Waste Tyre Management

With the rapidly growing number of vehicles around the world, the disposal of end-of-life tyres is a growing issue. Often simply dumped by the million to pose a serious environmental, health and fire risk, the technology to recover higher value materials and energy from waste tyres is moving forward.

The recovery of energy and materials from used tyres is big business. According to a report by the World Business Council for Sustainable Development, in 2008 around one billion End-of-Life Tyres (ELTs) were being produced globally each year. A further four billion were estimated to be held in stockpiles and landfills. Around the world it is estimated that some 1.5 billion new tyres are produced annually.

With so many ELTs being produced, as well as the huge stockpiles from the past, waste tyres pose many potential dangers. They can contaminate groundwater, harbour disease carrying mosquitoes in pooled water and they are not only flammable, but once ablaze, extremely difficult to extinguish.

Because of the hazards associated with scrap tyres, nearly all developed countries regulate their disposal. In the EU, while no single directive or regulation targets ELTs, the Landfill Directive banned them from being disposed of to landfill whole in 2003 and in 2006 banned even their shredded remains from landfill.





Indian Scenario

Presently in India waste tyres are sold to scrap dealers and due to high calorific value of these tyres they are used as fuel in brick industries at many small brick industries are using these tyres as fuel in furnace. Remoulding of the waste tyres is taking place at many places and some tyres are reused. Very small quantum of tyre waste is going back to major tyre manufacturers in India for reclamation of tyre.

Currently, the issue of waste tyres is dealt under Environment (Protection) Rules 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, Central Pollution Control Board's guidelines for Environmentally Sound Management of End of Life Vehicles, 2016 and Standard Operating Procedure (SOP) issued by the Union Ministry of Environment, Forest and Climate Change (MoEFCC).

The Government of India is working on a new legislation for tyre recycling, which could change the way tyre manufacturers work in a long run. A draft of the regulation is under the consideration of the Ministry of Environment and Forest now.

The draft waste tyre management rules envisage the creation of authorised waste collection and storage centres. An integrated waste tyre management plan is to be submitted with an assessment of quantities and types of tyres that will become late tyres, how the waste tyres will be managed, provide options for recycling/re-use or recovery, the mechanism to ensure safe disposal of waste tyres etc.

The collection and reuse of the used tyres are very unregulated and with some physical locations where tyres are available in required numbers or a critical mass, which could help regular availability of tyres for the retrading industry or the tyre industry itself which may want to re-trade used tyres.

The new legislation that is being drawn by the Government will make it mandatory for tyre manufacturers and dealers to dispose of end-of-life tyres, By making the industry accountable towards the environment, the proposed legislation is a step towards the right direction.

References:

- 1. https://en.wikipedia.org/wiki/World_Business_Council_for_Sustainable_Development
- 2. https://waste-management-world.com/a/tackling-tyre-waste
- 3. https://www.business-standard.com/article/companies/government-working-on-tyre-recycling-norms-117113000701_1.html