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Environmental Pollution

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Abstract: ***The relationship between modern man and his environment is a major social problem and the very survival of man depends upon intelligent human action with respect to this problem. Nowadays, citizens have a huge concern about the quality of life in their cities, especially regarding the level of pollution. Environmental pollution is affecting cities and people living in it. Now it is big challenge for city planners to control all types of pollution such as air, water, noise so that people living in cities can survive freely. Adverse condition like flood, snowfall, typhoons will also require a special attention by the planners to prevent inhabitants of cities. This Paper focuses on air pollution and steps taken by government to monitor and control it***

Key words: Pollution, CPCB, Air, NAAQM. Environment, flood, snowfall, typhoons, big challenge.

The Government of India has established the Central Pollution Control Board (CPCB) with a view to monitoring and controlling pollution as a statutory organization constituted in September 1974 under the Water (Prevention and Control of Pollution) Act 1974. The main function of CPCB is to control and preserve water, Air and environment from pollution and support ministry of environment and forest by providry its services to both departments. Some other duties of the board are:

1) To promote cleanliness of river, streams and well in different states.
2) To perform air quality monitoring. National ambient Air Quality Monitoring has been established its main function is to determine air quality in different cities and find out the remedies for air pollution.
3) It also provides background air quality data needed to setup industries in big cities. It helps in city and town planning.

Air (Prevention and Control of Pollution) Act 1981

- The government of india enacted the air (prevention and control of pollution act. 1981 to prevent the air quality. This act. Describes various functions of CPCB at Central and state level.
- To advise the Central Government on any matter concerning the improvement of the quality of the air and the prevention, control and abatement of air pollution.
- To plan and cause to be executed a nation-wide programme for the prevention, control and abatement of air pollution.
- To provide technical assistance and guidance to the State Pollution Control Boards.
- To carry out and sponsor investigations and research related to prevention, control and abatement of air pollution.
- To collect, compile and publish technical and statistical data related to air pollution: and
- To lay down and annul standards for the quality of air.
- The main functions of the State pollution Control Boards are as follows:
- To plan a comprehensive programme for prevention, control and abatement of air pollution and to secure the execution thereof;

1) It advices central government in the matter related to improvement in the quality of air and its pollution.
2) The state pollution control board plan programs for prevention and control of air pollution and advises state government on the matter of air quality, Air pollution and also collects the data related to air pollution for furtherer research.
3) The board also compile and publish statistical data related to air pollution.

Monitoring Network- Frequency and parameters Monitored Under N. A. M. P., four air pollutants viz., Sulphur Dioxide (SO2), Oxides of Nitrogen as NO2, Suspended Particulate Matter (SPM) and Respirable Suspended Particulate Matter (RSPM/PM10), have been identified for regular monitoring. Besides this, additional parameters such as Respirable Lead and other toxic trace metals, Hydrogen Sulphide (H2S), Ammonia (NH3) and Polycyclic Aromatic Hydrocarbons (PAHs) are also being monitored in 7 metro-cities of the country. The monitoring of meteorological parameters such as wind speed and direction, relative humidity and temperature was also integrated with the monitoring of air quality. The monitoring of

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pollutants is carried out for 24 hours (4-hourly sampling for gaseous pollutants and 8-hourly sampling for particulate matter) with a frequency of twice a week to have 104 observations in a year.

Number of Monitoring Stations The number of monitoring stations under N. A. M. P. has increased, steadily, to 295 by 2000-01 covering 99 cities/towns in 28 States and 4 Union Territories of the country.

Monitoring AgenciesN. A. M. P., being a nationwide network, involves several agencies which are: Central Pollution Control Board:in Delhi; State Pollution Control Boards: in the respective States; Pollution Control Committees in the respective Union Territories; National Environmental Engineering Research Institute (NEERI), Nagpur: in 7 metro-cities of the country; Visvesvaraya National Institute of Technology (Formerly VRCE); Nagpur: in the city of nagpur, University of Pune, : in the city of Pune; KTHM College, Nashik: in the city of Nashik; Walchand Institute of Technology, Sholapur: in the city of Sholapur; and the Thane Municipal Corporation in the city of Thane.

CPCB work with many other agencies and give than financial and technical support for monitoring process, large number of equipments and man power is needed for sampling chemical analyses, data reporting etc. the data obtained after this process can not be taken as fully valid, it is an absolute data because there is probability of personal variation. Various measurs have been taken to ensure quality of data.

Findings- The Levels of sulphur dioxide are within the National Ambient Air Quality Standards at most of the monitored places in the country. A decreasing trend has been observed in many cities which may be due to various measures taken such as reduction of sulphur in diesel etc.

Levels of Nitrogen dioxide are also within National Ambient Air Quality Standards in most of the monitored cities. Levels of Respirable Suspended Particulate Matter and Suspended Particulate Matter exceed National Ambient Air Quality Standards in many monitored cities. Non-attainment cities have been identified where ambient air quality standards are violated. Action Plans for controlling pollution of air have been formulated for the cities.

List of Non-Attainment Cities-CPCB has identified list of polluted cities in India based on ambient air quality data obtained under National Air Quality Monitoring Programme (NAMP) for the period 2011 to 2016. Polluted cities have been identified by calculating an Exceedence Factor. In forty cities National Ambient Air Quality Standards (NAAQs) are violated.

Air pollution is a very Serious problem. If we live in an industrial city with many mills, we know what air pollution is. For many centuries, smoke from burning coal was the most harmful source of air pollution. Studies have shown that, in general, automobiles are the major contributors to air pollution,accounting for 60 p.c. of total tons emitted. Industry takes the next largest share of the responsibility with a contribution of 18 p.c. Electric power generating plants contribute 13 p.c. Space heating and garbage disposal contribute 6 and 3 p.c. respectively. Among the numerous substances that find their way into air, some 40 compounds are suspected of causing cancer such as asbestos, benzene, mercury etc. In addition to all those pollutants-more than million metric tons of lead are mixed into air every year. Some of this is directly due to industry but most of it is emitted by automobiles. Lead in high concentrations is poisonous to the body, damaging the kindness and the brain.

Seventy per cent of the available water in India is polluted. Waters are found to contain dissolved impurities and absence of oxygen which has completely destroyed water's ecological balance making it as dangerous as slow poison.

In a developing country like India, the pollution is mainly due to poverty arising from lack of resources to ensure a decent standard of living for the majority of people. The excessive growth and mad rush of people from village to urban areas resulting in overcrowding of cities, rapid industrialization andurbanization have led to an increase in environment pollutant load that poses a serious public health problem. We are going too fast towards total industrialization without taking proper precautions and safety measures.

Industrialization is the direct cause of the pollution of air and water in human environment. Cities like Delhi, Mumbai, Calcutta, Ahmedabad, Jamshedpur, Kanpur etc. have already entered the danger zone of pollution.

Solutions to Environmental Pollution :

- We should plant more and more trees to decrease air pollution.
- We should avoid burning plastic.
- Only certified factories should be set up.
- We should use CNG in vehicles instead of petrol.

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- The disposal of Plastic and other toxic waste should be done properly.
- Use of plastic should be minimized.
- There should be well maintained drainage system. It should not be blocked and should be cleaned every week.
- There is a need to switch over alternative fuels for our energy requirements such as solar, hydro and wind energy instead of fossil fuels.
- Only treated and certified factory waste water should be release into the river.

REFERENCE

1. Dr. Priya Ranjan Trivedi, State of India's Pollution; Jnanada Prakshan: 2010.
2. www.livescience.com
3. www.conserve-energy-future.com
4. Ghosh Viswanath, 'Contemporary Social Problems of India; Himalaya Publishing House; 2006.

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