FAQ's

With a help of an example explain how waste can be turned into 'gold'.

The Indian Oil Corporation and Department of Science &Technology are expected to establish India's first plant to convert waste plastic into Petrol, diesel and LPG.
This process was invented by an Indian couple to convert one of the world's most polluting objects into a most sought after commodity. This invention yields 40-60% liquid petroleum from 1 kg of waste plastic. The production cost is mere Rs.7 per liter.
In the process, shredded plastic waste free of oxygen is heated with coal and a secret chemical. The product ranges includes fuel like coke and LPG. About 1 kg of plastic and 100 gms of coal churn out 1 litre of fuel which contains the gasoline range.

What is EPA?

Independent US governmentagency with jurisdiction over existing and under-development chemicals (such as pesticides) that affect the environment. It regulates their manufacture, processing, distribution and use, and setstolerance levels of their presence in food and feed. EPA has wide ranging punitive powers, and also screens all chemical products before their commercialization to assess their effect on health and environment.

The Environment Protection Agency seeks to protect and conserve the natural environment and improve the health of humans by researching the effects and mandating limits of chemicals and other pollutants. The EPA regulates the manufacturing, processing, distribution and use of chemicals and other pollutants. In addition, the EPA is charged with determining safe tolerance levels for chemicals and other pollutants in food, animal feed and water. The EPA is able to enforce its findings through fines, sanctions and other procedures.

How does Air Act help control pollution of air?

This was the first act from the government that made U.S. citizens and policy makers aware of this global problem. Unfortunately, this act did little to prevent air pollution, but it at least made government aware that this was a national problem. The act allowed Congress to reserve the right to control this growing problem. The Air Pollution Control Act of 1955 was the first federal law regarding air pollution. This act began to inform the public about the hazards of air pollution and detailed new emissions standards. Public opinion polls showed that the percentage of Americans who regarded air pollution as a serious problem almost doubled from 28% in 1965 to 55% in 1968 with the addition of all the amendments made to the original Air Pollution Control Act of 1955.

Despite having the term "control" in the title of the act, this legislation had no regulation component.In the early 1950s Congress did not want to interfere with states' rights; as such, the early laws of the act were not strong. This act set up the role that the government would play in research on air pollution effects and control. As such, the act was the forefront of the air pollution movement that continues to this day. Amendments were added to The Air Pollution Control Act of 1955 as well as the Clear Air Act frequently by the government, as the government continued to further research on the topic and improve air quality.

What is the role of the Central Board in prevention, control and abatement of pollution of water?

Functions of CPCB comes under both national level and as State Boards for the Union Territories. CPCB, under the Water (Prevention and Control of Pollution) Act, 1974, and

the Air (Prevention and Control of Pollution) Act, 1981, aims to promote cleanliness of streams and wells in different areas of the States by prevention, control and abatement of water pollution, and to improve the quality of air and to prevent, control or abate air pollution in the country.

- Air quality/ pollution : CPCB runs nation-wide programs of ambient air quality monitoring known as National Air Quality Monitoring Programme (NAMP). The network consists of 621 operating stations covering 262 cities/towns in 29 states and 5 Union Territories of the country. 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 at all the locations. The monitoring of meteorological parameters such as wind speed and wind direction, relative humidity (RH) and temperature were also integrated with the monitoring of air quality. This information on Air Quality at ITO is updated every week.
- Water quality/ pollution : Fresh water is a finite resource essential for use in agriculture, industry, propagation of wildlife & fisheries and for human existence. India is a riverine country. It has 14 major rivers, 44 medium rivers and 55 minor rivers besides numerous lakes, ponds and wells which are used as primary source of drinking water even without treatment. Most of the rivers being fed by monsoon rains, which is limited to only three months of the year, run dry throughout the rest of the year often carrying wastewater discharges from industries or cities or towns endangering the quality of our scarce water resources. CPCB in collaboration with concerned SPCBs/PCCs established a nationwide network of water quality monitoring, which has running 1019 stations in 27 States and 6 Union Territories. The monitoring process is done on quarterly basis in surface waters and on half yearly

basis in case of ground water. It covers 200 Rivers, 60 Lakes, 5 Tanks, 3 Ponds, 3 Creeks, 13 Canals, 17 Drains and 321 Wells. Among the 1019 stations, 592 are on rivers, 65 on lakes, 17 on drains, 13 on canals, 5 on tanks, 3 on creeks, 3 on ponds and 321 are groundwater stations. The inland water quality monitoring network is operating under a three-tier program i.e. Global Environment Monitoring System (GEMS), Monitoring of Indian National Aquatic Resources System (MINARS) and Yamuna Action Plan (YAP).

- Urban area programs (EcoCity Program) : CPCB programs for urban areas, also known as *EcoCity Program* comes under X Plan to improve environment through implementation of identified environmental improvement projects in the selected towns and cities. Pilot studies conducted for urban areas by the Centre for Spatial Environmental Planning created at the CPCB under the World Bank funded *Environmental Management Capacity Building Project* and supported by the *GTZ-CPCB Project* under the *Indo-German Bilateral Program*. According to these studies CPCB develop a comprehensive urban improvement system employing practical, innovative and non-conventional solutions. Under the X Plan, a budget provision of Rs. 15 crore has been made for the period 2002-03 to 2006-07 for the Ecocity projects.
- Municipal Solid Waste rules : Every municipal authority comes under the **M**unicipal **S**olid **W**astes (Management & Handling) Rules, 2000 (MSW rules,2000) and responsible for collection, segregation, storage, transportation, processing and disposal of municipal solid. CPCB collects necessary information form municipal authorities and provide them technical assistance.
- Noise Pollution/ Rules : According to **S.O. 123(E)** by MoEF, various sources like industrial activity, construction activity, generator sets, loud speakers, public address systems, music systems, vehicular horns and other mechanical devices have deleterious

effects on human health. CPCB has the responsibility to regulate and control noise producing and generating sources with the objective of maintaining the ambient air quality standards.

- Environmental Data Statistics : CPCB manages environmental data statistic in which *air quality data* and *water quality data* comes through. In the case of air quality data, it measures the level of SO2, NO2, RSPM and SPM. CPCB measure and maintains water quality data as well. Quality level of river and ponds are the major fields which comes under the water quality data criteria