



BUILD ELECTRONICS BETTER

CHEMICAL AND PRODUCT REGULATIONS AFFECTING ELECTRONICS:

SINGAPORE



IPC 2020 White Paper

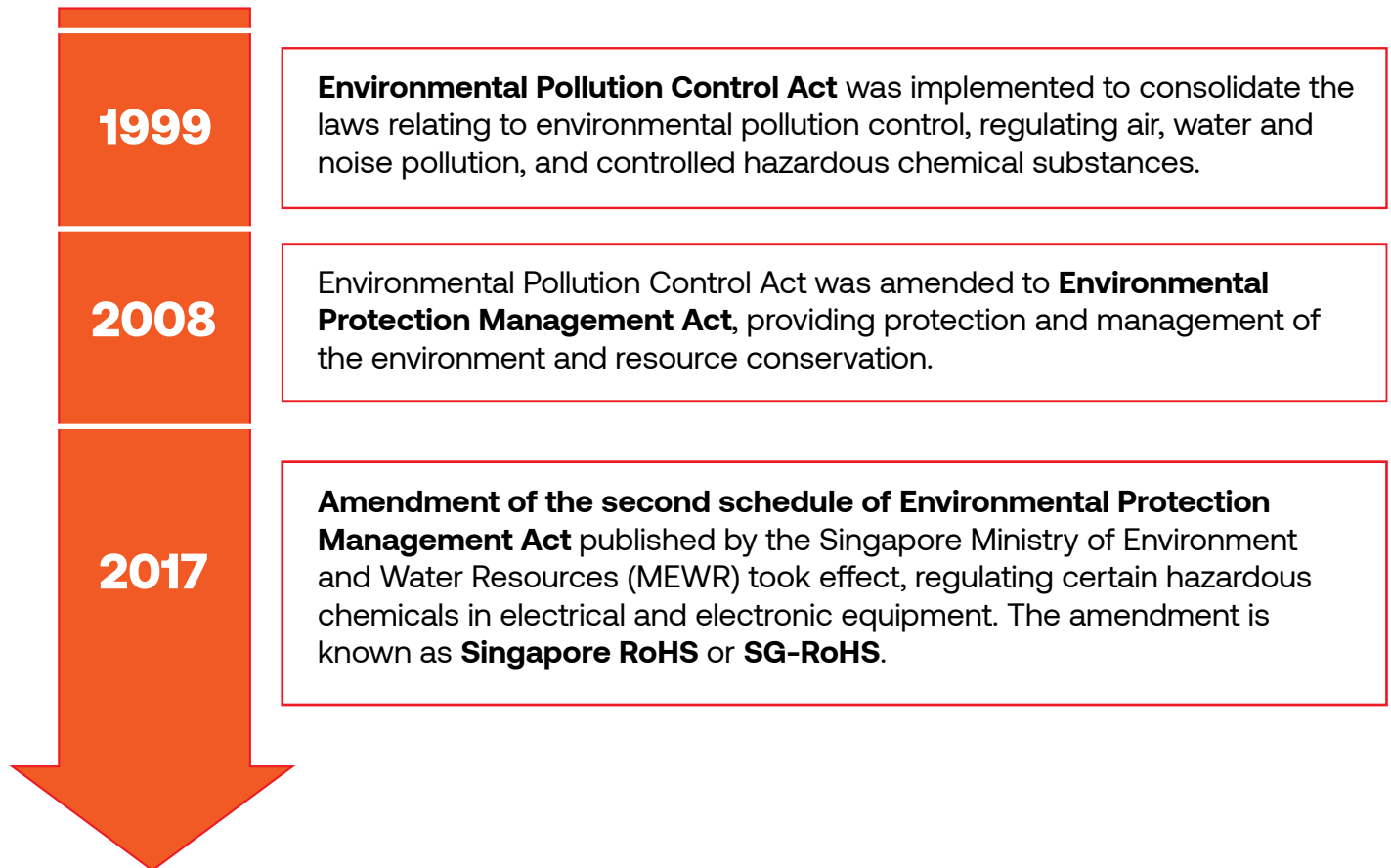
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1. INTRODUCTION

To lower the health and environmental impact from chemicals, countries and regions around the globe have published various chemical regulations for chemical management. Singapore started regulating chemicals in the 1990s. Chemicals in Singapore are mostly regulated through the Environmental Protection and Management Act and could have significant impact on importers and manufacturers of chemical products and electrical and electronic equipment (EEE).

2. HISTORY OF CHEMICAL REGULATION DEVELOPMENT



3. CURRENT CHEMICAL REGULATORY SYSTEMS

3.1 Overall Chemical Regulations

Currently, Singapore does not have any European Union REACH-like regulations; hazardous chemicals are regulated under the second schedule — Control of Hazardous Substances — of the Environmental Protection and Management Act (EPMA). EPMA was published by Singapore National Environmental Agency (NEA), amended from the Act 9 of 1999, Environmental Pollution Control Act. The act has been regularly amended over the past 20 years, with the most recent amendment in 2019 and effective since February 2020.

Although there is no REACH-like chemical registration requirement, EPMA requires any company that imports/exports, sells, purchases, uses and transports controlled hazardous substances to obtain a hazardous substances license, permit or transport approval as shown in the table below. Hazardous substances are defined as substances in the NEA list of controlled hazardous substances.

Requirement	Applicant
Hazardous Substances License	Anyone to import/export or sell any hazardous substances.
Hazardous Substances Permit	Anyone to purchase, store or use any hazardous substances.
Transport Approval	Anyone to transport any hazardous substance above limit.

English version of EPMA can be viewed at

<https://sso.agc.gov.sg/Act/EPMA1999?ValidDate=20200212&ProvlDs=Sc2-#Sc2->

3.2 RoHS-like Regulations: SG-RoHS

The Singapore Ministry of Environment and Water Resources (MEWR) published the Environmental Protection and Management Act (Amendment of Second Schedule, NO. S 263) in August 2016, the amendment known as Singapore RoHS (SG-RoHS) came into effect on 1 June 2017, restricting certain hazardous chemical substances in EEE.

English version of amendment NO. S 263 can be viewed at <https://sso.agc.gov.sg/SL-Supp/S263-2016/Published/20160601?DocDate=20160601#pr2->

3.2.1 Product Scope

The product scope of SG-RoHS includes 6 categories of EEE:

- Mobile phones
- Portable computers
- Refrigerators
- Air conditioners
- Panel TVs
- Washing machines

3.2.2 Substance Requirements

Substances	Limitation (%)
Cadmium	0.01
Lead	0.1
Mercury	0.1
Hexavalent chromium	0.1
PBB	0.1
PBDE	0.1

3.2.3 Marking & Labeling Requirements

SG-RoHS does not have any requirement on labeling of hazardous substances or RoHS mark.

3.2.4 Declaration of Conformity

A RoHS Declaration of Conformity must be submitted to the Singapore National Environmental Agency (NEA) by manufacturers, importers or traders at the import stage. EEE products in non-compliance can still be manufactured for export, but the manufacturer will need to apply for a hazardous substance license from the NEA.

4. RECENT REGULATORY UPDATES AND REGULATION TRENDS FOR THE FUTURE

Hazardous chemicals in Singapore are regulated under EPMA, which was published in 1999 and went through multiple amendments. However, most of them are relatively minor amendments; one of the major amendments was SG-RoHS.

In addition to SG-RoHS, another amendment to highlight is amendment NO. S 359/2018. The amendment was released in 2018 and took effect on 1 January 2019, adding hydrofluorocarbons (HFCs) and mixtures to the EPMA list of hazardous substances, requiring hazardous substances license for import, manufacture or sale.

List of added HFCs: <https://sso.agc.gov.sg/SL-Supp/S359-2018/Published/20180601?DocDate=20180601#pr2->

All EPMA amendments: <https://sso.agc.gov.sg/Act/EPMA1999/Historical/19990401?DocDate=20001230&ValidDate=19990401>



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