

Air pollution control

Life is to live and not to be restricted. The way, the life is taken by an individual is different for their original bearing power, potential, openness to take up things and they can never be predicted and their responses are instantaneous. The problem of pollution are for the greed and deviation of carrying life from nature and regulating the same without considering the connectivity of nature with human and the physiological features he has, to protect himself from nature. The activities are to be for living with nature which prevents much of the problems.

The air pollutants that may arise out of human activities for their living are of two types: particulates and gaseous pollutants. Particulates for their size are categorized as suspended particulates as they are being in drift in wind and inhalable particulates which gets into human respiratory system and inhibits the respirations. They do have similar problems with animals and settle on materials, and plants inhibiting their quality.

Gaseous pollutants readily enter into human system, animals, and cause health problems with respect to dermatological and respiratory activities. The level to which the creations on the earth respond to air pollutants depend on the immune system that we got to focus on the immune system and mutagenic developments and body language we carry to make ourselves protected from the pollutants.

When we look straight our nose will be pointing down and will not take in pollutants and that which enters will be filtered with nasal components. The gaseous pollutants will have their own trajectory of travel during which they get inert if the food system is natural with more of honey, pepper and jaggery which purifies blood streams and open up the respiratory system for more intake of oxygen which makes the pollutants to stable form and remain inactive.

The sulphur, nitrogen, carbon and volatile organics are the sources of food and forms a component in the cycle of flow as nutrient and energy and are not certainly harmful but are beneficial as the atmospheric stabilization with air as medium is fast and harmless. Among the three medium of environment the soil water and air, air is the media which cannot be collected at a central location and



treated, air cannot be held within a segmented area to get purified to the requirement as we do with water, yet we can make it a effective source of dilution if we consider the connectivity between the different layers of atmosphere, different environmental components and the flux of pollutants from among the layers which also should include the source from where the pollutants are generated.

When the transport is understood for the organics, their different forms as cycle which is not generated, but transformed form from one state, we find they also deserve their due place and are to be treated as part of the natural cycle and not against the ecosystem or life of natural creations. They will take their ecological foot prints to grow plants and fix with the soil and the total efforts spent on the regulations, emission levels, are misleading as the meteorological factors which decide upon the dispersion and interaction and chemical reactivity depends on the atmospheric temperature, barometric pressure, humidity, wind direction and speed, which is referred as stability of the atmosphere which is favourable for cloud formation and precipitation that will alter the concentration of atmospheric components which is the natural way of getting aback to soil for plant uptake. Any anthropogenic activity to control the emission of pollutant is misleading and the same getting dispersed into atmosphere equalizes the concentration to a vast media and carry on the connectivity, evolution and dynamism, characteristic of the nature.

It is to be understood that the ecosystem cannot be artificial and planned but happens on its own and what all measures we take against protecting the environment are really against them. The restrictive, instructional attitude we develop will interfere with our growth pattern. Many of the activities and attitude which are taken for granted among the elders become indisciplin among the youngsters not for the core of the activity but for the restrictive and instructional attitude of the elders. The same cannot be exercised with nature as it is our creator and we can be intelligent only to cherish the relationship, enjoy the wealth it gives, but not to restrict the same with our attitude. The attitude changes continuously if we respond to nature for evolution and that regresses if we fear to respond and stick to follow day old procedures. The elders are to get convinced and believe the world offers all it can to the children. We need not protect the environment for future generation, it is great if we live simple. Aggressive move to establish a stance, create an image spoils the core nature and

it is earned automatically if we go with the nature. The routine and restrictive environment pushes one within the set bars and that makes him to behave like a robot and the conflicting situation explodes out as misunderstanding and misconduct. Leave all to their own trend and temperament and that self realization make them all give out their best. There cannot be an expected pattern but the best of benefits to all involved.

The real success of air pollution and control lies in understanding the vast unlimited space available with the atmosphere which need to be connected to carry the components of natural cycle where the temperature serves as the immediate surrogate for all other elements and the same is not the threat as global warming, but a warning to think of the continuity. Adjusting the transport of atmospheric emissions to high altitude to complete the cycle of stabilization with dynamism is the needed strategy rather than accumulating them in the lower atmosphere that causes inversion and related stratification.

Global warming is a surrogate to retain temperature in the atmosphere to maintain a heated mass which forms the gradient needed to dissipate the pollutants to the surrounding atmosphere with air as medium. There will be dispersion only as long as the pollutant mass is warmer than the surrounding which transfers heat in the process of which the pollutant mass becomes lighter and lifts up. When the rate of transfer of the heat and pollutants are not the same the air above becomes warmer and light where as the air below laden with pollutants become dense and cool, then the inversion occurs. This further increases the pressure of the air mass which lowers the temperature further and the parcel of air remains murky and gloomy.

The situation will become favourable if the dispersion is in line with the atmosphere where the wind speed and direction play an important role. The vertical updraft and downdraft causes dispersion and precipitation both of which impart to the cycling of organics which we perceive as pollutants but they are really the evolved organics into the atmosphere in a different phase as particulate or gaseous. It is to be observed that the carbon di oxide and other gases which act as sink for retaining atmospheric heat is actually a reservoir of energy which can be tapped for the source to charge the vehicles and this serves to reduce the temperature inversion.

No activity should be banned for atmospheric pollution but the pollutants be made to form stable, accommodative product in the atmosphere that they safely remain in the cycles of transformation giving rise to evolution of ecosystem progressively. The heat trapped in the atmosphere which has been felt as global warming because it has been fragmented and had not formed a smooth transition from below to higher levels by vertical transport. They form the reservoir of heat energy which can be easily tapped by absorption unlike solar energy which needs a conversion media to convert light in to heat where we have heat in readily available form that global warming is not a curse, but bliss. We could run the vehicles, could use any sort of sophistication, work without interruption using electrical appliance with energy produced from heat for every use that we get transformed to better living and this forms a favorable flux rate which extends the boundary layer much ahead.

Threads

1. What are the various types of air pollutants?
2. Describe the effects of air pollutants on human beings and ecosystem.
3. Do you think handling the pollutants and emission policies specific to a country or region is ineffective as the connectivity between the countries by nature plays a significant role which is not given due significance.
4. Discuss on meteorological convection.
5. What do you mean by temperature inversion?
6. Discuss on the global and regional effects of air pollution.
7. Discuss on the concepts of modeling theory?
8. Discuss on the principles of various modeling theories.
9. We cannot control the pollution, but prevent and manage the same to be constructive. Discuss this concept with reference to pollutant concentration in the atmosphere.

10. Mobility can be reduced by using virtual communication to a large extent, which supports Ecopsychology, hyper physics and so on which explores environment with the inclusion of changes. Discuss on this.

11. Observe the vehicular emission at different times and record your inferences.

12. Conduct an observation in the meteorological studies of carbon di oxide dispersion and bring out your inferences to add or change the course.

13. Discuss on any one of the air pollution episodes and elaborate the scenario with your own observations.

14. Discuss on the air pollution control equipments in vehicles and industries. How could you stabilize the pollutants into inert mass before getting into the atmosphere?

15. How do you encourage the transport of air pollutants to have continuity of transport for a long distance to bring out effective dilution?

16. Making the process complete will reduce the amount of particulates and reactive gaseous pollutants to a great extent. Discuss on this to the level of energy generation which can be used for the process.

17. By having a suitable absorbing media to heat in the premises of furnace in industries we can avoid the occupational health hazards which in turn will be used for energy generation. Discuss on this.

18. The enormous heat available in the atmosphere can be absorbed, conducted with convection even to remain as a constant source of power supply. There are ample of medium available to make it to their requirement. Those who wish can carry on projecting their ideas, a model or a unit in pilot scale. This question is for the choice of the reader.

19. The concept of industrial estate is the reason for meso scale clouds which could be avoided by changing the schedule and emission, promoting the complete burning of fuel. Discuss on this.

20. Visit an industry of your choice, and suggest a zero emission strategy for them with progressive approach. Progressive approach is on using the best of the value that the waste coming out of the industry is in the simplest form and can be accommodated in the nature, by itself.



Incomplete burning of fuels are the reason for the air pollutants, if the fuels are not burnt to the purpose, but burnt to their complete combustion, there will not be pollution at all. The flue gases should have complete burning to serve additionally till they lose their complete energy source, to the lowest possible thermal unit measure. When the progressive approach is implemented, there is no expenditure on the environmental management systems and audit, but revenue adding to the system.