



CHAPTER - 25



ACTS AND POLICIES

25.1. WILD LIFE PROTECTION ACT 1972

- India is the first country in the world to have made provisions for the protection and conservation of environment in its constitution. On 5th June 1972, environment was first discussed as an item of international agenda in the U.N. Conference of Human Environment in Stockholm and thereafter 5th June is celebrated all over the world as World Environment Day.
- Soon after the Stockholm Conference our country took substantive legislative steps for environmental protection. The Wildlife (Protection) Act was passed in 1972, followed by the Water (Prevention and Control of Pollution) Act 1974, the Forest (Conservation) Act, 1980, Air (Prevention and Control of Pollution) Act, 1981 and subsequently the Environment (Protection) Act, 1986.

25.1.1. Constitutional Provisions

- The provisions for environmental protection in the constitution were made within four years of Stockholm Conference, in 1976, through the 42nd amendment as follows:
- Article-48-A of the constitution provides:
- “The state shall endeavour to protect and improve the environment and to safeguard forest and wildlife of the country.”
- Article 51-A (g) Provides:
- It shall be duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures.”
- Thus our constitution includes environmental protection and conservation as one of our fundamental duties. Some of the important Acts passed by the Government of India are discussed here.

25.1.2. The Wildlife (Protection) Act of 1972

- The passing of the Wildlife Act of 1972 constitutes an important landmark in the history of wildlife legislation in the country.
- This is because of the fact that the “Forest” including “Wildlife” was then a State subject falling in Entry 20 List II of Seventh Schedule, Parliament had no power to make law on the same except as provided in Articles 249, 250 and 252 of the constitution.
- Having regard to the importance of the matter, the Act has been adopted by all the States except that of Jammu and Kashmir which has a similar law enacted for the purpose of wildlife protection. The operation of the Act is mandatory in the Union Territories too.
- The Wildlife (Protection) Act of 1972 provides the basic framework to ensure the protection and management of wildlife. The Act was amended subsequently in 1982, 1986, 1991 and 1993 to accommodate provision for its effective implementation.

The rationale for passing Act as stated in its Statement of Objects and Reasons are as follows:

- The rapid decline of India's wild animals and birds, one of the richest and most varied wildlife resources of the country has been a cause of grave concern.
- Areas which were once teeming with wildlife have become devoid of it and even in sanctuaries and National Parks the protection afforded to wildlife needs to be improved.
- The Wild Birds and Animals Protection Act, 1935 has become completely outdated.
- This existing laws not only have become outdated but also provide punishments, which are not commensurate with the offence and financial benefits that occur from poaching and trade in wildlife produce. Further,



such laws mainly relate to control of hunting and do not emphasize the other factors which are also the prime reasons for the decline of India's wildlife namely taxidermy and trade in wildlife and products there from.

25.1.3. Salient features of the Act:

- The Wildlife Protection Act, 1972 is a product of process which started long ago in 1887 for the protection of a few wild birds and after addition of wild animals in 1912 and specified plants in 1919 it covered almost all the wildlife resources which need protection and management.
- 1. The rating of the Schedules I to V is in accordance with the risk of survival of the wildlife (fauna) enlisted in them. Animals included Schedule are provided for total protection from hunting and the trade and commerce related to such animals are strictly regulated. The schedule VI has been added to include the specified plant species to be protected by the Wildlife (Protection) Amendment Act of 1991.
- 2. An expert committee, constituted by the Indian Board of Wildlife considers amendments to the Act, as and when necessary.
- 3. With the amendment of the Act in 1991, powers of the State Governments have been withdrawn almost totally. Now the State Governments are not empowered to declare any wild animal a vermin. Further by addition of provision, immunization of livestock within a radius of 5 km from a National Park or sanctuary has been made compulsory.

Do you know?

Management Effective Evaluation (MEE), MEE conducted by the National Tiger Conservation Authority and the Wildlife Institute of India is the assessment of how well protected areas are being managed and their effectiveness in conserving target flora and fauna, the reserves were put into four categories – 'very good', 'good', 'fair' and 'poor'.

25.2. ENVIRONMENT (PROTECTION) ACT, 1986

- As compared to all other previous laws on environment protection, the Environment (Protection) Act, 1986 is a more effective and bold measure to fight the problem of pollution.

- The genesis of the Environmental (Protection) Act, 1986, thus, is in Article 48A (Directive Principles of State Policy) and Article 51A (g) (Fundamental Duties) of the Indian Constitution.
- The Act empowers the Central Government to take all appropriate measures to prevent and control pollution and to establish effective machinery for the purpose of protecting and improving the quality of the environment and protecting controlling and abating environmental pollution.
- The Central Government or any other person duly authorised is empowered to collect the samples of air, water, soil or other substances as evidence of the offences under the Environment (Protection) Act, 1986.
- The Act prescribes a special procedure for handling hazardous substances and the concerned person has to handle the hazardous substances according to the procedure of the Act.
- The Environment (Protection) Act, 1986 has relaxed the rule of "Locus Standi" and because of such relaxation even a common citizen can approach the Court provided he has given a notice of sixty days of the alleged offence and his intention to make a complaint to the Central Government or any other competent authority.
- This Act also empowers and authorises the Central Government to issue directions for the operation or process, prohibition, closure, or regulation of any industry. The Central Government is also authorised to stop, regulate the supply of electricity or water or any other service directly without obtaining the order of the Court in this regard.
- The Act consists of and deals with more stringent penal provisions. The minimum penalty for contravention or violation of any provision of the law is an imprisonment for a term which may extend to five years or fine up to one lakh rupees, or both. The Act also provides for the further penalty if the failure or contravention continues after the date of conviction. It is Rs. 5000/- per day. If the failure of contravention continues beyond the period of one year, then the offender is punished with imprisonment for a term which may extend to seven years.
- The Environment (Protection) Act, 1986 grants immunity to the officers of the Government for any act done under the provisions of this Act or under the powers vested in them or functions assigned to them under this Act.
- The Act debars the Civil Courts from having any jurisdiction to entertain any suit or proceeding in respect of



an action, direction, order issued by Central Government or other statutory authority under this Act.

- Under the Act, there will be supremacy of provision. In other words, the provisions of this Act and the rules or orders made under this Act shall have effect and supremacy over anything inconsistent contained in any enactment other than this Act

25.3. NATIONAL FOREST POLICY 1988

- The principal aim of National Forest Policy, 1988 is to ensure environmental stability and maintenance of ecological balance including atmospheric equilibrium which are vital for sustenance of all life forms, human, animal and plant.

25.3.1. Objectives

- Conserving the natural heritage of the country by preserving the remaining natural forests with the vast variety of flora and fauna, which represent the remarkable biological diversity and genetic resources of the country.
- Checking soil erosion and denudation in the catchments areas of rivers, lakes, reservoirs in the "interest of soil and water conservation, for mitigating floods and droughts and for the retardation of siltation of reservoirs.
- Checking the extension of sand-dunes in the desert areas of Rajasthan and along the coastal tracts.
- Increasing substantially the forest/tree cover in the country through massive afforestation and social forestry programmes, especially on all denuded, degraded and unproductive lands.
- Increasing the productivity of forests to meet essential national needs.
- Encouraging efficient utilisation of forest produce and maximising substitution of wood.

25.3.2. The major achievements of National Forest Policy, 1988,

- Increase in the forest and tree cover.
- Involvement of local communities in the protection, conservation and management of forests through Joint Forest Management Programme.
- Meeting the requirement of fuel wood, fodder minor forest produce and small timber of the rural and tribal populations.

- Conservation of Biological Diversity and Genetic Resources of the country through ex-situ and in-situ conservation measures.
- Significant contribution in maintenance of environment and ecological stability in the country.

25.4. BIOLOGICAL DIVERSITY ACT, 2002

- The Biological Diversity Act 2002 was born out of India's attempt to realize the objectives enshrined in the United Nations Convention on Biological Diversity (CBD) 1992 which recognizes the sovereign rights of states to use their own Biological Resources.
- An Act to provide for conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of biological resources, knowledge and for matters connected therewith or incidental thereto.

25.4.1. Objectives

- (i) Conservation of biological diversity;
 - (ii) Sustainable use of its components; and
 - (iii) Fair and equitable sharing of the benefits arising from the utilization of genetic resources.
- The Act envisages a three-tier structure to regulate access to the biological resources, comprising of National Biodiversity Authority (NBA), State Biodiversity Boards (SBB) and Biodiversity Management Committees (BMC) at the local level

Do you know?

The Wildlife Institute of India (WII) has recommended notification of the areas 'above' wildlife sanctuaries as a 'silent zone' by keeping the noise level of helicopters within the limit of 50 db. This is the recommendation in WII's interim report with regard to height and noise level for flights over the Kedarnath Wildlife Sanctuary (KWLS).

25.5. THE SCHEDULED TRIBES AND OTHER TRADITIONAL FOREST DWELLERS (RECOGNITION OF FOREST RIGHTS) ACT, 2006

- Forest Rights Act, 2006 provides for the restitution of deprived forest rights across India, including both individual rights to cultivated land in forestland and community rights over common property resources.



- The Act is significant as it provides scope and historic opportunity of integrating conservation and livelihood rights of the people.

The Union Finance Ministry has also slashed the Centre's share of non-recurring expenditure from 100% to 60%, for Project Tiger, leaving the remaining amount for the respective states to manage. However, in the case of special status states, which includes the three Himalayan states of Himachal Pradesh, Jammu-Kashmir and Uttarakhand and the Northeastern states, the ratio is 90:10.

25.5.1. FRA is a potential tool

- I. To empower and strengthen the local self governance
 - II. To address the livelihood security of the people
 - III. To address the issues of Conservation and management of the Natural Resources and conservation governance of India.
- For the first time Forest Rights Act recognises and secures
 - i. Community Rights in addition to their individual rights
 - ii. Right to protect, regenerate or conserve or manage any community forest resource which the communities have been traditionally protecting and conserving for sustainable use.
 - iii. Right to intellectual property and traditional knowledge related to biodiversity and cultural diversity
 - iv. Rights of displaced communities & Rights over developmental activities

25.5.2. Salient Features

- Nodal Agency for the implementation is MoTA.
- This Act is applicable for Tribal and Other Traditional Forest Dwelling Communities.
- The Act provides for recognition of forest rights of other traditional forest dwellers provided they have for at least three generations prior to 13.12.2005 primarily resided in and have depended on the forest or forest land for bonafide livelihood needs. A "generation" for this purpose would mean a period comprising of 25 years.
- The maximum limit of the recognizing rights on forest land is 4 ha.
- National Parks and Sanctuaries have been included along with Reserve Forest, Protected Forests for the recognition of Rights.

- The Act recognizes the right of ownership access to collect, use, and dispose of minor forest produce which has been traditionally collected within or outside village boundaries.
- The Act has defined the term "minor forest produce" to include all non-timber forest produce of plant origin, including bamboo, brush wood, stumps, cane, tussar, cocoons, honey, wax, lac, tendu or kendu leaves, medicinal plants and herbs, roots, tubers and the like.
- The Act provides for the forest right relating to Government providing for diversion of forest land for the purpose of schools, hospitals, anganwadis, drinking water supply and water pipelines, roads, electric and telecommunication lines, etc.
- The rights conferred under the Act shall be heritable but not alienable or transferable and shall be registered jointly in the name of both the spouses in the case of married persons and in the name of the single head, in the case of a household headed by a single person and in the absence of a direct heir, the heritable right shall pass on to the next of kin
- The Act provides that no member of a forest dwelling Scheduled Tribe or other traditional forest dwellers shall be evicted or removed from forest land under his occupation till the recognition and verification procedure is completed.
- As per the Act, the Gram Sabha has been designated as the competent authority for initiating the process of determining the nature and extent of individual or community forest rights or both that may be given to the forest dwelling Scheduled Tribes and other traditional forest dwellers.

Do you know?

The National Tiger conservation Authority (NTCA) has recommended Nandhaur Wildlife Sanctuary (WLS) to be the third tiger reserve in the Uttarakhand after Rajaji and Corbett. The sanctuary is situated between the Gola and Sarda rivers. It is part of the Terai Arc landscape and the shivalik Elephant Reserve.

25.6 GREEN HIGHWAYS (PLANTATION, TRANSPLANTATION, BEAUTIFICATION & MAINTENANCE) POLICY - 2015

- India has a total 46.99 lakh kms of road length and out of which over 96214 kms are National Highways, accounting 2% of total road length. The Highways carry



about 40% of the traffic load. The Ministry has decided to develop all of existing National Highways and 40,000 kms of additional roads in the next few years as Green Highways.

- The vision is to develop eco-friendly National Highways with participation of the community, farmers, NGOs, private sector, institutions, government agencies and the Forest Department.
- The objective is to reduce the impacts of air pollution and dust as trees and shrubs along the Highways act as natural sink for air pollutants and arrest soil erosion at the embankment slopes. Plants along highway median strips and along the edges reduce the glare of oncoming vehicles which sometimes become cause of accidents. The community involvement in tree plantation directly benefits local people by generating employment. The Panchayats, NGOs and other Self Help Groups (SHGs) will be involved in the process of planting and maintenance. The plant species selected will be region specific depending on local conditions such as rainfall, climate type of soil.
- 1% of the total project cost of all highways projects will be kept aside for the highway plantation and its maintenance, about Rs. 1000 crore per year will be available for plantation purpose. This policy will generate employment opportunities for about five lakh people from rural areas.
- In the new policy, the provisions about the responsibilities attached have also been clearly defined. Now it will be the responsibility of the planting agency to ensure that the condition of the site is good enough for the successful establishment of grasses.
- The monitoring of the plantation status has been included as an integral part of the policy, strong monitoring mechanism in place by using ISRO's Bhuvan and GAGAN satellite systems.
- For Highway projects to be environmentally sustainable, it is necessary that the natural resources lost in the process of Highway construction are restored in one way or the other. This requires that ecological needs are taken into consideration from the stage of project planning and designing to its execution. The Highways developed as green corridors not only sustain biodiversity and regenerate natural habitat but also benefit all stakeholders, from road users to local communities and spur eco-friendly economic growth and development.

Do you know?

The National Tiger Conservation Authority (NTCA) is awaiting a final nod from the Ministry of Defense (MoD) to start its drone-monitoring project for combating wildlife poaching and human-animal conflict. The NTCA has signed a memorandum of understanding (MoU) with the Wildlife Institute of India (WII) to start monitoring by drones in five tiger reserves (TRs) – Panna, Corbett, Kaziranga, Sundarbans and Sathyamangalam, and the permission being sought is to fly the drones only within the boundary of the core area of these reserves.

25.7 CHEMICAL SAFETY

- Government has notified two rules viz. Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996 for ensuring chemical safety in the Country. These Rules delineate the criteria for identification of Major Accident Hazard (MAH) unit, As per these Rules, an off-site emergency plan for a district having MAH unit is required to be in place so as to mitigate the impact of chemical accidents. As per the information received from various State and Union Territories, there are 1,861 MAH units in the Country, located in 303 districts.

25.8 COASTAL REGULATION ZONE, 2011

In the 1991 Notification the CRZ area was classified as CRZ-I (ecological sensitive), CRZ-II (built-up area), CRZ-III (Rural area) and CRZ-IV (water area). In the 2011 Notification the above classification is retained. The only change is the inclusion of CRZ-IV, which includes the water areas upto the territorial waters and the tidal influenced water bodies.

For the very first time, a separate draft Island Protection Zone Notification has been issued for protection of the islands of Andaman & Nicobar and Lakshadweep under Environment (Protection) Act, 1986.

CRZ-I

- Ecologically sensitive areas and the geomorphological features that play a primary role in maintaining the integrity of the coast.
 - Mangroves, in case mangrove area is more than 1000 square metres, a buffer area of 50 metres shall be provided;



- Corals and coral reefs and associated biodiversity;
- Sand Dunes;
- Mudflats which are biologically active;
- National parks, marine parks, sanctuaries, reserve forests, wildlife habitats and other protected areas under the provisions of Wild Life (Protection) Act, 1972, the Forest (Conservation) Act, 1980 or Environment (Protection) Act, 1986; including Biosphere Reserves encompassing;
- Salt Marshes;
- Turtle nesting grounds;
- Horse shoe crabs habitats;
- Sea grass beds;
- Nesting grounds of birds;
- Areas or structures of archaeological importance and heritage sites;

(ii) The area between Low Tide Line and High Tide Line.

The activities permitted in CRZ-I under the 2011 Notification are

- (i) No new construction shall be permitted in CRZ-I except;
- Projects relating to the Department of Atomic Energy;
 - Pipelines, conveying systems including transmission lines;
 - Facilities that are essential for activities permissible under CRZ-I;
 - Installation of weather radar for monitoring of cyclones movement and prediction by the Indian Meteorological Department;
 - Construction of trans-harbour sea link and roads on stilts or pillars without affecting the tidal flow of water, between LTL and HTL.
 - Development of green field airport already permitted at only Navi Mumbai;
 - (ii) Between Low Tide Line and High Tide Line in areas which are not ecologically sensitive, the following may be permitted;
 - Exploration and extraction of natural gas;
 - Construction of dispensaries, schools, public rain shelter, community toilets, bridges, roads, jetties, water supply, drainage, sewerage which are required to meet the needs of traditional inhabitants living within the biosphere reserves after obtaining approval from concerned CZMA.
 - Salt harvesting by solar evaporation of seawater;

- Desalination plants;
- Storage of non-hazardous cargo such as edible oil, fertilizers and food grain within notified ports;
- Construction of trans-harbour sea links, roads on stilts or pillars without affecting the tidal flow of water.

CRZ-II

The areas which are developed upto or close to the shoreline and falling within municipal limits.

Buildings are permissible on the landward side of the existing road, authorized structure or hazardous line where there are no authorised structures. Other activities such as desalination plants and storage of non-hazardous cargo are also permissible.

CRZ-III

The areas that are relatively undisturbed and do not fall under either in Category I or II and also include rural and urban areas that are not substantially developed.

All permissible activities for CRZ-III as listed in the CRZ Notification, 1991 are retained in the Notification. Between 0-200 metres from HTL is a No Development Zone where no construction shall be permitted. Only certain activities relating to agriculture, horticulture, gardens, pasture, parks, play field, forestry, projects of Department of Atomic Energy, mining of rare minerals, salt manufacture from seawater, facilities for receipt, storage, regasification of petroleum products and liquefied natural gas, facilities for generating power by non-conventional energy sources and certain public facilities may be permitted in this zone.

Between 200-500 metres of HTL, construction and repair of houses of local communities, tourism projects including green field airport at Navi Mumbai, facilities for receipt, storage, degasification of petroleum products and liquefied natural gas, storage of non-hazardous cargo, desalination plants, facilities for generating power by non-conventional energy sources are permissible.

CRZ-IV

The aquatic area from low tide line upto territorial limits including the area of the tidal influenced water body.

In CRZ-IV areas, there is no restriction on the traditional fishing and allied activities undertaken by local communities. However, no untreated sewage, effluents or solid waste shall be let off or dumped in these areas. A comprehensive plan for treatment of sewage generating from the city must be formulated within a period of one year from the date of



issue of this Notification and be implemented within two years thereafter

Significant new provisions in the Coastal Regulation Zone Notification, 2011

- (i) The entire water area which includes 12 nautical miles in the sea and the entire water area of a tidal water body such as creek, river, estuary will be regulated by the Notification.
- (ii) In order to safeguard livelihood and property of local communities including the infrastructure along the coastal areas the hazard line has been introduced which will be demarcated by the offices of the Survey of India.
- (iii) Keeping in view the environmental and social issues, special dispensation has been provided to Greater Mumbai, Kerala, Goa and Critically Coastal Vulnerable Areas such as the Sunderban.
- (iv) In view of the erosion experienced along the coastal areas due to man-made interventions the shoreline will be mapped using up-to-date satellite images and the shorelines will then be subsequently classified as 'high eroding', 'medium eroding' and 'low or stable stretches'. No foreshore development would be permissible in high eroding areas.
- (v) To meet the increasing demands of housing for fishing communities and other traditional coastal communities, the No Development Zone which is of 200 metres from the High Tide Line is being reduced to 100m.

25.9 ISLAND PROTECTION ZONE NOTIFICATION, 2011

Why is a separate Island Protection Zone Notification, 2011 required?

There are about 500 islands in Andaman & Nicobar and about 30 in Lakshadweep. These two groups of oceanic islands are home to some of the country's most thriving biodiversity hotspots. The A&N Islands are known for their terrestrial and marine biodiversity including forest area which covers 85% of the Andaman and Nicobar geographical area, while, Lakshadweep is a coral island. The geographical areas of these islands are so small that in most of the cases the 500 metres Coastal Regulation Zone regulations overlap. Hence, a separate Notification is being issued which takes into account the management of the entire island (except for four islands of A&N which include North Andaman, Middle Andaman, South Andaman and Great Nicobar).

The main objectives of the IPZ Notification, 2011 are:

- To ensure livelihood security to the fishing communities, tribals and other local communities living in the coastal areas;
- To conserve and protect coastal stretches and;
- To promote development in a sustainable manner based on scientific principles, taking into account the dangers of natural hazards in the coastal areas and sea level rise due to global warming

Do you know?

The Centre has extended the relaxation of green norms in Left Wing Extremism (LWE) affected areas in the country till December 2018. The central government had in May 2011 granted relaxations under section 2 of the Forest (Conservation) Act, 1980, to help expedite the creation of public utility infrastructure in 60 LWE affected districts identified by the planning commission for implementation of the integrated Action Plan.

25.10 SOLID WASTE MANAGEMENT RULES, 2016

62 million tonnes of waste is generated annually in the country at present, out of which 5.6 million tonnes is plastic waste, 0.17 million tonnes is biomedical waste, hazardous waste generation is 7.90 million tonnes per annum and 15 lakh tonnes is e-waste. The per capita waste generation in Indian cities ranges from 200 grams to 600 grams per day. 43 million TPA is collected, 11.9 million is treated and 31 million is dumped in landfill sites, which means that only about 75-80% of the municipal waste gets collected and only 22-28 % of this waste is processed and treated. "Waste generation will increase from 62 million tonnes to about 165 million tonnes in 2030".

Scientific disposal of solid waste through segregation, collection and treatment and disposal in an environmentally sound manner minimises the adverse impact on the environment. The local authorities are responsible for the development of infrastructure for collection, storage, segregation, transportation, processing and disposal of MSW. The Rules are now applicable beyond Municipal areas and extend to urban agglomerations, census towns, notified industrial townships, areas under the control of Indian Railways, airports, airbase, Port and harbour, defence establishments, special economic zones, State and Central



government organizations, places of pilgrims, religious & historical importance.

The source segregation of waste has been mandated to channelize the waste to wealth by recovery, reuse and recycle.

Integration of waste pickers/ ragpickers and waste dealers/ Kabadiwalas in the formal system should be done by State Governments, and Self Help Group, or any other group to be formed.

No person should throw, burn, or bury the solid waste generated by him, on streets, open public spaces outside his premises, or in the drain, or water bodies.

Generator will have to pay 'User Fee' to waste collector and for 'Spot Fine' for Littering and Non-segregation.

Time frame

- i. setting up solid waste processing facilities by all local bodies having 100000 or more population: within two years
- ii. census towns below 100000 population, setting up common or stand-alone sanitary landfills by or for all local bodies having 0.5 million or more population and setting up common or regional sanitary landfills by all local bodies and census towns under 0.5 million population-three years
- iii. bio-remediation or capping of old and abandoned dump sites-five years.

Duties of Waste generator

Every waste generator shall segregate and store the waste generated by them in three separate streams namely bio-degradable, non-bio-degradable and domestic hazardous wastes in suitable bins and handover segregated wastes to authorized rag-pickers or waste collectors

Event organizer of more than 100 persons shall intimate the local authority, at least three working days in advance. Such person or the organizer of such event shall ensure segregation of waste at source and handing over of segregated waste to waste collector or agency as specified by local authority.

All Resident Welfare and Market Associations, Gated communities and institution with an area >5,000 sq m and all hotels and restaurant shall, within one year from the date of notification of these rules and in partnership with the local authority by the generators as prescribed in these rules, ensure segregation of waste at source, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorized waste pickers

or the authorized recyclers. The biodegradable waste shall be processed, treated and disposed of through composting or bio-methanation within the premises as far as possible. The residual waste shall be given to the waste collectors or agency as directed by the local authority.

The developers of Special Economic Zone, Industrial Estate, Industrial park to earmark at least 5% of the total area of the plot or minimum 5 plots/ sheds for recovery and recycling facility.

Duties of Ministry of Urban Development

MoUD shall formulate National Policy and Strategy on Solid Waste Management including policy on Waste to Energy in consultation with stakeholders within 6 months from the date of notification of these Rules; review of the measures taken by the States and local bodies, undertake training and capacity building of local bodies and other stakeholders; providing technical guidelines and project finance to States, UTs and local bodies on solid waste management to facilitate meeting timelines and standards

Promotion of marketing and utilization of compost

The Department of Fertilisers, Ministry of Chemicals and Fertilizers shall provide market development assistance on city compost and ensure promotion of co-marketing of compost with chemical fertilizers in the ratio of 3 to 4 bags: 6 to 7 bags by the fertilizer companies to the extent compost is made available for marketing to the companies.

The Ministry of Agriculture shall provide flexibility in Fertiliser Control Order for manufacturing and sale of compost, propagate utilisation of compost on farm land set up laboratories to test quality of compost produced by local authorities or their authorized agencies and issue suitable guidelines for maintaining the quality of compost and ratio of use of compost vis-a-vis chemical fertilizers while applying compost to farmland.

Promotion of waste to energy plant

Ministry of Power shall fix tariff or charges for the power generated from the Waste to Energy plants based on solid waste and ensure compulsory purchase of power generated from such Waste to Energy plants by DISCOMs.

The Ministry of New and Renewable Energy Sources shall facilitate infrastructure creation for Waste to Energy plants and provide appropriate subsidy or incentives for such Waste to Energy plants.

All industrial units using fuel and located within 100 km from an solid waste based RDF plant shall make arrangements within six months from the date of notification of



these rules to replace at least 5 % of their fuel requirement by RDF so produced.

Non recyclable waste having calorific value of 1500 K/cal/kg or more shall not be disposed of on landfills and shall only be utilized for generating energy either or through refuse derived fuel or by giving away as feed stock for preparing refuse derived fuel.

Do you know?

The tiger population of Northeast India is genetically different from the rest of the country.

25.11 HAZARDOUS WASTE MANAGEMENT RULES, 2016

Hazardous waste means any waste, which by reason of characteristics, such as physical, chemical, biological, reactive, toxic, flammable, explosive or corrosive, causes danger to health, or environment. It comprises the waste generated during the manufacturing processes of the commercial products such as industries involved in petroleum refining, production of pharmaceuticals, petroleum, paint, aluminium, electronic products etc. As per the information furnished by CPCB in the year 2015, the total hazardous waste generation in the country is 7.46 million metric tonnes per annum from about 44,000 industries.

Unscientific disposal of hazardous and other waste through burning or incineration leads to emission of toxic fumes comprising of Dioxins & Furans, Mercury, heavy metals, causing air pollution and associated health-related problems. Disposal in water bodies, or in municipal dumps leads to toxic releases due to leaching in land and water entailing into degradation of soil and water quality. The workers employed in such unscientific practices suffer from neurological disorders, skin diseases, genetic defects, cancer etc. Hence, there is a need for systematic management of hazardous and other waste in an environmentally sound manner by way of prevention, minimisation, re-use, recycling, recovery, utilisation including co-processing and safe disposal of waste.

Scientific disposal of hazardous waste through collection, storage, packaging, transportation and treatment, in an environmentally sound manner minimises the adverse impact on human health and on the environment. The hazardous waste can be disposed at captive treatment facility installed by the individual waste generators or at Common Hazardous Waste Treatment, Storage and Disposal Facilities (TSDFs).

For the first time, Rules have been made to distinguish between Hazardous Waste and other wastes. Other wastes include: Waste tyre, paper waste, metal scrap, used electronic items, etc. and are recognized as a resource for recycling and reuse. These resources supplement the industrial processes and reduce the load on the virgin resource of the country.

The salient features

- i. The ambit of the Rules has been expanded by including 'Other Waste'.
- ii. Waste Management hierarchy in the sequence of priority of prevention, minimization, reuse, recycling, recovery, co-processing; and safe disposal has been incorporated.
- iii. All the forms under the rules for permission, import/export, filing of annual returns, transportation, etc. have been revised significantly, indicating the stringent approach for management of such hazardous and other wastes with simultaneous simplification of procedure.
- iv. The basic necessity of infrastructure to safeguard the health and environment from waste processing industry has been prescribed as Standard Operating Procedure (SOPs), specific to waste type, which has to be complied by the stakeholders and ensured by SPCB/PCC while granting such authorisation.
- v. Procedure has been simplified to merge all the approvals as a single window clearance for setting up of hazardous waste disposal facility and import of other wastes.
- vi. Co-processing as preferential mechanism over disposal for use of waste as supplementary resource, or for recovery of energy has been provided.
- vii. The approval process for co-processing of hazardous waste to recover energy has been streamlined and put on emission norms basis rather than on trial basis.
- viii. The process of import/export of waste under the Rules has been streamlined by simplifying the document-based procedure and by revising the list of waste regulated for import/export.
- ix. The import of metal scrap, paper waste and various categories of electrical and electronic equipments for re-use purpose has been exempted from the need of obtaining Ministry's permission.
- x. The basic necessity of infrastructure to safeguard the health and environment from waste processing industry has been prescribed as Standard Operating Procedure (SOPs) specific to waste type.



- xi. Responsibilities of State Government for environmentally sound management of hazardous and other wastes have been introduced as follows:
- To set up/ allot industrial space or sheds for recycling, pre-processing and other utilization of hazardous or other waste
 - To register the workers involved in recycling, pre-processing and other utilization activities.
 - To form groups of workers to facilitate setting up such facilities;
 - To undertake industrial skill development activities and ensure safety and health of workers.
- xii. List of processes generating hazardous wastes has been reviewed taking into account technological evolution in the industries.
- xiii. List of Waste Constituents with Concentration Limits has been revised as per international standard and drinking water standard.

The following items have been prohibited for import:

- Waste edible fats and oil of animals, or vegetable origin;
 - Household waste;
 - Critical Care Medical equipment;
 - Tyres for direct re-use purpose;
 - Solid Plastic wastes including Pet bottles;
 - Waste electrical and electronic assemblies scrap;
 - Other chemical wastes especially in solvent form.
- xiv. State Government is authorized to prepare integrated plan for effective implementation of these provisions, and have to submit annual report to Ministry of Environment, Forest and Climate Change.
- xv. State Pollution Control Board is mandated to prepare an annual inventory of the waste generated; waste recycled, recovered, utilised including co-processed; waste re-exported and waste disposed and submit to the Central Pollution Control Board by the 30th day of September every year.

25.12 CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT RULES, 2016

The salient features are:

Applies to everyone who generates construction and demolition waste.

Duties of waste Generators

- Every waste generator shall segregate construction and demolition waste and deposit at collection centre or handover it to the authorised processing facilities
- Shall ensure that there is no littering or deposition so as to prevent obstruction to the traffic or the public or drains.
- Large generators (who generate more than 20 tons or more in one day or 300 tons per project in a month) shall submit waste management plan and get appropriate approvals from the local authority before starting construction or demolition or remodeling work,
- Large generators shall have environment management plan to address the likely environmental issues from construction, demolition, storage, transportation process and disposal / reuse of C & D Waste.
- Large generators shall segregate the waste into four streams such as concrete, soil, steel, wood and plastics, bricks and mortar.

Duties of Service providers and Contractors

- The service providers shall prepare a comprehensive waste management plan for waste generated within their jurisdiction, within six months from the date of notification of these rules,
- Shall remove all construction and demolition waste in consultation with the concerned local authority on their own or through any agency.

Timeframe for implementation

- Million plus cities (based on 2011 census of India), shall commission the processing and disposal facility within one-and-a-half years from date of final notification of these rules
- 0.5 to 1 million cities, shall commission the processing and disposal facility within two years from date of final notification of these rules
- for other cities (< 0.5 million populations), shall commission the processing and disposal facility within three years from date of final notification of these rules

Local Authority shall be responsible for proper management of construction and demolition waste within its jurisdiction including placing appropriate containers for collection of waste, removal at regular intervals, transportation to appropriate sites for processing and disposal. Procurement of materials made from construction and demolition waste shall be made mandatory to a certain percentage (say 10-20%) in municipal and Government contracts subject to strict quality control.

**Do you know?**

The decline in vulture population has had other indirect costs, too. Anecdotal evidence shows that the population of secondary scavengers such as dogs, jackals and rodents has been increasing. This might be leading to increased expenditure on diseases such as rabies, leptospirosis in humans and canine distemper in tigers. Besides, the increase in feral dogs' population and the change in their feeding habits might also have an impact on the prey base for large wild cats like the tiger in future.

25.13 BIO-MEDICAL WASTE MANAGEMENT RULES, 2016

Biomedical waste comprises human & animal anatomical waste, treatment apparatus like needles, syringes and other materials used in health care facilities in the process of treatment and research. This waste is generated during diagnosis, treatment or immunisation in hospitals, nursing homes, pathological laboratories, blood bank, etc. Total bio-medical waste generation in the country is 484 TPD from 1,68,869 healthcare facilities (HCF), out of which 447 TPD is treated.

The hospitals servicing 1000 patients or more per month are required to obtain authorisation and segregate bio-medical waste in to 10 categories, pack five colour backs for disposal.

The quantum of waste generated in India is estimated to be 1-2 kg per bed per day in a hospital and 600 gm per day per bed in a clinic. 85% of the hospital waste is non-hazardous, 15% is infectious/hazardous. Mixing of hazardous results in to contamination and makes the entire waste hazardous. Hence there is necessity to segregate and treat. Improper disposal increases risk of infection; encourages recycling of prohibited disposables and disposed drugs; and develops resistant microorganisms

Scientific disposal of Biomedical Waste through segregation, collection and treatment in an environmentally sound manner minimises the adverse impact on health workers and on the environment.

The salient features

- (a) The ambit of the rules has been expanded to include vaccination camps, blood donation camps, surgical camps or any other healthcare activity;
- (b) Phase-out the use of chlorinated plastic bags, gloves and blood bags within two years;

- (c) Pre-treatment of the laboratory waste, microbiological waste, blood samples and blood bags through disinfection or sterilisation on-site in the manner as prescribed by WHO or NACO;
- (d) Provide training to all its health care workers and immunise all health workers regularly;
- (e) Establish a Bar-Code System for bags or containers containing bio-medical waste for disposal;
- (f) Report major accidents;
- (g) Existing incinerators to achieve the standards for retention time in secondary chamber and Dioxin and Furans within two years;
- (h) Bio-medical waste has been classified in to 4 categories instead 10 to improve the segregation of waste at source;
- (i) Procedure to get authorisation simplified. Automatic authorisation for bedded hospitals. The validity of authorisation synchronised with validity of consent orders for Bedded HCFs. One time Authorisation for Non-bedded HCFs;
- (j) The new rules prescribe more stringent standards for incinerator to reduce the emission of pollutants in environment;
- (k) Inclusion of emissions limits for Dioxin and furans;
- (l) State Government to provide land for setting up common bio-medical waste treatment and disposal facility;
- (m) No occupier shall establish on-site treatment and disposal facility, if a service of 'common bio-medical waste treatment facility is available at a distance of seventy-five kilometer.
- (n) Operator of a common bio-medical waste treatment and disposal facility to ensure the timely collection of bio-medical waste from the HCFs and assist the HCFs in conduct of training

Amendment Rules, 2018

- Phase out chlorinated plastic bags (excluding blood bags) and gloves by March 27, 2019.
- All healthcare facilities shall make available the annual report on its website within a period of two years (from 2018).
- Operators of common bio-medical waste treatment and disposal facilities shall establish barcoding and global positioning system for handling of bio-medical waste in accordance with guidelines issued by the CPCB.



- Every person having administrative control over the institution generating biomedical waste shall pre-treat it through sterilization on-site in the manner as prescribed by WHO and then sent to the Common biomedical waste treatment facility for final disposal.

25.14 E-WASTE MANAGEMENT RULES, 2016

17 lakh tonnes of E-waste is generated every year, with an annual increase of 5 per cent of generation of E-waste.

For the first time, the Rules will bring the producers under Extended Producer Responsibility (EPR), along with targets. The producers have been made responsible for collection of E-waste and for its exchange

Salient features

1. Manufacturer, dealer, refurbisher and Producer Responsibility Organization (PRO) have been introduced as additional stake holders in the rules.
2. The applicability of the rules has been extended to components, consumables, spares and parts of EEE in addition to equipment as listed in Schedule I.
3. Compact Fluorescent Lamp (CFL) and other mercury containing lamp brought under the purview of rules.
4. Collection mechanism based approach has been adopted to include collection centre, collection point, take back system etc for collection of e-waste by Producers under Extended Producer Responsibility(EPR).
5. Option has been given for setting up of PRO, e-waste exchange, e- retailer, Deposit Refund Scheme as additional channel for implementation of EPR by Producers to ensure efficient channelization of e-waste.
6. Provision for Pan India EPR Authorization by CPCB has been introduced replacing the state wise EPR authorization.
7. Collection and channelisation of e-waste in Extended Producer Responsibility - Authorisation shall be in line with the targets prescribed in Schedule III of the Rules. The phase wise Collection Target for e-waste, which can be either in number or Weight shall be 30% of the quantity of waste generation as indicated in EPR Plan during first two year of implementation of rules followed by 40% during third and fourth years, 50% during fifth and sixth years and 70% during seventh year onwards.
8. Deposit Refund Scheme has been introduced as an additional economic instrument wherein the producer charges an additional amount as a deposit at the time of sale of the electrical and electronic equipment and returns it to the consumer along with interest when the end-of life electrical and electronic equipment is returned.
9. The e-waste exchange as an option has been provided in the rules as an independent market instrument offering assistance or independent electronic systems offering services for sale and purchase of e-waste generated from end-of-life electrical and electronic equipment between agencies or organizations authorised under these rules.
10. The manufacturer is also now responsible to collect e-waste generated during the manufacture of any electrical and electronic equipment and channelise it for recycling or disposal and seek authorization from SPCB.
11. The dealer, if has been given the responsibility of collection on behalf of the producer, need to collect the e-waste by providing the consumer a box and channelize it to Producer.
12. Dealer or retailer or e-retailer shall refund the amount as per take back system or Deposit Refund Scheme of the producer to the depositor of e-waste.
13. Refurbisher need collect e-waste generated during the process of refurbishing and channelise the waste to authorised dismantler or recycler through its collection centre and seek one time authorization from SPCB.
14. The roles of the State Government has been also introduced in the Rules in order to ensure safety, health and skill development of the workers involved in the dismantling and recycling operations.
15. The transportation of e-waste shall be carried out as per the manifest system whereby the transporter shall be required to carry a document (three copies) prepared by the sender, giving the details.
16. Liability for damages caused to the environment or third party due to improper management of e-waste including provision for levying financial penalty for violation of provisions of the Rules has also been introduced.
17. Urban Local Bodies (Municipal Committee/Council/ Corporation) has been assign the duty to collect and channelized the orphan products to authorized dismantler or recycler.

Amendment Rules, 2018

- The e-waste collection targets under extended producer responsibility (EPR) have been revised. The phase-wise collection targets for e-waste in weight shall be 10% of



the quantity of waste generation as indicated in the EPR Plan during 2017-18, with a 10% increase every year until 2023. From 2023 onwards, the target has been made 70% of the quantity of waste generation as indicated in the EPR Plan.

- Separate e-waste collection targets have been drafted for new producers
- Under the Reduction of Hazardous Substances (RoHS) provisions, cost for sampling and testing shall be borne by the government for conducting the RoHS test. If the product does not comply with RoHS provisions, then the cost of the test will be borne by the Producers.

25.15 PLASTIC WASTE MANAGEMENT RULES, 2016

15, 000 tonnes of plastic waste is generated every day, out of which 9, 000 tonnes is collected and processed, but 6, 000 tonnes of plastic waste is not being collected.

An eco-friendly product, which is a complete substitute of the plastic in all uses, has not been found till date. In the absence of a suitable alternative, it is impractical and undesirable to impose a blanket ban on the use of plastic all over the country. The real challenge is to improve plastic waste management systems.

Salient features

1. Increase minimum thickness of plastic carry bags from 40 to 50 microns and stipulate minimum thickness of 50 micron for plastic sheets also to facilitate collection and recycle of plastic waste.
2. To promote use of plastic waste for road construction as per Indian Road Congress guidelines or energy recovery, or waste to oil etc. for gainful utilization of waste
3. Rural areas have been brought in ambit of these Rules since plastic has reached rural areas also. Responsibility for implementation of the rules is given to Gram Panchayat.
4. First time, responsibility of waste generators is being introduced. Individual and bulk generators like offices, commercial establishments, industries are to segregate the plastic waste at source, handover segregated waste, pay user fee as per bye-laws of the local bodies.
5. Plastic products are left littered after the public events (marriage functions, religious gatherings, public meetings etc) held in open spaces. First time, persons organizing such events have been made responsible for management of waste generated from these events.

6. Use of plastic sheet for packaging, wrapping the commodity except those plastic sheet's thickness, which will impair the functionality of the product are brought under the ambit of these rules. A large number of commodities are being packed/wrapped into plastic sheets and thereafter such sheets are left for littered. Provisions have been introduced to ensure their collection and channelization to authorised recycling facilities.
7. Extended Producer Responsibility: Earlier, EPR was left to the discretion of the local bodies. First time, the producers and brand owners have been made responsible for collecting waste generated from their products. They have to approach local bodies for formulation of plan/system for the plastic waste management within the prescribed time frame.
8. SPCBs will not grant/renew registration of plastic bags, or multi-layered packaging unless the producer proposes the action plan endorsed by the concerned State Development Department.
9. Producers to keep a record of their vendors to whom they have supplied raw materials for manufacturing carry bags, plastic sheets, and multi-layered packaging. This is to curb manufacturing of these products in unorganised sector.
10. The entry points of plastic bags/plastic sheets/multi-layered packaging in to commodity supply chain are primarily the retailers and street vendors. They have been assigned the responsibility of not to provide the commodities in plastic bags/plastic sheets/multi-layered packaging which do not conform to these rules. Otherwise, they will have to pay the fine.
11. Plastic carry bag will be available only with shopkeepers/street vendors pre-registered with local bodies on payment of certain registration fee. The amount collected as registration fee by local bodies is to be used for waste management.
12. CPCB has been mandated to formulate the guidelines for thermoset plastic (plastic difficult to recycle). In the earlier Rules, there was no specific provision for such type of plastic.
13. Manufacturing and use of non-recyclable multi-layered plastic to be phased in two years.

Amendment Rules, 2018

- Phasing out of Multilayered Plastic (MLP) is now applicable to MLP, which are non-recyclable, or non-energy recoverable, or with no alternative use.



- Central registration system for the registration of the producer/importer/brand owner.
- A national registry has been prescribed for producers with a presence in more than two states, a state-level registration has been prescribed for smaller producers/brand owners operating within one or two states.
- Explicit pricing of carry bags has been omitted.

25.16 WETLANDS (CONSERVATION AND MANAGEMENT) RULES 2017

Wetlands (Conservation and Management) Rules, 2017 supersede the Wetlands (Conservation and Management) Rules, 2010 for effective conservation and management of wetlands in the country

Key features

Decentralisation of wetland management. Under the new rules, the powers have been given to the State governments so that protection and conservation can be done at the local level. The central government has mainly retained powers regarding monitoring.

The new rules have replaced the Central Wetlands Regulatory Authority (CWRA) with the National Wetland Committee, which has a merely advisory role.

The State or UT Wetlands Authority will have to prepare a list of all wetlands and also will develop a comprehensive list of activities to be regulated and permitted within notified wetlands and their zone of influence.

The new rules also prohibit encroachments on wetlands, solid waste dumping, discharge of untreated waste and effluents from industries and human settlements.

It prescribes that conservation and management would be based on the principle of wise use, which is to be determined by the Wetlands Authority.

Shortfalls

We have earlier read the definition of wetland given by Ramsar convention earlier in this topic. The 2010 wetland rules followed the definition of Ramsar convention.

However, the 2017 rules, in the definition of wetland do not include river channels, paddy fields, man-made water bodies/tanks specifically for drinking water purposes and structures specifically constructed for aquaculture, salt production, recreation, and irrigation purposes.

By this new definition (exclusion of aforesaid wetlands) close to 65 % wetland in the country will lose the status of wetlands. The management and protection awarded to

river channels, man-made wetlands will be no more effective as they are not considered wetlands.

The definition of wetlands and its inclusion is done by the respective state/ UT. This may lead to a lack of uniformity in defining and conserving the wetlands in the country.

The older provision of appealing to the National Green Tribunal does not exist in the 2017 Rules.

There is also no timeline specified for phasing out solid waste and untreated waste from being dumped into wetlands.

The new rules do not take into account the Jagpal Singh vs State of Punjab (2011) judgment of Supreme Court for the restoration of encroached wetlands throughout the country.

Key to wetland conservation is not just understanding regimes of multiple uses but conserving and managing the integrity of the wetland ecosystem.

Do you know?

- Gujarat has the largest area of wetland in the country. Lakshadweep has the highest percentage of wetland in its own geographical area for a state / UT.

25.17 NATIONAL GREEN TRIBUNAL (NGT)

- The Preamble of the act provides for the establishment of a National Green Tribunal for the effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources, including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto (The National Green Tribunal Act, 2010).
- With the establishment of the NGT, India has joined the distinguished league of countries that have a dedicated adjudicatory forum to address environmental disputes.
- India is third country in the world to full fledged green tribunal followed by New Zealand and Australia.
- The specialized architecture of the NGT will facilitate fast track resolution of environmental cases and provide a boost to the implementation of many sustainable development measures.
- NGT is mandated to dispose the cases within six months of their respective appeals.



- [For more details on national green tribunal refer Shankar IAS academy's polity part II material]

25.18 THE OZONE DEPLETING SUBSTANCES RULES

- The Ozone Depleting Substances (Regulation and Control) Rules, 2000 under the Environment (Protection) Act, in July 2000.
- These Rules set the deadlines for phasing out of various ODSs, besides regulating production, trade import and export of ODSs and the product containing ODS.
- The Ozone Depleting Substances (Regulation and Control) Rule, 2000 were amended in 2001, 2003, 2004 and 2005 to facilitate implementation of ODS phase-out at enterprises in various sectors.
- These Rules prohibit the use of CFCs in manufacturing various products beyond 1st January 2003
- except in metered dose inhaler and for other medical purposes.
- Similarly, use of halons is prohibited after 1st January 2001 except for essential use. Other ODSs such as carbon tetrachloride and methylchloroform and CFC for metered dose inhalers can be used upto 1st January 2010.
- Further, the use of methyl bromide has been allowed upto 1st January 2015. Since HCFCs are used as interim substitute to replace CFC, these are allowed upto 1st January 2040.



