

UNIT-V: CASE STUDIES

5.3- EIA OF MINING PROJECTS



EIA OF MINING PROJECTS

Case Study

EIA analysis of coal mining project by M/s Jayaswals Neco Limited

This is a Rapid Environment Impact Assessment (REIA) report evaluated by the Centre for Science and Environment, New Delhi. Jayaswals Neco Ltd. proposed a coal mining project in Raigarh, Chattisgarh. The Nagpur-based Enviro Techno Consult conducted the EIA study. The area around proposed site is rich in coal. The project requires 491 hectares of land and the area around the site is densely forested. The EIA report shows that agriculture is a major occupation in the study area. The project is likely to impact local biodiversity, the forest ecology, and the livelihoods of the local communities. The villages around the area will be affected with noise and air pollution, and blasting and ground vibrations. The environmental impact of the project includes;

1. ***Impact on local groundwater resources:*** According to the EIA report, open cast coal mining will result in breaching of the ground water table. The report emphasizes that the rate of dewatering from the mine pit should not exceed 65 % of the rate of ground water recharge in the mine lease area, in order to maintain the “safe” groundwater category. All the rivers in the region are polluted and stressed due to existing industrial activities. The mine pit water has higher Total Dissolved Solids values.
2. ***Impact of the project on local air quality:*** Mining can cause significant air pollution. The EIA report for the proposed project has made estimations of

fugitive emissions. The emission potential from top soil removal, drilling, blasting, transportation, material handling, and also from the coal handling plant have been estimated 3,510 tonnes of dust per year can be generated. The Environment Management Plan (EMP) suggests adequate steps for dust suppression such as water spraying, bag filters to be attached to the drilling machines and so on. Also covered storages and covered conveyor belts are suggested.

3. **Local biodiversity:** The area around the site is rich in biodiversity and it can impact the local biodiversity. The EIA report shows that important wildlife in the area include: bear, bandar, pea fow land leopards.
4. **Noise impacts:** The impact of noise and vibrations generated due to mining will be high and can impact the local community in near by villages.
5. **Disaster management:** Coal mining and that too underground coal mining can cause accidents and occupational hazards. The hazards include: roof collapse, flooding, suffocation due to methane, carbon dioxide and carbon monoxide and so on. So disaster management plans, risk management to underground mining should have taken into account.

Therefore, the proposed project is a large-scale project. The EIA analysis estimates the impacts include the impact due to coal mining. The impacts include those on the local water regime, pollution to the air, noise and vibration pollution, impact on forests and the local biodiversity. The area region is eco-sensitive and the forests are the lifeline of the people inhabiting this area.