

Some categories of pollutants

Bio degradable pollutants

eg - Domestic sewage, papers, clothes, wood
Micro organisms
↓
"pollutants"

Non Biodegradable pollutants

eg - Aluminium, BOD, Hg, Lead, Iron, phenol, Glass, benzene, BHC, DDT etc.

- 1) Subsh →
- 2) Alternative options

Primary pollutants "Environment free"

eg ⇒ DDT, CO etc.

Secondary pollutants

eg - photochemical smog (PAN, NO_3)
Landsmog (H_2SO_4 , N_2O)

eg - PAN (peroxyacetyl nitrate)
photosynthesis → Hill (Photolysis Rxn of H_2O)
chlorophyll synthesis

Other type of pollution

Natural Pollution

eg - Paddy field
Marshy → CH₄
forest fire

Anthropogenic
Artificial &
pollution
↓
Human activity

Negative
Soil & animals
↓
maximum
eg ⇒ Soil erosion

positive pollution
eg - soil
fertilizer
maximum
use

Quantitative pollutants
⇒ CO₂ ↑↑ NO₂

Qualitative pollutants
eg ⇒ DDT, Insecticides
Fungicides, Herbicides
(due to Human activity
man charya)

(1) Smog (Secondary pollutants) Desvoeux ~~Smog~~ ~~Smoke + Fog~~ ABLES[®] KOTA

① photochemical smog
 oxidising smog
 Required smoke and Fog
 Nitrogen oxide, Hydrocarbon, O_2
 High temp and UV Rays

Red-Brown colour

Brown haze

(PAN + O_3 + Nitrogen oxides)
 "photochemical smog"

Effect: eye irritation, lung-rubber

O_3 → Muscular layer harmful

* smog में PAN (Peroxylacetyl nitrate)
 photosynthesis → Hill ⇒ photolysis of H_2O
 phot-II ⇒ inhibition
 chlorophyll →

② London smog or classical smog
 Reducing smog / Sulphur
 eg - coal smoke, SO_2 , SO_3 Temp ↓
 Fog ↓
 H_2SO_4 की वाष्प (Fog)
 "लन्दन स्मॉग"

1952 ⇒ H_2SO_4 fog
 4000 ⇒ individual death

term Acid Rain

Robert August ⇒

Smoke ⇒ NO_2, SO_2 + water vapour

Wet deposition
Rain, Fog, ice } Acid

Dry deposition Acid ($\text{H}_2\text{SO}_4 + \text{HNO}_3$)
Nitrate and sulphuric Acid

Settle down on earth

Acid ⇒ water / soil
Acidic Nature

Acid Rain ⇒ pH = 5.6

H_2SO_4 : HNO_3
70% : 30%

Effect ⇒

Acid Rain ⇒ Taj Mahal ⇒ ?
Red fort ⇒ ?

Stone leprosy ⇒ due acid Rain