

Page environmental pollution assignment



The companies wishing to operate such processes need to apply to the appropriate environment agency for a permit to operate. The processes affected are described in Schedule 1 to the regulations. The schedule is divided into various industrial sectors according to their potential to pollute the environment, for instance, Part A(1) A(2) or Part B processes, e. G. Coating processes and printing. The permits detail the conditions and emission levels under which they are allowed to operate as well as the prescribed substances which may be released.

Instances include: to air, for example, oxides of carbon, particulate matter; to water, for example, mercury and its compounds, BPCS; to land, for example, organic solvents, pesticides, ergonomically compounds. The permits themselves are reviewed every four years and are also subject to change. The control mechanism used for this regime, BAT, is described later. Further legislation relating to authorization of substances includes the Radioactive Substances Act 1993 and the Solvent Emission Directive 1999/13/SEC requirements implemented through the PC regime above.

Abnormal Conditions Giving Rise to Occasional Releases Abnormal conditions might lead to unintended releases to the environment or releases which are greater than normal. These might be situations where abatement controls temporarily fail or are unable to cope (say at an effluent treatment plant that receives a sudden large surge of effluent). Similar situations might occur on plant shut down, Start up, decommissioning or due to some human error, as happened at Camelopard, Cornwall, in 1988 where aluminum sulfate was deposited into the wrong tank.

Major Releases Following Plant Failure These are, of course, abnormal and infrequent occurrences arising as a result of some accident or dangerous occurrence - due to plant design or management failure. So, for example, an out of control reaction at a chem. plant may cause an explosion or venting of large quantities of vapor or gas into the atmosphere. Such incidents may give rise to fires, explosions lead to spillages of chemicals, radiation, etc.

The COMMA Regulations require the effects of potential Major Accidents To The Environment (MATTES) to be assessed. Quenching a large fire may allow large quantities of contaminant fire water run-off to escape to local waterways or sensitive environments, There are a number of incidents of this type which have caused not only environmental problems, but also had serious health and safety implications e. G. Opal, India (leak of methyl isocyanate); Chernobyl, Ukraine (radioactive release); Seveso, Italy (release of dioxin).

Principle Of Source, pathway, Target and Impact in Relation to Effects of Pollution Toxic substances can be released and dispersed by way of three environmental media: Air, Water and Soil. Environmental Pollution and Waste Management 10-4 NABOBS National Diploma Unit C Workplace and Work Equipment Safe Land releases can be by way of a number of different substances ranging from non-polar organic solvents to ergonomically active compounds. Releases to the atmosphere as air pollutants can be in the form of oxides of sulfur and nitrogen. Other toxic and polluting compounds may include carbon monoxide, hydrocarbons and lead.