

1. Introduction

Environment means the whole complex of physical, social, cultural, economic and aesthetic factors, which affect individually as well as the communities. Environmental impact means any alteration of environmental conditions or creation of new set of conditions, adverse or beneficial, caused by human activity, such as industries including mining. Public response to mining is however, always negative because it creates a visual impact. It leaves ugly scars on existing landscapes. Mining areas often have a monochromatic appearance. Coal mining areas are depressingly black, iron and manganese ore areas are blackish red and brown, ochre lands with yellow colour, limestone mine makes the area chalky white and so on. Fine particles of ore and waste generated spread as layer of dust on every available surface in these areas. Location of crushers and grinders, within the mining areas, aggravates the situation. But, unlike other industries, mining operations are transient in nature and are one time operations, the impacts of which are mostly reversible. The affected land can be brought back for a better land use.

Mining in general affects the existing land, water and air systems. Noise pollution is another serious problem, especially when mines are located near human as well as wild life habitats. Besides leaving large excavations and huge waste dumps, mining enterprises, means the conversion of land to such purposes, as roads, railways and rope-ways for the mineral transport, townships for housing, infrastructure for administrative purpose, land for stockyards and for preliminary processing of the ore.

The mining industry in India is fairly well developed, but their activities are confined to an area of about 7150 sq km (about 0.22% of the total land area), distributed mostly in seven states. Though the percentage of land affected by mining is relatively small, their concentrations as well as location in some environmentally fragile areas make the situation grim and requires large scale environmental protection measures, calling for modifications in the conventional methods of mining.

In its pursuit for better quality of life, the mankind of the world had overlooked the fact that environmental pollution has come to such a stage as to constitute the single biggest hazard, not only to the very existence of human being but also to the existence of all resources the nature has gifted him. Therefore, all of us must realise that unless urgent steps are taken to put a stop to the ever increasing pollution, a very bleak and terrible future awaits the mankind.

It is, however, gratifying for us to note that with commendable foresight, the Constitution of India has already made appropriate provisions in Article 48A that 'the state shall endeavour to protect and improve the environment and to safeguard the forests and the wild life of the country'. For every Indian citizen also, the Constitution has made it a part of his fundamental duties in Article 51A which provides that 'it shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures'.

Nevertheless, pollution of the environment, remained unabated over the globe for years till it attracted the attention of the United Nations Organisation (UNO), which in its landmark Stockholm Conference in June, 1972, chalked out a detailed abatement plan on the subject.

About 113 countries, including India, participated in this Conference and evolved the principle and action plan for controlling and regulating human environment and envisaged the institutional and financial arrangement for achieving that purpose. The salient points of the Declaration of this Conference were :

“Man is both creator and moulder of his environment, which gives him physical sustenance and provides him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of human race on this planet a stage has been reached when, through rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both the aspects of man’s environment, the natural and the man-made, are essential to his well being and to the enjoyment of basic human rights even the right to live itself.

The protection and the improvement of human environment is a major issue which affects the well being of people and economic development throughout the world. It is an urgent desire of the people of the whole world and the duty of all Governments. The natural resources of the earth, including air, water, land, flora and fauna and especially representative samples of future ecosystems, must be safeguarded for the benefit of the present and the future generations through careful planning or management. The capacity of the earth to produce vital renewable resources must be maintained and wherever practicable, restored or improved.

Man has a special responsibility to safeguard and wisely manage the heritage of wildlife and its habitats, which are now gravely imperiled by a combination of adverse factors. Nature’s conservation including wildlife, must therefore, receive importance in planning for economic development.

The non-renewable resources of the earth must be enjoyed in such a way as to safeguard against the danger of their future depletion and final exhaustion and to ensure that benefits from such enjoyment are shared by all mankind.

Appropriate national institutions must be entrusted with the task of planning, managing or controlling the environmental resources of State with a view to enhancing environmental quality. Science and technology, as part of their contribution to economic and social development must be applied to the identification, avoidance and control of environmental risks and the solutions of environmental problems and for the common good of mankind”.

On December 15, 1972, the United Nations General Assembly passed a resolution emphasising the need of active cooperation among the member nations in the field of human environment. Further, the resolution designated “June 5” of every year to be observed as the World Environment day. On this day, the various countries and organisations covered under the United Nations are required to undertake activities reaffirming their concern for the preservation and enhancement of the environment. On the same day, the United Nations passed an another

resolution, which provided for institutional and financial arrangements for international environmental cooperation. Provision has also been made for establishing a Governing Council for Environmental Programme, Environment Secretariat and Environment Fund. Accordingly, Office of the United Nations Environment Programme (UNEP) was established at Nairobi in Kenya.

Prompted by the U.N. Conference, the International Chamber of Commerce issued guidelines in 1974 for environmental protection in industries. These guidelines were revised in 1981 and a second revision was taken up in 1985. Similarly, the International Labour Organisation (ILO) started taking interest in environmental protection.

World Commission on Environment and Development

In 1983, the United Nations created a World Commission on Environment and Development. This Commission was headed by Mrs. Gro Harlem Brundtland, the then Prime Minister of Norway. Its main functions were to re-examine the critical environment and development problems on the planet, to formulate realistic proposals to solve them and to ensure that human progress will be sustained through development without bankrupting the resources of future generations. The Commission submitted its report in 1987 entitled as 'Our Common Future'. 'Our Common Future' serves notice that the time has come for a marriage of economy and ecology, so that governments and their people can take responsibility for environmental protection and for the policies that cause damage. The largest ever World Summit on the subject, held in Rio-de-Janeiro, Brazil, in June, 1992, aimed at identifying links between economy and environment and evolving a global consensus on sustainable use of world resources.

Consistent with the global trend in last two decades we have witnessed enactment and framing of an all-embracing environmental legislation, commencing with Water Act in 1974, Water Cess Act in 1977, Forest (Conservation) Act in 1980, Air Act in 1981 and Environment (Protection) Act in 1986. Progressively, deterrent penal clauses have been added in the environmental laws in recent years. Several amendments to these Acts and Rules have been made from time to time to make them more dynamic and effective. In its serious concern for a cleaner environment, the Government has even made it mandatory for the concerned industries to submit annual returns in the form of a detailed 'environmental statement' indicating the status of the environment on account of water, air, hazardous wastes and solid wastes. Last, but probably not the least, the government has made a move that no expansion or modernisation of any industry or setting up of a new project will be permitted unless it has been accorded environmental clearance from the Central/State Government depending on its size, vide notification No. S.O.6(E) dated 27th January, 1994 from the Ministry of Environment and Forests. According to this notification **all mines** of major minerals of more than 5 hactres of lease area will require environmental and site clearance from the Central Government, while for **prospecting and exploration** of major minerals above 500 hactres of land, it requires site clearance.