing the condition indicated in this Court's order dated:30.10.2002 relating to the payment of net present value of the forest land.”

#### ANNEXURE-III

## **LAW DEPARTMENT'S ADVICE IN REGARD TO MINING LEASES**

- i. In respect of the mining operations being carried out on forest lands leased before the commencement of the Forest (Conservation) Act, 1980 during the continuance of the lease period, the approval of the Central Government under Section 2 of the said Act is not required.
- ii. A renewal of a lease is really the grant of a fresh lease. [See Delhi Development Authority Vs. Durga Chand Kausish, AIR 1973 SC 2609]. The prior approval of the Central Government in terms of section 2 of the Forest (Conservation) Act, 1980 would be required when a mining lease granted before the commencement of the said Act is renewed after its coming into force.
- iii. As held by the Supreme Court in State of Bihar Vs. Banshi Ram Modi (supra), prior approval of the Central Government in terms of Section 2 of the Forest (Conservation) Act, 1980 would not be required for mining and winning any new mineral from a forest land leased for mining before the commencement of the said Act during the leased period originally granted, if the said land is already broken up or cleared before the commencement of the Act. Otherwise, the prior approval of the Central Government under Section 2 of the said Act would be required.

## REGULARISATION OF ENCROACHMENTS ON FOREST LAND

Encroachment of forest land for cultivation and other purposes continues to be the most pernicious practice endangering forest resources throughout the country. Statistical information compiled by Ministry of Agriculture during early 1980s revealed that nearly 7 lakh hectares of forest land was under encroachment in the country about a decade back. This is despite the fact that prior to 1980, a number of States had regularised such encroachments periodically and approximately 43 lakh hectares of forest land was diverted for various purposes between 1951 and 1980, more than half of it for agriculture. The decisions of the State Government to regularise encroachments from time to time seem to have acted as strong inducement for further encroachments in forest areas and the problem remained as elusive as ever for want of effective and concerted drive against this evil practice.

2 The National Forest Policy, 1988 has also observed the increasing trend in encroachments on forest land and stated that these should not be regularised. Implementation of this pronouncement has been examined by this Ministry keeping in view the constraints of various State Governments some of whom have expressed that they stand committed to regularise encroachments of a period prior to 1980. The issue figured prominently in the Conference of the Forest Ministers held in May, 1989 and was later examined by an inter-Ministerial Committee, set up by this Ministry in consultation with the representatives of some of the States. Keeping in view the recommendations of the Forest Ministers' Conference and the committee referred to above, and with due approval of the competent authority, the following measures are suggested for review of the old encroachments and effective implementation of the pronouncement made in this regard in the National Forest Policy, 1988.

2.1 All the cases of subsisting encroachments where the State Governments stand committed to regularise on account of past commitments may be submitted to this Ministry for seeking prior approval under the Forest (Conservation) Act, 1980. Such proposals should invariably conform to the criteria given below:

1. PRE-1980 ENCROACHMENTS WHERE THE STATE GOVERNMENT HAD TAKEN A DECISION BEFORE ENACTMENT OF THE FOREST (CONSERVATION) ACT, 1980, TO REGULARIZE 'ELIGIBLE' CATEGORY OF ENCROACHMENTS.

1.1 Such cases are those where the State Governments had evolved certain eligibility criteria in accordance with local needs and conditions and had taken a decision to regularise such encroachments but could not implement their decision either wholly or partially before the enactment of the Forest (Conservation) Act, on 25.10.80.

1.2 All such cases should be individually reviewed. For this purpose the State Government may appoint a joint team of the Revenue, Forest and Tribal Welfare Department for this work and complete it as a time-bound programme.

1.3 In case where proposals are yet to be formulated, the final picture after taking into considerations all the stipulations specified here may be placed before the concerned Gaon Sabha with a view to avoid disputes in future.

1.4 All encroached lands proposed for regularisation should be properly surveyed.

- 1.5 Encroachments proposed to be regularised must have taken place before 25.10.1980. This must be ascertained from the First Offence Report issued under the relevant Forest Act at that point of time.
  - 1.6 Encroachments must subsist on the field and the encroached land must be under continuous possession of the encroachers.
  - 1.7 The encroacher must be eligible to avail the benefits of regularisation as per the eligibility criteria already fixed by the State.
  - 1.8 As far as possible scattered encroachments proposed to be regularised should be consolidated/relocated near the outer boundaries of the forests.
  - 1.9 The outer boundaries of the areas to be denotified for regularisation of encroachments should be demarcated on the ground with permanent boundary marks.
  - 1.10 All the cases purposed to be regularised under this category should be covered in one proposal and it should give district-wise details.
  - 1.11 All cases of proposed regularisation of encroachments should be accompanied by a proposal for compensatory afforestation as per existing guidelines.
  - 1.12 No agricultural practices should be allowed on certain specified slopes.
2. 'INELIGIBLE' CATEGORY OF PRE-1980 ENCROACHMENTS WHERE THE STATE GOVERNMENTS HAD TAKEN A DECISION PRIOR TO THE ENACTMENT OF THE FOREST (CONSERVATION) ACT, 1980.
    - 2.1 Such cases should be treated at par with post 1980 encroachments and should not be regularised.
3. ENCROACHMENTS THAT TOOK PLACE AFTER 24.10.1980.
    - 3.1 In no case encroachments which have taken place after 24.10.1980 should be regularised. Immediate action should be taken to evict the encroachers. The State/UT Government may, however, provide alternate economic base to such persons by associating them collectively in afforestation activities in the manner suggested in this Ministry's letter No. 6-21/89-FP dated 1.6.90, but such benefits should not extend to fresh encroachers.

## **CLARIFICATION**

A reference is invited to the guidelines issued by this Ministry for regularisation of certain cases of forest encroachments reproduced above. The relevant paragraph 1.1 of the guidelines, which clarifies the cases of encroachments, which subject to specified conditions, would be eligible for regularisation, is reproduced below:

"Such cases are those where the State Governments had evolved certain eligibility criteria in accordance with local needs and conditions and had taken a decision to regularise such encroachments but could not implement their decisions either wholly or partially before enactment of the Forest (Conservation) Act on 25.10.1980.

2. Doubts have been raised as to whether all encroachments that had taken place up to 25.10.1980 could be regularised in accordance with an eligibility formula by which some earlier encroachments were regularised.
3. A perusal of the paragraph reproduced above will make it clear that there are 2 pre-conditions for any encroachments to be considered for regularisation. These are:-

- (a) The State Government should have taken the decision on regularisation of encroachments before 25.10.1980; and
  - (b) That the decision should be with reference to some eligibility criteria (normally expected to be related to social and economics status of encroachers, location and extent of encroachment, cut off date of encroachment, etc.)
4. It would be seen that the encroachments which are proposed to be considered for regularisation, subject to the prescribed conditions, are those which fulfilled the eligibility criteria evolved by the State Government as per decision taken before 25.10.1980 for regularisation of encroachments. The objective is limited to permitting implementation of decisions taken before 25.10.1980 which could not be implemented because the enactment of Forest (Conservation) Act, 1980 intervened. It is therefore quite clear that while all encroachments that can be considered as eligible for regularisation would have taken place before 25.10.1980, all encroachments that had taken place before 25.10.1980 would not be eligible for regularisation - they may be ineligible because either they do not meet the eligibility criteria or are not covered by any decision taken before 25.10.1980. Thus, if the decision on regularisation of encroachments in a State covered only encroachments up to a date earlier than 25.10.1980, the guidelines on regularisation of encroachments do not envisage that the State Government would now survey encroachments between that date and 25.10.1980 and propose regularisation. The latter encroachments though occurring before 25.10.1980 are not covered by any regularisation decision taken prior to that date and hence can not be considered for regularisation at this juncture.
5. Accordingly, the State Governments may take up for implementation only such decision of pre 25.10.1980 period which could not be implemented because of Forest (Conservation) Act, 1980 intervening and propose regularisation of encroachments as per those decisions and in accordance with the eligibility criteria laid down in those decisions. No encroachments not covered by any pre 25.10.1980 decisions - even though they might have occurred prior to that - should now be considered for regularisation in terms of our guidelines.





### Review of disputed claims over forest land, arising out of forest settlement

It has been brought to the notice of this Ministry that local inhabitants, living in and around forest areas, have preferred claims on certain notified forest lands contending that they were in occupation of such areas prior to the initiation of forest settlements and/or their rights were not enquired and/or commuted before notifying these lands as forests under respective laws. The claimants are requesting that title of such lands should be conferred on them. It is being generally felt that even bonafide claims are persistently overlooked causing wide-spread discontentment among the aggrieved persons. Such instances ultimately erode the credibility of the Forest Administration and sanctity of the forest laws, especially in the tracts inhabited by tribals.

2. Seized of its complexities, the issue regarding disputed claims over forest land was got critically examined by this Ministry through an inter-Ministerial Committee. The Committee, after prolonged deliberations and due consultations with representatives of some of the States, stressed the need to resolve such disputes with utmost urgency and suggested the feasible course of action to redress genuine grievances without jeopardising protection of forests and forest land. Keeping in view the recommendations of the said Committee and with due approval of the competent authority, the following course of action is suggested for amicably resolving disputed claims on forest land:

2.1 The State Government/UT Administration should review the cases of disputed claims over forest land and identify the following three categories of claims:

- (a) (a) Claims in respect of forest areas notified as deemed reserved Forests without observing the due process of settlement as provided in Forest Acts provided that these pertain to:
  - (i) (i) tribals areas; or affect a wide cross section of rural poor in non-tribal areas; and
  - (ii) (ii) the claimants are in possession of the 'disputed land'.
- (b) (b) Claims in tribal areas wherever there is prime facie evidence that the process of forest settlement has been vitiated by incomplete or incorrect records/maps or lack of information to the affected persons, as prescribed by law, provided that:
  - (i) (i) Such forest settlement pertains to a period after 1947; and
  - (ii) (ii) The claimants are in possession of the 'disputed land'.
- (c) (c) Claims in tribal areas wherever the process of settlement is over but notification under section 20 of the Indian Forest Act, 1927 (or corresponding section of the relevant Act) is yet to be issued, particularly where considerable delay has occurred in the issue of final notification under section 20, provided that the claimants are still in possession of 'disputed land'.

2.2 After identifying the above three categories of the claims, the State Government/UT Administration should get these enquired through a Committee which should consist of atleast the concerned Divisional Forest Officer, Sub-divisional Officer (Revenue Department) and a representative of the Tribal Welfare Department. The Committee should determine genuineness of the claims after examining all available evidence to establish that:

- (i) (i) In case of category 2.1(a) the claimant was in possession of the disputed land when the notification declaring 'deemed reserved forests' was issued; and
- (ii) (ii) In case of categories 2.1(b) and 2.1(c) the claimant was in possession of the disputed land when the notification showing Governments intention to declare reserved forest was issued under section 4 of the Indian Forest Act, 1927 (or

corresponding section of the relevant Act) and his rights were not commuted or extinguished in accordance with due process of law.

2.3 In no case either the Government or the above Committee shall entertain any claim in which the claimant has not been in possession of the disputed land throughout.

2.4 Once the bonafides of the claims are established through proper enquiry, the State/UT Government may consider restoration of titles to the claimants. While deciding to restore titles to the claimants the following aspects should be duly considered:

- (i) (i) As far as possible, restoration of claims should not be result in honey combing of forest land. In such cases possibility of exchange of land near periphery or elsewhere (e.g. non-forest Govt. land) should be exhausted.
- (ii) (ii) The land to be restored to the claimants should be properly demarcated on the ground with permanent boundary marks.

2.5 After the State Government/UT Administration has decided in principle to restore titles to the claimants proposals may be formulated suitably and submitted for seeking prior approval of this Ministry under the provision of the Forest (Conservation) Act, 1980, alongwith proposals for compensatory afforestation.

**Disputes regarding pattas/leases/ grants involving forest land-- settlement thereof**

An inter-Ministerial Committee, which was set up by this Ministry to look into various aspects of tribal-forest-interface has pointed out that a number of cases of pattas/leases/grants involving forest land in one way or the other, have become contentious issues between different departments of the State/U.T. Govt. Such pattas/leases/grants are said to have been issued under the proper authority and orders of the respective State/U.T. Govts. and the land in question continues in the possession of the allottees or under their authorised use but its status is under dispute between different departments. Some of such cases are listed below for illustration.

- 1.1 1.1 Protected forests in Madhya Pradesh, termed as “Orange Areas” which according to the State Govts. decision were to be transferred to Revenue Deptt. after demarcation for issuing pattas to the beneficiaries. It is observed that pattas were issued to the individuals but transfer of the land from Forest to Revenue Deptt. which should have preceded allotment of pattas, was not effected.
- 1.2 1.2 ‘Dali’ lands in Maharashtra which are said to have been leased to the entire village community in the past by the State Government. The assignees continue to make use of these lands for various purposes as per original terms and conditions and some times, in accordance with the decision of the village community wherever such leases are for collective use of the community as a whole. But the formal status of these 'Dali' lands is not clear.
- 1.3 1.3 Cases in which land was assigned by the Revenue Department supposedly from revenue lands. But eventually these were found to be notified forest land even though the assignees were not dispossessed of their holdings.
- 1.4 1.4 Leases granted by the State Governments for cultivation, agro-forestry or tree plantation; the leases continue to possess the land though these have not been renewed since enactment of the Forest (Conservation) Act, 1980.

2. An ambiguity about the status of the land involved in the type of cases cited above, particularly when the forest land continues under the possession of the assignees, is likely to adversely affect forest protection in these and the neighbouring areas, apart from forcing the lawful assignees to live in a state of uncertainty. Keeping these and similar other aspects in view and after careful consideration of the recommendations of the inter Ministerial Committee, it has been decided that inter departmental issues related to pattas/leases/grants involving forest land should be settled at the earliest. The following steps are suggested in this regard.

2.1 All the cases of pattas, leases, grants involving forest land whether by intent, omission, oversight or accident, should be reviewed by the State/UT Government. Such review should enable the State/UT Government to identify those cases in which the pattas/leases/grants were awarded under proper authority. The assignees continue to be in possession of the land and the term of the pattas/leases/grant is yet to expire.

2.2 In all those cases, where pattas/leases/grants were given by the State Government Departments to Scheduled Tribes or rural poor either individually or collectively, such pattas/leases/grants should be honoured and inter-departmental disputes should not affect the rights of the leases provided they are in physical possession of the land, and term of the patta/lease/grant has not yet expired. These cases should be examined by district level

committees consisting of D.F.O., S.D.O. Revenue Department, a representative of Tribal Welfare Department. The disputes should be resolved at the district level wherever it is possible, or after obtaining suitable orders of the State/UT Government or the Government of India (if the provisions of the Forest (Conservation) Act, 1980 are attracted), as the case may be.

2.3 Lease of a period prior to 25.10.1980 which were granted to the Scheduled Tribes or to other rural poor for agro-forestry, tree plantation or alike but could not be renewed, despite the State/UT Government's intention to do so, on account of enactment of the Forest (Conservation) Act, 1980 should be examined expeditiously. Wherever the State/UT Government's desire to continue the leases proposals should be submitted to this Ministry, in the prescribed manner, for seeking prior approval under the Forest (Conservation) Act, 1980. Pending final decision the lessees should not be dispossessed of the land.

2a. In cases where Forest (Conservation) Act is attracted proposals for denotification of forest land should be accompanied by proposals for compensatory afforestation.

### **Conversion of forest villages into revenue villages and settlement of other old habitations**

Forest villages, were set up in remote and inaccessible forest areas with a view to provide uninterrupted man-power for forestry operations. Of late, they have lost much of their significance owing to improved accessibility of such areas, expansion of human habitations and similar other reasons. Accordingly, some of the States converted forest villages into revenue villages well before 1980. Nevertheless there still exist between 2500 to 3000 forest villages in the country. Besides, some cases of other types of habitations e.g. unauthorised houses/homesteads, dwellings of tribals who have been living in them in virtually pre-agrarian life styles, are suspected to exist in forest lands even though these may not have been recognised either as revenue villages or forest villages.

2. In March, 1984, the then Ministry of Agriculture suggested to the State/UT Govts. that they may confer heritable and inalienable rights on forest villagers if they were in occupation of land for more than 20 years. But this suggestion does not seem to have been fully implemented. Development of forest villages has also been addressed to in the National Forest Policy, 1988 which states that these should be developed on par with revenue villages. This issue was again examined by an inter-Ministerial Committee, set up this Ministry to look into various aspects of tribal-forest-interface, in consultation with representatives of some of the States.

3. Although the forest villagers have lived in harmony with their surrounding forests and the concept of forest villages prove an effective arrangement for sustained supply of man-power, yet it would not be appropriate to deny them legitimate rights over such lands which were allotted to them decades ago for settlement and have been continuously under their occupation since then. Keeping this aspect and the recommendations of the inter-Ministerial Committee in view, the following measures are suggested to resolve the outstanding issues of forest villages and other types of habitations existing in forest lands.

#### **3.1 Forest Villages**

Forest villages may be converted into revenue villages after denotifying requisite land as forest. Proposals seeking prior approval of Government of India for this purpose under the Forest (Conservation) Act, 1980 may be submitted expeditiously. While converting these villages into Revenue Villages, the following principles may be adhered to:

- (i) (i) the villagers are conferred heritable but inalienable rights;
- (ii) (ii) administration of these and other Revenue Villages enclaved in forest areas should preferably be entrusted to the State Forest Departments.

#### **3.2 Other habitations**

- (a) (a) Habitations other than Forest Villages may be grouped into the following categories:
  - (i) (i) Cases where dwelling belong to persons who have encroached on forest land for cultivation.
  - (ii) (ii) Dwellings of other persons who have been living therein since past without encroaching on forest land for cultivation but their habitations are neither recognised as Revenue Villages nor Forest Villages.

- (b) (b) Each case may be examined on its merits. Suggestions for resolving the cases are given below:-
- (i) (i) In case of category (a)(i) above wherever encroachments for agricultural cultivation are regularised, the house sites and homesteads, too, may be regularised either in-situ or as near to the agricultural field as possible subject to certain safe-guards in the interest of forest protection and “eligibility” criteria as may be evolved by the State Government.
  - (ii) (ii) In case of category (a)(ii) above, certain specific habitations, more than 25 years old, involving sizeable group of families, may be examined, case by case, on merits for their amicable settlement.
  - (iii) (iii) Scheduled Tribes and rural poor not covered under (i) and (ii) above should be resettled in non-forest Government land.
  - (iv) (iv) All other unauthorised habitations must be evicted.
  - (v) (v) Wherever provisions of Forest (Conservation) Act, 1980 are attracted, comprehensive proposals may please be submitted for seeking prior approval of this Ministry It may kindly be noted that such proposals will be considered only when the State/UT Govt. ensure that all the measures are taken simultaneously and effectively and are accompanied with proposals for compensatory afforestation.

## ANNEXURE-V

### GUIDELINES FOR LAYING TRANSMISSION LINES THROUGH FOREST AREAS

1. Where routing of transmission lines through the forest areas can not be avoided, these should be aligned in such a way that it involves the least amount of tree cutting.
2. As far as possible, the route alignment through forest areas should not have any line deviation.
3. (i) The maximum width of right of way for the transmission lines on forest land shall be as follows:

Transmission Voltage (KV)	Width of Right of Way (Mts)
11	7
33	15
66	18
110	22
132	27
220	35
400	52
800	85

(ii) Below each conductor, width clearance of 3 mts. would be permitted for taking the tension stringing equipment. The trees on such strips would have to be felled but after stringing work is completed, the natural regeneration will be allowed to come up. Felling/pollarding/pruning of trees will be done with the permission of the local forest officer whenever necessary to maintain the electrical clearance. One outer strip shall be left clear to permit maintenance of the transmission line.

(iii) In the remaining width the right of way up to a maximum of 85 metres (for 800 KV lines) trees will be felled or lopped to the extent required, for preventing electrical hazards by maintaining the following:

Voltage (KV)	Minimum clearance between conductors and trees (Mts)
11	2.6
33	2.8
66	3.4
110	3.7
132	4.0
220	4.6
400	5.5

The sag and swing of the conductors are to be kept in view while working out the minimum clearance mentioned as above.

(iv) In the case of transmission lines to be constructed in hilly areas, where adequate clearance is already available, trees will not be cut.

4. Where the forest growth consists of coconut groves or similar tall trees, widths of right of way greater than those indicated at Sl. No.3 may be permitted in consultation with the CEA.

**ANNEXURE-VI (a)**

**CATEGORY OF PROPOSALS FOR WHICH  
COST-BENEFIT ANALYSIS IS APPLICABLE**

<b>Sl.No</b>	<b>Nature of Proposal</b>	<b>Applicable/not applicable</b>	<b>Remarks</b>
1.	All categories of proposals involving forest land up to 20 hectares in plains and up to 5 hectares in hills.	Not applicable	These proposals are to be considered on case by case basis and value judgement.
2.	Proposal for defence installation purposes and oil prospecting (prospecting only)	Not applicable	In view of National Priority accorded to these sectors, the proposals would be critically assessed to help ascertain that the utmost minimum forest land above is diverted for non-forest use.
3.	Habitation, establishment of industrial units, tourist lodges/complex and other building construction	Not applicable	These activities being detrimental to protection and conservation of forest, as a matter of policy, such proposals would be rarely entertained.
4.	All other proposals involving forest land more than 20 hectares in plains and more than 5 ha. in hills including roads, transmission lines, minor, medium and major irrigation projects, hydel projects mining activity, railway lines, location specific installations like micro-wave stations, auto repeater centres, T.V. towers etc.	Applicable	These are cases where a cost-benefit analysis is necessary to determine when diverting the forest land to non-forest use is in the overall public interests.



## ANNEXURE-VI (b)

## PARAMETERS FOR EVALUATION OF LOSS OF FORESTS

Sl.N	Parameters	Roads, Tr. Lines & Railway lines	Minor irrigation projects, quarrying of stones/ metals	Medium & major irrigation, hydro electric, large mining & other misc. projects.
1.	Loss of value of timber, fuelwood and minor forest produce on an annual basis, including loss of man-hours per annum of people who derived livelihood and wages from the harvest of these commodities.	To be quantified & expressed in monetary terms.	To be quantified & expressed in monetary terms.	To be quantified & expressed in monetary terms.
2.	Loss of animal husbandry productivity, including loss of fodder	-do-	-do-	-do-
3.	Cost of human resettlement	-do-	-do-	-do-
4.	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railways etc.) on forest land, or which would require forest land if these facilities were diverted due to the project.	-do-	-do-	-do-
5.	Environmental losses: (soil erosion, effect on hydrological cycle, wildlife habitat, microclimate upsetting of ecological balance).	Though technical judgement would be primarily applied in determining the losses, as a thumb rule the environmental value of one hectare of fully stocked forest (density 1.0) would be taken as Rs. 126.74 lakhs* to accrue over a period of 50 years. The value will reduce with density, for example, if density is 0.4, the value will work out at Rs. 50.696 lakhs. So if a project which requires disforestation of 1 hectare of forest of density 0.4 gives monetary returns worth over Rs. 50.696 lakhs over a period of 50 years, may be considered to give a positive cost benefit ratio. The figure of assumed environmental value will change if there is an increase in bank rate; the change will be proportional to percentage increase in the bank rate.		
6.	Suffering to oustees.	The social cost of rehabilitation of an oustee (in addition to the cost likely to be incurred in providing residence, occupation and social services to him) be worked out as 1.5 times of what he should have earned in two years had he been not shifted.		

**ANNEXURE-VI (c)**

**Parameters for Evaluation of Benefit, notwithstanding Loss of Forests**

Sl.No	Parameters	Nature of Proposal		
		Roads, Tr. Lines & Railway lines	Minor projects	Irrigation/ hydel projects & Others.
1.	Increase in productivity attributable to the specific project	To be quantified & expressed in monetary terms.	To be quantified & expressed in monetary terms.	To be quantified & expressed in monetary terms.
2.	Benefits to economy	Value judgement	-do-	-do-
3.	No. of population benefited.	-do-	Value judgement	Value judgement
4.	Employment potential	-do-	-do-	-do-
5.	Cost of acquisition of facility on non-forest land wherever feasible	To be quantified & expressed in monetary terms.	To be quantified & expressed in monetary terms.	To be quantified & expressed in monetary terms.
6.	Loss of (a) agriculture & (b) animal husbandry production due to diversion of forest land	To be quantified & expressed in monetary terms.	To be quantified & expressed in monetary terms.	To be quantified & expressed in monetary terms.
7.	Cost of rehabilitating the displaced persons as different from compensatory amounts given for displacement	To be quantified & expressed in monetary terms.	To be quantified & expressed in monetary terms.	To be quantified & expressed in monetary terms.
8.	Cost of supply of free fuel-wood to workers residing in or near forest area during the period of construction.	To be quantified & expressed in monetary terms.	To be quantified & expressed in monetary terms.	To be quantified & expressed in monetary terms.



**GUIDELINES FOR PARTICIPATION OF PRIVATE SECTOR  
THROUGH INVOLVEMENT OF NGOs & FOREST DEPARTMENT  
IN AFFORESTATION/REHABILITATION OF DEGRADED FOREST**

**PREAMBLE**

Our National Forest Policy of 1988 envisages that one third of the geographical area of the country should be under forest/tree cover. The total recorded forest area in the country is about 23% of the geographical area. According to the State of Forest Report, 1997, the actual forest cover in the country is only about 19.27%. It has been further estimated by Forest Survey of India that out of this 19.27% only 11.17% is dense forest i.e. having density of more than 40%. About 7.95 (2.61310 sq. km) of the geographic area is open forest i.e. having density less than 10%. This degraded forest needs urgent attention and sufficient monetary input so that it is rehabilitated and fully covered. These forest areas were endowed with rich biological diversity and should be our immediate concern to rejuvenate at the earliest.

The Ministry is greatly concerned over the slow rate of afforestation owing to financial and other constraints. The afforestation has gone down from about 89,000 sq. km in the VII Five-Year Plan to about 70,000 sq. km in the VIII Plan. Even if it is presumed that there will be no further degradation of forest areas it will take more than 25 years to restock the degraded forest areas. Even if we take a conservative norm of Rs.20,000 per hectare cost it will require a budgetary allocation of more than Rs.600 billions to rehabilitate them.

It is, therefore clear that ministry is not in a position even to restore the existing degraded forests from the available resources :- leaving aside the goal of increasing the forest cover to 33% of the geographical area by afforestation.

It therefore requires some innovative policy decision wherein without compromising the basic provisions of our forest policy we can attain the goal. One of the proposals received from the Govt. of Maharashtra under the Forest (Conservation) Act, 1980 appears to be aimed in that direction. It has been proposed by the Govt. that about 100 ha of degraded forest land near Thane will be afforested/rehabilitated by BAIF an NGO through funding from NOCIL in consultation/guidance of the local Forest Department. It will be done through an agreement signed between BAIF-NOCIL and the State Government. BAIF-NOCIL will have no rights over the land or the usufruct at anytime thereafter whatsoever.

It has been observed that a large number of like minded industrial houses are willing to join hands in this green movement through NGOs and under the supervision and guidance of the forest department voluntarily without any rights whatsoever on the forest land or the usufruct. The executing NGO will work over the land for a time till the plantations/tree cover gets established.

**GUIDELINES**

The Ministry, therefore after due consideration has taken a decision to encourage this joint participation of Industrial houses, NGOs and Forest department in order to rehabilitate/reforest the vast degraded forest in the country. This will not only result in

greening of the nation but will also result in employment generation. However, in order to have a clarity on the method and procedures. Ministry is issuing following guidelines.

1. There must be tri-partite agreement between the industrial house, an acceptable NGO of repute and the local Forest Department.
2. The agreement must have the commitment of the industrial house to bear the cost of the scheme: of the NGO to faithfully implement the scheme under the supervision and direction of the Forest Department.
3. The industrial house and the NGO will not claim any right whatsoever over the forest land or the produce anytime thereafter.
4. The rights of local people if any, over the forest land will not be affected by this agreement.
5. The agreement will be for a period of say 5 to 7 years during which the area is likely to be tackled including maintenance.
6. The scheme should be prepared in such a way so that naturally occurring species should be given priority in the rehabilitation and even plantations should be of local native species.
7. Only such forest lands that are less than 0.4 density and that cannot be regenerated with natural regeneration should be taken up under this scheme.
8. Any other condition that State Forest Departments considers essential to fulfill objectives and preamble of these guidelines.

**Guidelines for preparation of Cluster Mining Proposals**

1. 1. Cluster proposal may be prepared for such leases, which have contiguous boundaries.
2. 2. All the existing mines proposals/fresh proposals in pipeline be included in that including non-forest lands, if within.
3. 3. States will take individual proposals from different lessees in the proforma with relevant documents.
4. 4. However, with covering letter, a comparative statement of all mines with area and other details be given and all leases with boundaries be shown on one map.
5. 5. Even existing approved leases be included in the proposal so that they can be brought to the same time frame.
6. 6. The condition of compensatory afforestation will apply on the basis of each individual lease rather than on pro-rata basis.
7. 7. The safety zone shall be at the outer boundary of the cluster and condition of safety zone will apply on pro-rata basis.

This is to further clarify that where existing forest roads outside the lease areas/cluster are being used by lessees for transporting mined minerals, it is not desirable to insist inclusion of such forest areas in the lease proposal unless a new road is proposed for such lease or cluster. The State Governments should rather permit its use on the terms and conditions to be decided by the State Government.

**Proforma for Site Inspections Reports by Regional Offices**

1. Legal status of the forest land proposed for diversion.
2. Itemwise break-up details of the forest land proposed for diversion.
3. Whether proposal involves any construction of buildings (including residential) or not. If yes, details thereof.
4. Total cost of the project at present rates.
5. **Wildlife:-**  
Whether forest area proposed for diversion is important from wildlife point of view or not.
6. **Vegetation:-**  
Total number of trees to be felled.  
Effect of removal of trees on the general ecosystem in the area.  
**Important species:-**  
Number of trees to be felled of girth below 60 cm.  
Number of trees to be felled of girth above 60 cm.
7. Background note on the proposal.
8. **Compensatory afforestation:-**  
Whether land for compensatory afforestation is suitable from plantation and management point of view or not.  
Whether land for compensatory afforestation is free from encroachments/other encumbrances.  
Whether land for compensatory afforestation is important from Religious/Archaeological point of view.  
Land Identified for raising compensatory afforestation is in how many patches, whether patches are compact or not.  
Map with details.  
Total financial outlay.
9. Whether proposal involves violation of Forest (Conservation) Act, 1980 or not. If yes, a detailed report on violation including action taken against the concerned officials.
10. Whether proposal involves rehabilitation of displaced persons. If yes, whether rehabilitation plan has been prepared by the State Government or not.  
Details be furnished specifically if rehabilitation plan would affect any other forest area by translocating oustees in around the said forest.
11. **Reclamation plan:** Details and financial allocation.
12. Details on catchment and command area under the project. Catchment area treatment plan to prevent siltation of reservoir
13. Cost benefit ratio.
14. Recommendations of the Principal Chief Conservator of Forests/State Government.
15. Recommendations of Regional Chief Conservator of Forests alongwith detailed reasons.
16. Regional Chief Conservator of Forests shall give detailed comments on whether there are any alternatives routes/alignment for locating the project on the non-forest land.
17. Utility of the project.  
Numbers of Scheduled caste/Scheduled Tribes to be benefited by the project.
18. Whether land being diverted has any socio-cultural/religious value.  
Whether any scared grove or very old growth trees/forests exist in the areas proposed for diversion.  
Whether the land under diversion forms part of any unique eco-system.
19. Situation w.r.t. any P.A.
20. Any other information relating to the project.

**A COMPREHENSIVE  
HANDBOOK  
OF**

Forest (Conservation) Act, 1980

Forest (Conservation) Rules, 2003

**Guidelines & Clarifications**  
(Revised as on 20<sup>th</sup> October,2003)

**Ministry of Environment & Forests  
New Delhi**