

Salient Features of the E-Waste (Management) Rules, 2016 and its likely implication

| e-waste (Management & Handling) Rules, 2011 | E-Waste (Management) Rules, 2016 | Reasons /and Likely implications |
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| Title | | |
| e-waste (Management & Handling) Rules, 2011 | E-Waste (Management) Rules, 2016 | |
| Applicability | | |
| Producer, consumer or bulk consumer, collection centre, dismantler and recycler | expanded to manufacturer, dealer, refurbisher and Producer Responsibility Organization (PRO) | to address leakage of e-waste to informal sector at all the stages of channelization. |
| Only to Electrical and Electronic Equipment (EEE) as listed in Schedule I | Extended to components, consumables, spares and parts of EEE in addition to equipment as listed in Schedule I | Bulk of e-waste comprises of components, consumables, spares and parts of EEE which were not getting addressed in previous rules entailing to the scope of their channelization to informal sector. |
| | Compact Fluorescent Lamp (CFL) and other mercury containing lamp brought under the purview of rules. | Taking into account the lack of any regulation for management of CFL and other mercury containing lamp, CFL has been included in Schedule I which provide the list of EEE to which this rules is applicable. |
| Exemption | | |

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| <p>Micro and Small industry sector as defined in Micro Small and Medium Developmental Act, 2006</p> | <p>Micro enterprises as defined in the Micro, Small and Medium Enterprises Development Act, 2006</p> | <p>Exemption continues for micro enterprises; however small enterprises, which have been referred as one of the major source of generation of e-waste, have been included in the rules for responsibility as manufacturer, without burdening them with EPR responsibility as applicable to Producers.</p> |
| <p>Collection Mechanism</p> | | |
| <p>Collection Centers can be set up by producer or by any person or agency or association for the purpose of collecting e-waste.</p> <p>Separate authorization from SPCBs for setting up of such collection centres was necessary.</p> | <p>Collection is now exclusively Producer's responsibility, which can set up collection centre or point or even can arrange buy back mechanism for such collection.</p> <p>No separate authorization for such collection will be required, which will be indicated in the EPR Plan of Producers.</p> | <p>The rules provide for setting up of individual collection centres which were not necessitated as part of EPR Authorization, thus giving leeway to Producers for not setting up such collection centres.</p> <p>Shift from collection centre to collection mechanism approach and removal of need of separate authorization will ensure effective collection simultaneously ensuring flexibility for Producers for implementation. This will check leakage of flow of e-waste to unauthorised players.</p> |
| <p>Extended Producer Responsibility (EPR)</p> | | |
| <p>The Producers are required to obtain authorization from SPCB/PCCs for implementing their</p> | <p>Single EPR Authorization for Producers is now being made CPCB's responsibility to ensure pan India implementation.</p> <p>Procedure for seeking the authorization and</p> | <p>Need for separate EPR authorization from each state lead to significant delays and thus failure in implementation of EPR</p> <p>There had been significant lack of</p> |

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| <p>Extended Producer Responsibility for effective channelization of E-waste to the registered dismantlers/recyclers</p> | <p>for effective implementation has now been elaborated with various kind of flexibilities provisions</p> | <p>initiatives from Producers wrt implementation of EPR and for capacity building and awareness initiatives, though mandated in the rules due to lack of elaborate procedure for the same in the rules which has now been elaborated step- wise.</p> |
| <p>Flexibility for ease of implementation of EPR</p> | | |
| <p>No provisions</p> | <p>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;</p> | <p>These are various non- mandatory options for ease of implementation of EPR</p> |
| <p>Target based approach for collection under EPR</p> | | |
| <p>No such provision</p> | <p>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.</p> <p>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</p> | <p>Target based approach for implementation of EPR has been adopted on the basis of existing international best practices which indicate higher success rate for implementation of EPR in those countries having target based EPR mechanism.</p> <p>Target based approach (Minimum) is being used in many countries like Japan (redcycling rate 50% to 60%), South Korea (Recyxcling rate 55% to 70%), UK (Recycling and recocvery rate 50% to 80%) and Netherlands (recycling rates 45% to 75%).</p> |

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| | years, 50% during fifth and sixth years and 70% during seventh year onwards. | As it may be noted in all these countries target is with reference to successful recycling rate, whereas in India we have just began with adoption of successful collection rate to begin with. Further, the minimum target has been 45-55% internationally. Whereas, in India in order to gain experience the target has been kept as collection rate of 30% of the total e-waste generated as per the EPR plan submitted by Producer themselves. In order to ascertain the annual quantity of waste generated, category wise average life and the weight shall be used and this will be applied to sales figure of the producers to arrive at the quantity of e-waste generation. All the details will be prescribed in the CPCB guidelines. |
| Simplification of Permissions | | |
| Authorization for collection centre Dismantler and Recyclers to obtain Authorization and Registration, separately. Separate EPR | No separate authorization for collection centre which shall be part of EPR now Registration/ authorization for dismantling and recycling through one system i.e. Authorization instead of both registration and authorisation. Pan India EPR authorization by CPCB | Simplification of various permissions to avoid delays. |

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| authorization by all the states | | |
| Economic Instrument for implementation of the rules | | |
| No specific citation | 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; | An optional financial mechanism for effective implementation of EPR |
| E-waste exchange | | |
| No specific citation | The e-waste exchange as an option has been provided in the rules. | 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 |
| Responsibilities of Manufacturer | | |
| No provision | 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; | To check the leakage to informal sector. |

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| Responsibilities of dealers | | |
| No provision | <p>in the case the dealer has been given the responsibility of collection on behalf of the producer, the dealer shall collect the e-waste by providing the consumer a box</p> <p>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</p> | This will provide flexibility to producer for channelization and ensure ease of implementation by consumers for depositing the e-waste at end of life. |
| Responsibilities of the refurbisher | | |
| No provision | <p>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;</p> | To check the leakage to informal sector. |
| Obligations for Bulk Consumer | | |
| 'bulk consumer' means bulk users of electrical and electronic equipment such as Central Government or State Government Departments, public sector undertakings, | <p>Bulk Consumer is being redefined by adding 'and health care facilities which have turnover of more than one crore or have more than twenty employees'</p> <p>They need to file annual returns.</p> | To bring clarity in respect of definition and to put obligations on bulk consumers who are major generators and whose compliance was non satisfactory due to lack of any concrete obligation on reporting. |

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| <p>banks, educational institutions, multinational organisations, international agencies, partnership and public or private companies that are registered under the Factories Act, 1948 (63 of 1948) and the Companies Act, 2013 (18 of 2013)</p> <p>No provision on annual return</p> | | |
| Responsibility of State Government | | |
| <p>No provision</p> | <p>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. These responsibilities are as given below:</p> <p>(i) Department of Industry in State or any other government agency authorised in this regard by the State Government is to ensure earmarking or allocation of industrial space or shed for e-waste dismantling and recycling in the existing and upcoming industrial</p> | <p>Involvement of state government for effective implantation of the rules and simultaneously ensure welfare, safety and health of the workers involved in this e- waste management sector.</p> |

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| | <p>(ii) park, estate and industrial clusters; Department of Labour in the State or any other government agency authorised in this regard by the State Government need to ensure recognition and registration of workers involved in dismantling and recycling; assist formation of groups of such workers to facilitate setting up dismantling facilities; undertake industrial skill development activities for the workers involved in dismantling and recycling; and undertake annual monitoring and to ensure safety & health of workers involved in dismantling and recycling;</p> <p>(iii) State Government to prepare integrated plan for effective implementation of these provisions, and to submit annual report to Ministry of Environment, Forest and Climate Change.</p> | |
| Reduction of Hazardous Substances (RoHS) during manufacturing stage | | |
| Every producer of electrical and electronic equipment and their | The procedure for implementation of ROHS has been elaborated and made explicit | For effective implementation |

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| <p>components or consumables or parts or spares listed in Schedule I shall ensure that, new Electrical and Electronic Equipment and their components or consumables or parts or spares do not contain Lead, Mercury, Cadmium, Hexavalent Chromium, polybrominated biphenyls and polybrominated diphenyl ethers beyond a maximum concentration value of 0.1% by weight in homogenous materials for lead, mercury, hexavalent chromium, polybrominated biphenyls and polybrominated diphenyl ethers and of 0.01% by weight in homogenous materials for cadmium.</p> | <p>Provision on Reduction of Hazardous Substances (RoHS) and related Schedule II has been revised in line with existing EU regulatory framework which forms the basis of the provision.</p> <p>In case the products not comply with the RoHS provision, provision has been introduced to withdraw or recall the product from market and take corrective measures to bring the product into compliance;</p> | <p>In line with existing international best practices.</p> <p>Stringent compliance mechanism</p> |
| <p>Transportation of e-waste</p> | | |
| <p>No provision</p> | <p>The transportation of e-waste shall be carried out as per the manifest system whereby the transporter shall be required to</p> | <p>To prevent leakage of e-waste to informal sector during transportation</p> |

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| | carry a document (three copies) prepared by the sender, giving the details as per Form-6: | |
| Liability provision | | |
| No provision | 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. | For effective implementation |
| Responsibility of Urban Local Bodies | | |
| No specific citation | Urban Local Bodies (Municipal Committee/Council/Corporation) has been assign the duty to collect and channelized the orphan products to authorized dismantler or recycler. | To bring clarity in the rules for effective implementation and prevent leakage to informal sector |

UNIT-4

Treatment, Storage and Disposal Facilities (TSDFs)

- The Government has taken a number of initiatives to address issues related to disposal of wastes.
- It encourages setting up of integrated Treatment, Storage and Disposal Facility (TSDFs) for hazardous waste management on Public Private Partnership (PPP) mode in clusters of hazardous waste generating industries.
- So far 28 TSDFs have been set up. The Ministry of Urban Development is implementing the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) for providing assistance to the State Governments/ Urban Local Bodies for various projects including solid waste management.

- On the basis of proposals received from the States, the Centre has provided financial assistance to the State Pollution Control Boards for setting up of integrated TSDFs
- The financial assistance disbursed from 2007 to 2010, State-wise and year-wise is as follows

| Year | State | Amount (in lakhs) |
|-----------|----------------|----------------------|
| 2007-2008 | Tamil Nadu | Rs. 80.00 |
| 2007-2008 | Andhra Pradesh | Rs. 80.00 |
| 2007-2008 | Maharashtra | Rs. 96.64 |
| 2008-2009 | Maharashtra | Rs. 160.00 |
| 2009-2010 | Maharashtra | Rs. 2.40 crore |
| 2009-2010 | Uttar Pradesh | Rs. 80.00 |
| 2009-2010 | Kerala | Rs. 80.00 |

- To offset any possibility of the amount allocated for setting up of the TSDFs getting diverted for other activities or projects, a Memorandum of Understanding (MoU) is signed between the Ministry of Environment and Forests, State Pollution Control Board and the entrepreneur before release of financial assistance for setting up of TSDF.
- One of the conditions of the MoU is to constitute a committee to monitor progress of the facility.
- Further release of financial assistance is made only on submission of audited Utilization Certificate and physical progress report by the respective State Pollution Control Board.

- The CPCB's Guidelines for Environmentally Sound management of E-waste, 2008 in its 'guidelines for establishment of integrated e-waste recycling & treatment facility' state that plastic, which cannot be recycled and is hazardous in nature, is recommended to be landfilled in nearby Treatment, Storage and Disposal Facility (TSDF).
- In case lead recovery is low, they can be temporarily stored at e-waste dismantling facility and later disposed in TSDF.