

RISK ASSESSMENT

Risk analysis involves the identification and assessment of risks the persons involved in the proposed project and the neighboring populations are exposed to as a result of hazard occurrence. This requires a thorough knowledge of failure probability, credible accident scenario, vulnerability of population etc. Much of this information is difficult to get or generate. Consequently, the risk analysis is often confined to maximum credible accident studies.

In the sections below, the identification of various hazards, probable risks in the proposed project, maximum credible accident analysis and consequence analysis, which gives a broad identification of risks involved, are addressed. Based on the risk estimation for fuel storage, a Disaster Management Plan (DMP) has been presented.

Approach to the Study:

Risk involves the occurrence or potential occurrence of some accidents consisting of an event or sequence of events. The risk assessment study covers the following:

- Identification of potential hazard areas;
- Identification of representative failure cases;
- Visualization of the resulting scenarios in terms of fire (thermal radiation)
- and explosion;
- Assessment of the overall damage potential of the identified hazardous events and the impact zones from the accidental scenarios;
- Assessment of the overall suitability of the site from hazard minimization and disaster mitigation points of view
- Furnishing specific recommendations on the minimization of the worst
- accident possibilities; and
- Preparation of broad Disaster Management Plan (DMP), On-site and Off-site
- Emergency Plan, which includes Occupational and Health Safety Plan.