ADMISTRATIVE AND LEGISLATIVE GAP ANALYSIS OF EXISTING COMPUTER WASTE MANAGEMENT PRACTICES IN RAWALPINDI AND ISLAMABAD



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ABSTRACT

One of the burning environmental issues is e-waste management worldwide. The problem is more conspicuous in developing countries like Pakistan. The current study has been undertaken to evaluate the existing state of Computer Waste Management (CWM) in Rawalpindi and Islamabad territories. The study focused on administrative and legislative gap analysis of computer waste management system and determination of potential occupational health impacts from current computer waste management practices in Rawalpindi-Islamabad. The area generates huge quantity of computer waste annually. For the above said purpose, system observation and waste quantification were the tools used in field. Interviews and specially designed questionnaires were used to know the factual situations at computer waste storage facilities and the governmental bodies. Approximately 624.15 tons of computer waste was generated in the Rawalpindi-Islamabad per year. Approximately 825 kg of computer monitors and 1125 kg of Control Processing Units (CPU) waste was generated in the Twin cities per day. The authorities responsible for environment in twin cities are the Capital Development Authority (CDA), Ministry of Climate Change (MoCC), Federal environmental protection agency and Provincial environmental protection agency. These departments were surveyed and evaluated for legal compliance and administration. The authorized in of environment have not formulated yet any specific rules and regulations on e-waste. It was also observed in storage facilities that most of the work force associated with computer waste dismantling was dealing with waste works without personal protective equipment's. Although 9.1% belonged to the age group of 10-15 years, 27.3% were 16-20 years. 9.1% 21-25 years, whereas 27.3% were of 26-30 years and 27.3% in age group of more than 30 years, working in computer waste management. This study revealed mismanagement in disposing of the computer waste and provides new insights for establishing proper computer waste management system.

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ABBREVIATIONS

ICTs Information and Communications

Technologies

WEEE Waste of Electrical and Electronic

Equipment

CWM. Computer Waste Management

PCs Personal Computers

Mt Matric Tone

TVs Televisions

PEPA Pakistan Environmental

Protection Act

CW. Computer Waste

CRT Cathode Ray Tube

PVC poly vinyl chloride

BFRS Brominated Flame Retardants

PPE's Personal Protective Equipment's

MoEF Ministry of Environment and

Forestry

LPUR law for the promotion of effective

utilization of the resources

PTA Pakistan Telecommunication

Authority

PEMA Pakistan Electronic

Manufacturing Authority

HSE Health Environment and Safety

MoCC Ministry of Climate Change

PTSs Persistent toxic substances

EU European Union

US United States

EPA Environmental Protection Agency

AWDA Waste Disposal Act Amendments

CDA Capital Development Authority

EPA Environmental Protection Agency

GO's. Government Organizations

NGO's Non-Government Organizations

MoC Ministry of Commerce

EWM Electronic Waste Management

OHS Occupational Health and Safety

IPO Import Policy Order

HW Hazardous Waste

CPU's Control Processing Units

RAM Random Access Memory

CD-ROM Compact Disk Read Only Memory

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