

ENVIRONMENTAL MANAGEMENT PLAN

WATER QUALITY MANAGEMENT:

The ground water available in the applied area and its surrounding is tolerably suitable for drinking or irrigation. As mining is going to be done much above the ground water level, the question of pumping water outside does not arise. As there is no beneficiation involved with the use of water, the question of discharge effluents also does not arise.

Groundwater: The depth of the mining will be 7.5mtr and the water table of the area is 50 to 60bgl. The mining operation will be on higher levels; therefore there will be no effect on groundwater condition due to mining.

Domestic waste water will be disposed through septic tank followed by soak pit.

AIR QUALITY MANAGEMENT:

- Water sprinklers are proposed on haul road and at work place for dust suppression. Dust mask will be provided to the operator & mineworkers.
- The source of air pollution is vehicular movement but the transportation will be towards the lower side hence the impact is not very much significant.
- Vehicular emission will be controlled and regularly monitored. Loading is also creating air pollution.
- Water spraying is proposed over the material before loading and transportation.
- Covered trucks will be used in transportation.
- Proposed mining is manual and no processing/ grinding unit is proposed in the applied area, hence the air pollution will remain in permissible limit.

NOISE MANAGEMENT:

- The proposed mining will be done by opencast method but some amount of noise will be generated due to operation of JCB and small capacity excavator which will be deployed on hire basis for removal of overburden and due to vehicular movement.
- Transportation vehicles will be properly maintained and provided with good silencers. Precaution and regular maintenance of excavator, replacement of damaged/ worn out parts

whenever required will be taken.

- Ear plugs will be provided to operator and mine workers. Trees will be planted which will attenuate the noise levels.

SOLID WASTE

- The Bajri recovery is 100% so not produced wastes in during mining period. There is no sub-grade mineral will be generated during the course of mining.

GREEN BELT DEVELOPMENT

- During plantation, local plant
- species will give preference or in consultation with local forest officials. Area is sparsely vegetated by few shrubs and bushes.
- Around 33% of the area to be planted in next five year inside & outside the lease area. Proper fencing arrangement for survival of trees will be provided. The separate watering, manuring arrangement will be provided.
- The trees will be provided along the road, applied lease area and approach road. The dead plants will be replaced by fresh plants in next monsoon season. The plantation should be grown in each monsoon season. Proposed plants are *Azadirachta indica*(Neem), *Prosopis cineraria* (Khejri), and *Acacia nilotica*(Babool) etc.
- Total 33% area will planted, in case of non availability of sufficient land in leased out area other land such as Panchayat Land, School premises etc will be planted as per availability or in consultation with local panchayat authorities.

Post Plantation Care:

- Most of these trees will be planted during the rainy season.
- The type of trees proposed usually does not require much care after plantation.
- However, workers will be engaged to look after them on regular basis.
- Fencing will be done properly.
- The water for the purpose of plantation other than rainy season shall be fetched from the bore wells of the nearby village.
- The proposed plantation will help in the restoration of the land use and will also improve the eco-system of the area.

SOCIOECONOMIC IMPACT

The mining activity will have positive impact due to direct and indirect employment and development of ancillary industries. The project involves no displacement.

SAFETY & SECURITY:

All safety measures as per mines act will be adopted. Fencing is proposed all around the proposed working/excavation to check the inadvertent entry of human and livestock in the mining area. A watchman is proposed for ward and watch duty for security purpose. In the period of discontinuance the proposed watchman will continue for ward and watch duty. The safe working is proposed in the supervision of technical and qualified supervisory staff.

OCCUPATIONAL SAFETY & HEALTH

All safety measures prescribed under mining laws will be followed strictly. All workers will be medically examined in pre- placement phase and also periodically. First Aid Personnel with First aid kit will be available at the mine site to provide first aid to injured person. Arrangement for transportation of persons to nearby medical facilities will be made. Potable water facility will be provided to mine workers. Personal protective equipments (earmuffs/ earplugs, helmets, face masks, gloves, goggles) will be provided to mine workers as safeguards.

DISASTER MANAGEMENT & RISK MANAGEMENT

The proposed working will be done by opencast mining method. No big machineries are proposed. Face height is not proposed high. No tailing dam is proposed. Thus high risk accidents like land slide, subsidence, flood, inundation, fire, seismic activities etc. not come across. In case of accidents, a well equipped first aid station is proposed at mine site for giving first aid to injured person. A vehicle will always remain at site for any miss happening.