

**MAHAGIRI MINES (CHROMITE)
M/S INDIAN METALS AND FERRO ALLOYS LTD.**

**MODEL STANDING ORDER IN THE EVENT OF STOPPAGE OF 120 HP
VENTILATION FAN**

Development of the Underground mine at Mahagiri Mines (Chromite) is carried out through a combination of Vertical Shaft and Decline. An effective exhaust ventilation system has been established by the installation of one, 120HP motor operated, axial flow fan at 85 mRL x-cut to Vertical Shaft. The fan draws fresh air through the Decline and releases the foul air through Vertical Shaft. The fan has been provided with one 'Self-Starter Switch' which automatically switches on the motor after duration of 5 minutes in the event of power failure or change over.

RESPONSIBILITY OF THE FAN ATTENDANT

The fan attendant shall not stop the 120HP Ventilation fan except on the written authority of the Mines Manager or a person authorized by him in this behalf. Such written authority shall in every case indicate the period for which the fan is to be stopped and the fan attendant shall strictly comply with the instructions.

In the event of the stoppage of the 120HP Ventilation fan, either authoritatively or due to power failure or for any other reason whatsoever under the circumstances beyond the control of the management the fan attendant shall,

- i) Immediately open the doors provided near the ventilation fan to facilitate the natural ventilation.
- ii) Immediately notify the attendance clerk on duty about the stoppage indicating the reasons and circumstances thereof.
- iii) Immediately inform the electrical personnel, in the Sub-Station about the stoppage for repairing, if required.
- iv) Record such information as may be made available to him in a bound paged book provided for the purpose.
- v) Immediately inform to any Mine Official present in the vicinity of the location of the Main Mechanical Ventilator.

RESPONSIBILITY OF THE ATTENDANCE CLERK

On being informed as above, the attendance clerk shall immediately send information of the stoppage to

- i) The Shift In-charges present in the mine.
- ii) The Mines Manager or in his absence to the senior-most official acting on his behalf.
- iii) Electrical Maintenance Department for action at their end if required.

RESPONSIBILITY OF THE ELECTRICAL MAINTENANCE DEPARTMENT

On receiving the information about the stoppage of 120HP Ventilation fan, the Electrical Maintenance Department shall immediately inform the Electrical Engineer.

- i) The Electrical Engineer, on receipt of such information, shall immediately depute a responsible official to investigate into the condition of the 120HP Ventilation fan.
- ii) The Electrical Engineer or the person deputed by him shall take such action as is necessary to rectify any fault or stoppage and restore normal operation.
- iii) The Electrical Engineer or the person deputed by him shall communicate the Mines Manager, Shift/Section in-charges about the probable time required to rectify any defects for restoring the normal operation of the 120HP Ventilation fan.

RESPONSIBILITY OF THE SHIFT IN-CHARGES

On receiving the information about the stoppage of the 120HP Ventilation fan, the Shift in-charges shall take the following steps

- i) Shall make arrangement to stop all the auxiliary ventilation fans in order to avoid short circuit.
- ii) Shall make arrangement to suspend electrical welding /gas cutting work if going on in return side.
- iii) Shall ensure that the all the ventilation doors are opened to facilitate the natural ventilation.
- iv) The Shift in-charges shall remain in communication with the person/persons, engaged for rectifying the defect until the 120HP Ventilation fan has been re-started.

SHORT STOPPAGE

If the 120HP Ventilation fan is re-started and works satisfactorily within one hour of the stoppage, then the work can be continued as usual after restarting of the fan. The attendance clerk shall immediately send information thereof to all persons concerned, mentioned above.

LONG STOPPAGE

If the fan is not re-started due to any mechanical or electrical problem within one hour of the stoppage, the following precautions are to be taken immediately.

i) All the persons, deployed at different parts of the mine, are to be withdrawn to the intake side or to a safe place being ventilated by natural ventilation except the officials and persons engaged in supervisory duties, pump attendants and persons employed on essential and urgent repair of the job, duly permitted by Mines Manager or in his absence the senior-most official acting on his behalf.

ii) All the proposed blasting operations are to be kept suspended till further clearance.

RE-STARTING

i) When the 120HP Ventilation fan is re-started after a long stoppage, all working places in the mine shall be examined by the concerned Shift in-charges for the presence of noxious gases and deficiency of oxygen.

ii) Mines Manager or in his absence the senior-most official acting on his behalf, on getting the information about the satisfactory performance of the 120HP Ventilation fan including auxiliary fans and Booster fans and safe condition of the work places, shall permit for general resumption of the work.

PLANNED STOPPAGE

i) When the stoppage of the ventilation fan is pre-planned, no persons shall be allowed to proceed underground without the written authority of the Manager or in his absence the senior most official

ii) The Manager or in his absence the senior most official, shall inform all the officials about the planned stoppage, the period for which the fan is to be stopped and the precautionary measures to be taken by each of them during the stoppage.

RECORDS OF THE STOPPAGE

i) All stoppages whether major or minor, short stoppage or long stoppage, planned stoppage or unplanned stoppage, the cause and the duration of the same and the action taken in each case shall be recorded in a bound paged book kept available with the fan attendant for the purpose.

ii) Every such record shall be countersigned by the manager or a person authorized by him in this behalf.

ENFORCEMENT OF THE ORDERS.

i) A copy of this order, in English and Odia, shall be posted near the 120HP Ventilation fan, Office of the mine, Time Office and at every conspicuous place in underground.

ii) It shall be the duty of the Manager to make all the officials and persons concerned thoroughly conversant with the action required on the event of the stoppage of the 120HP Ventilation fan.