

MODULE 14 – INDIAN LEGISLATIVE STEPS TO PROTECT OUR ENVIRONMENT

OBJECTIVES

By the end of the session, the students will be able to know:-

1. The Water (Prevention and control of Pollution) Act, 1974.
2. The Air (Prevention and Control of Pollution) Act, 1981.
3. The Environment (Protection) Act, 1986.
4. The Wild Life (Protection) Act, 1972.
5. The Forest (Conservation) Act, 1980.

SUMMARY

This film deals with various legislative frameworks, Acts and Rules formulated and implemented by Government of India for Conservation of Environment and control of pollution.

Central Pollution Control Board, State Pollution Control Board's and Forest department are the designated regulatory agencies to implement all Acts and Rules related to Environment Conservation.

Now as a citizen of India it is the duty of every individual to create awareness among masses and play important role in Conservation of Environment.

All of us should follow the 3R principle i.e. Reduce, reuse and Recycle all the available resources on earth.

TRANSCRIPTION

Introduction

Today, we will be talking about the various types of pollution, the legislative framework and about the conservation of environment. The various types of pollution we face on day to day life are- Water pollution, Air pollution, Noise pollution, Soil pollution, even the pollution from the industrial hazardous waste, pollution from municipal solid waste, pollution due to electronic waste, pollution due to plastic waste.

As we all know, when we manufacture something, we generate a lot of pollutant which may be in the form of gaseous pollutants, may be in the form of chemicals being

discharged which we term as the waste water. Once we treat this waste water, we remove all these chemicals in the form of sludge and this sludge is normally, the Industrial hazardous sludge or the Industrial hazardous solid waste. Secondly during the various production activities, for example, during the production of automobiles, when we paint them, a lot of paint is being wasted. This paint solidifies and it turns into the hazardous waste as it contains a lot of heavy metals and it can cause a big threat to the environment. Secondly as we all know, the municipal solid waste which is being generated from the day to day activity of every individual. Whatever we eat, the peelings of the vegetables, or the food left out after eating, or the packing and rapping of the materials that we buy from the market, these all come under the municipal solid waste. So all these pollutants pollute the environment to a very very large extent and now we all are facing the problems being caused by the various kinds of pollutants.

Water (Prevention and control of Pollution) Act, 1974

In the year 1972, UN held a conference in Sweden in the month of June which was attended by the various member countries. At that time, the then prime minister Late Smt. Indira Gandhi attended it with her team. After coming back from the conference, she thought of making a regulatory framework to curb and control the pollution. Normally in 1960s and 70s, we saw that a number of Industrial projects had started in our country. Large Industrial and infrastructural projects like river valley projects, power plants, steel plants, oil refineries were started. All these developments started taking place during mid 60s to mid 70s. These all activities brought with them a lot of waste water also. Because when we carry out these activities, a lot of waste water is generated and in that water, various chemicals and bacterial contamination are there which causes a big threat to the human environment and human health. Then, accordingly in 1974, the Govt. of India formulated a rule by the name of Water prevention and control of pollution act 1974, also known as the Water Act.

WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974 is an Act to provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water, for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution, for conferring on and assigning to such Boards Powers and functions relating thereto and for matters connected therewith.

To implement this Act, the Govt. decided to form the Central and the State Pollution Control Board which would act as the monitoring authority to monitor and control the water pollution. Also, the Govt. decided various norms under this Act to decide the quality of waste water and to decide whether this is polluting or not. Accordingly five to six parameters were decided like pH, TDS (total suspended solid), total dissolved solid, BOD,

COD, Oil and Grease. Initially these were the few parameters and the limits were set. If any establishment or Industry was discharging the waste water and it was well within the prescribed limits set under the water Act, then accordingly all these activities were defined to be following the standards of the water prevention Act. And those which exceeded the limit were categorized under the polluting Industries because the water pollution not only pollutes the water bodies but also the Soil and the nearby habitats. Because apart from containing the hazardous chemicals, this water is a breeding ground for the bacteria and this bacterial contamination causes a number of diseases. So, it is very important to take care of the Water pollution.

The Air (Prevention and Control of Pollution) Act, 1981

Now we will talk about the Air pollution and the legislative framework formulated to control it. In the mid 70s and 80s, the Industrial activities as well as the Urbanization, both grew at a very high rate. Due to the rapid Urbanization and Industrialization, lots of gaseous emissions were emitted in the atmosphere and it was the major cause of the Air pollution. Also, with the Urbanization, the number of vehicles increased like anything. They also emitted a lot of gaseous emissions which polluted the atmosphere. Looking into the severity of the problem, in 1981 the Govt. of India formulated the Air prevention and control of pollution Act 1981.

THE AIR (PREVENTION AND CONTROL OF POLLUTION) ACT, 1981 is an Act to provide for the prevention, control and abatement of air pollution, for the establishment, with a view to carrying out the aforesaid purposes, of Boards, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith.

Under this Act, again the Central pollution control board and the State pollution control board were defined as the regulatory authorities who will take care of the regulatory and legislative framework of the rule. In this Act, some penal provisions were also incorporated in the legislation framework and some norms were set for various types of pollutants namely Carbon dioxide, Carbon monoxide, Sulphur dioxide, Oxides of Nitrogen, particulate matters and the volatile organic carbons. We can say that any activity or any establishment whose emission levels are well within the prescribed limits for various pollutants, it can be said that the particular Industry is working under the norms of the Air Act and is following the provisions made therein. But if any case an Industry is not following the provisions of the Act, it is categorized under the defaulter unit liable to be penalized. The penal provisions are like this:

If any individual or establishment or an operator of an Industry pollutes the environment or doesn't follow the provisions mentioned in the regulatory framework, there is a provision

of an imprisonment of 3 months or a fine of Rs. 1 lakh or both. And for those establishments or organizations that don't follow the provision on a continuous basis then there is a fine of maximum Rs. 5000 per day. Once these legal provisions were made and the legislative framework was given, the Central pollution control board started taking action against the defaulter Industries.

The Environment (Protection) Act, 1986

In the year 1984, as we have heard of and are aware of, the Bhopal Gas tragedy took place on 2nd of Dec. 1984, it was a pesticide manufacturing Company by the name of Union Carbide and there was a leakage of MIC gas (Methyl Isocyanides) which caused the death of thousands of people on that night. This was the world's biggest ever Industrial tragedy due to the Air pollution. So, the Govt. of India thought to frame such a legislation which not only covers the water and air, but each and every aspect of the environment like soil pollution, noise pollution or any other kind of pollution. So, in the year 1986, the Govt. formed the Environmental Protection Act.

THE ENVIRONMENT (PROTECTION) ACT, 1986 is an Act to provide for the protection and improvement of environment and for matters connected there with. Subject to the provisions of this Act, the Central Government shall have the power to take all such measures as it deems necessary or expedient for the purpose of protecting and improving the quality of the environment and preventing controlling and abating environmental pollution.

This is a much generalized Act which covers almost all aspects of the environment whatever they are. If any individual, organization or entity or even the Govt. organizations pollute the environment or cause a threat to the environment in any form, a penal action can be taken against them under this Act. The provisions are very stringent and very strong; there is a provision of imprisonment to a maximum of 7 years or a fine of Rs. 1 lakh or both. And for those who don't follow the provisions on a regular basis, even after being warned, there is a provision of fine of Rs. 5000 per day till they don't follow the norms. So, this Act was a very important step taken by the Govt. to curb the pollution and conserve the environment. Then the Government has to regulate the activities of the Industrial bodies and the local bodies. We normally think that the industries are the one which cause the pollution, produce a lot of polluted water or emit a lot of gaseous emissions. But when we go into details of pollution, it is the responsibility of the local bodies also to control the domestic waste water being generated from the every individual household and to treat it as per the norms. Also it is their duty to take care of the municipal solid wastes being generated in their area. Thereafter, under the Environmental Protection Act, the rules were framed for various types of pollutants. Now, first of all, let me tell what are the various types of rules for various things and various materials made

under this environmental protection act. Also for industries particularly under this environmental protection act, a EIA notification was brought and it was made enforced in the year 1984 again this EIA act was amended in 1989 and again it was amended in 2003. Under this environmental impact assessment notification various types of large industries which may create large amount of pollution are identified and they were asked to carry out an environmental impact assessment study prior to setting up of their units. Under this environmental impact assessment study which is normally carried out for a year's duration wherein all the types of environmental pollution, threats which may be posed by the particular unit are monitored, are being assessed and analyzed and thereafter the positive and negative impacts of that particular industry or unit in that area is assessed. Accordingly government gives consent or authorization to that industry to carry out the industrial activity in future also, otherwise government may tell that industry to shut down the industrial activity in that particular area.

Basically this environmental protection act 1986 is a very big environmental umbrella act and thereafter as the government of India, Ministry of Environment and Forest found that various rules were needed to control other new types of pollution being generated in the society. Then thereafter, accordingly under Environmental Protection Act, first of all in 1989 the hazardous waste management and handling rules were framed these rules were framed for controlled prevention and amendment of hazardous waste being generated in the industries. Also these rules implies to every other organizations, which generate hazardous waste normally the electronic manufacturing units or in a office or in a organization where lots of electronic are used. The waste electronic parts or components come under hazardous waste and they are covered under hazardous waste management and handling rules 1989. These rules were amended in the year 2000 and 2003 and finally in the year 2008. Normally the amendments were made for the import of various hazardous chemicals or hazardous material in our country in 90's we have faced the problem of dumping of hazardous waste in our country by the developed countries. They used to send their hazardous waste to our country and many such small industries emerged who extract metal and various other types of chemical from these waste and carry out their business activities. But it was found that the amount of material extracted or the chemical extracted from this waste was very less, then thereafter the government finally made the amended rule in the year 2008 by the name of hazardous waste management, handling and transboundary movement rules and under this rule, the import and dumping of hazardous chemicals in our country by the developed countries were stopped. As due to urbanization, as we see, lots of medical and health care units came up in urban areas. Normally all these health care unit generate lot of waste during the diagnosis, during the immunization or during the operations and surgeries and in all these activities, a lot of waste is generated which is thrown away with the municipal waste. Normally this bio-medical waste is a big threat to human health and environment. Looking into the seriousness of the matter in the 1998 government of India formulated the bio

medical waste management and handling rules under the environmental protection act and then in the year 2000 these rules were amended and the concept of common bio-medical waste treatment and disposal facilities was introduced. Again in the year 2000, government felt that in urban areas, a lot of municipal waste is being generated and it is dumped here and there without any treatment and disposal. So in the year 2000, the ministry of environment and forest government of India formulated the municipal waste management and handling rule 2000. Under this rule, all the local bodies were asked to treat and dispose off their municipal solid waste in environmental safe manner using various technologies and if they don't manage or treat the waste, deadline was also set by the honorable supreme court of India for setting up treatment and disposal facilities. So they were asked to dispose off their municipal waste as per norms. In 2006, it was felt that a lot of battery-waste, lead battery being used in various activities even in vehicle or various types of activities has increased like anything and once the usage of anything increases the discard material of that particular type of these batteries also increases. Normally these batteries are lead batteries and we all know that lead is one of the very hazardous heavy metal which causes environmental degradation and it is a threat to human health. So looking into the seriousness of the problem, in the year 2006 government formulated the batteries management and handling rules 2006. In the year 2008 government formulated the rules for treatment and disposal of plastics, in the 2008 the draft rules were formulated and in 2010, final rules were made and now these rules are applicable. As we all know, the usage of plastic has increased in last 30-40 years many folds and it does not degrade. So if we once throw away the plastic, it is lying there for years. So looking into the seriousness of plastic waste problem, the government formulated the rules by the name of the plastic management and handling rules in the year 2010. As with urbanization, increased the use of electronics normally in our day to day life, a lot of e-waste is generated in our country. So in the year 2010, the government of India, ministry of environment and forest formulated the e-waste management and handling rules and all these rules, from hazardous to e-waste are covered under the umbrella of environmental protection act. So whatever the legislative or penal provisions are there in the environmental protection act, these all are applicable to these rules also. So who so ever defaults under these rules, is being covered by the penal of these environmental protection act of 1986.

The Wild Life (Protection) Act, 1972

Basically, as we all know that with rapid urbanization, we are also disturbing the wild life and forest. We are cutting the forest we are disturbing wild life like anything. So looking into the problem, in the year 1972 government of India formulated the wild life protection act.

THE WILDLIFE (PROTECTION) ACT, 1972 is an Act to provide for the protection of [Wild animals, birds and plants]¹ and for matters connected therewith or ancillary or incidental thereto.

Under this act, hunting of wild life and particularly endangered species whose big list is there, were prohibited. Hunting of all these animals were prohibited under the wild life protection act and legislative frame work was given a penal provision and also the many penal provisions of Indian penal code are taking care of wild life act. So in this wild life protection act there is a special provision that particularly if anybody kills the national bird or national animal then the penal provision will be as good as killing human being, so very stringent penal provisions are made for killing and hunting of these animals. In the year 2002 these rules were amended and a new big list of many animals and endangered species were published and hunting of all this animals are prohibited under this act for regulatory frame work forest department of the Government of India and the state forest department were made the regulatory authorities to monitor and to control this and to make cases against the person who are involved in the hunting and all. So forest department is the regulatory agency for this wild life protection act.

Forest (Conservation) Act, 1980

As we all know, due to urbanization also and due to need of wood in our day to day life we are cutting forest like anything. Initially in 1920 the forest Act was made and there after it was amended many times. In year 2002 Government has formulated the forest conservation Act.

FOREST (CONSERVATION) ACT, 1980 is an Act to provide for the conservation of forests and for matters connected therewith or ancillary or incidental thereto.

Under this forest conservation act nobody is allowed to make any habitation or any industrial activity or any type of activity in the forest areas. Government notified the forest areas the species of trees and plant. Even in non-notified areas also, without the prior permission of Government no plants can be cut and under this forest conservation act forest department Government of India and state forest department were made as the regulatory agency to monitor that the forest are being maintained and nobody can develop any industrial unit or develop any habitations within the notified forest area. For even in nonnotified area the concern the collector of district is made responsible for monitoring the cutting of trees and all .The collector is made responsible to look into and take penal action and to register a case against all who are prohibiting the law and who are not following the law. So these are the two again very important acts which take care of environment and which are more concerned with the conservation of the environment

then the pollution. So now these entire 4-5 acts forms the complete acts which are needed for protection of environment and for the control of pollution.

Conclusion

I think, now it is the duty of all of us and every individual that we should abide by all the acts pertaining to environmental protection to control of pollution, for wild life management, for protection and conservation of forests. Now it is the duty of every individual to bring awareness and to have a deep knowledge of all these acts so that we can control the pollution, we can conserve our forest and wild life. I think it is necessary and it is the high time that, as we are a growing country, we should fight against pollution and we should control it. If we find anywhere any pollution activity taking place, we should report it to the administration. We should report it to the concerned pollution boards and that way we can play big role in controlling the pollution and in this way, we can conserve our environment.

GLOSSARY

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| 1. | Legislative | : | Legal |
| 2. | Hazardous | : | Material which can cause affect environment. |
| 3. | Municipal Solid Waste | : | Waste generated form household activities. |
| 4. | Slag | : | Mixture of various materials left as waste. |
| 5. | Pollutants | : | Material which causes environment pollution or destroy its purity. |
| 6. | UNO | : | United Nations Organization. |
| 7. | Contamination | : | Make impure/ dirty |
| 8. | Urbanization | : | Over crowding in cities. |
| 9. | Defaulter | : | Not following rules. |
| 10. | Penal action | : | Legal action |
| 11. | Imprisonment | : | Sending to jail. |
| 12. | Curb | : | To control. |

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|-----|-------------------|---|--|
| 13. | Local bodies | : | Municipal Corporation. |
| 14. | EIA | : | Environment Impact Assessment. |
| 15. | Consent | : | Permission. |
| 16. | Protection | : | To save. |
| 17. | Effluent | : | Waste water. |
| 18. | Dumping | : | Unauthorized disposal. |
| 19. | Bio-medical Waste | : | Infectious waste generated from hospitals. |
| 20. | E-waste | : | Waste electronic goods. |
| 21. | Threat | : | Danger. |
| 22. | Wild life | : | Wild animals. |
| 23. | National park | : | Large forest area where hunting and cutting of trees is not permitted. |
| 24. | Conservation | : | to save |
| 25. | Notified area | : | Selected or protected area. |
| 26. | Habitation | : | Making houses |
| 27. | Species | : | Variety or type. |
| 28. | Monitoring | : | to check |
| 29. | Awareness | : | to provide information. |
| 30. | Regulatory agency | : | Government agency to enforce law. |

FAQ's

- Q1. When was first United Nations Conference on Human Environment held?
- A1. First United Nations Conference on Human Environment was held on 5-16 June 1972 at Stockholm in Sweden.
- Q2. What are major source of Water Pollution?
- A2. a) Power Generation Plants

- b) Steel Manufacturing Plants
- c) Oil Refineries
- d) Domestic Wastewater

Q3. What are various types of pollution?

- A3. a) Water Pollution
- b) Air Pollution
- c) Noise Pollution
- d) Solid & Hazardous Waste Pollution

Q4. What are major pollutants in Hazardous Waste?

- A4. a) Heavy metals
- b) Inorganic & Organic Chemicals

Q5. What causes water pollution?

A5. Chemicals, Bacteria's and heavy metals present in wastewater pollutes fresh water.

Q6. When was Water Act formulated & passed?

A6. Water (Prevention & Control of Pollution) Act was formulated and passed in 1974.

Q7. Who are the regulatory authorities to implement and monitor Water Act 1974?

- A7. a) Central Pollution Control Board (CPCB)
- b) State Pollution Control Board's (SPCB)

Q8. What are the parameters to monitor Water Pollution?

- A8. a) pH
- b) Total Dissolved Solids (TDS)
- c) Total Suspended Solids (TSS)
- d) Biological Oxygen Demand (BOD)
- e) Chemical Oxygen Demand (COD)

f) Oil & Grease

Q9. When was Air Act formulated?

a) Air (Prevention and Control of Pollution) Act was formulated in 1981.

Q10. What are the Parameters of monitoring Air Pollution?

A10. a) Carbon dioxide

b) Carbon mono oxide

c) Suspended particulate matter

d) Resperiable dust particles

e) Sulphur dioxide

f) Oxides of Nitrogen

Q11. When was Bhopal Gas Tragedy happened?

A11. Bhopal Gas Tragedy took place on 2nd Dec 1984.

Q12. From which plant the gas was leaked?

A12. Gas was leaked from the plant of Union Carbide.

Q13. What was the name of Gas leaked from Union Carbide?

A13. Mithyl Iso cynide (MIC)

Q14. How many people died in Union Carbide Gas leakage accident?

A14. About 16,000 people died in Union Carbide Gas leakage accident and 500000 people got affected by it.

Q15. What is EIA Notification?

A15. To obtain Environmental clearance for setting up of large industries and mega developmental projects EIA is to be obtained.

Q16. When Environment Protection Act was formulated and implemented?

A16. Environment Protection Act was formulated and implemented in the year 1984.

Q17. What are penal provisions of EP Act 1984?

A17. a) Imprisonment of max 7 years.

b) Fine of max Rs. 1Lac.

c) Fine of max Rs. 5000 per day for non compliance period

Q18. What are the Rules framed under EP Act 1986?

A18. a) Hazardous waste (Management & Handling) Rules.

b) Bio-Medical waste (Management & Handling) Rules.

c) Municipal Solid waste (Management & Handling) Rules.

d) Batteries (Management & Handling) Rules.

e) Plastic waste (Management & Handling) Rules.

f) E-waste (Management & Handling) Rules.

Q19. When was wildlife Act was formulated?

A19. Wildlife Protection Act was formulated the year 1972.

Q20. What notification is done under Wildlife Protection Act 1972?

A20. Notification of National Parks and Wildlife Sanctuaries is done under this Act.

Q21. When was Wildlife Act amended?

A21. Wildlife Protection act was amended in 2002.

Q22. Who will implement the Wildlife Protection Act?

A22. Forest Department is regulatory body of Wildlife Protection Act.

Q23. What is prohibited under Wildlife Protection Act?

A23. Killing or hunting of animals is prohibited under Wildlife Protection Act.

Q24. When was Forest Conservation Act formulated and implemented?

A24. Forest conservation act was formulated and implemented in 1980.

Q25. What is not permitted under Forest Act?

A25. a) Cutting of trees

b) Development of Housing project

c) Development of Industries