

This is a preview - click here to buy the full publication



**QC 080000**

Edition 3.0 2012-05

# IECQ PUBLICATION

**IEC Quality Assessment System for Electronic Components (IECQ System)**

---

**Hazardous Substance Process Management System Requirements (HSPM)**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

PRICE CODE

**Q**

---

## CONTENTS

FOREWORD.....	3
1 Scope.....	5
1.1 General.....	5
1.2 Application.....	5
2 Normative references.....	5
3 Terms and definitions.....	5
4 Hazardous Substance Process Management System.....	7
4.1 General requirements.....	7
4.2 Documentation requirements.....	7
5 Management responsibility.....	8
5.1 Management commitment.....	8
5.2 Customer focus.....	8
5.3 HSF policy.....	8
5.4 Planning.....	8
5.5 Responsibility, authority and communication.....	8
5.6 Management review.....	9
6 Resource management.....	9
6.1 Provision of resources.....	9
6.2 Human resources.....	9
6.3 Infrastructure.....	10
6.4 Work environment.....	10
7 Product realization.....	10
7.1 Planning of HSF process and product realization.....	10
7.2 Customer-related process.....	11
7.3 Design and development.....	11
7.4 Purchasing of HSF products.....	12
7.5 Production and service provision.....	13
7.6 Control of monitoring and measuring devices for HSF characteristic.....	14
8 Measurement, analysis and improvement.....	14
8.1 General.....	14
8.2 Monitoring and measurement.....	14
8.3 Control of HSF nonconforming product.....	15
8.4 Analysis of HSF data.....	15
8.5 Improvement of hazardous substance process management system.....	16
Bibliography.....	17

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

---

### **Hazardous Substance Process Management System Requirements (HSPM)**

#### FOREWORD

This publication has been prepared by the Management Committee (MC) of the IECQ.

This publication is directly related to Publication IECQ 03-5 containing the Rules of Procedure for the IECQ HSPM Scheme.

This IECQ Specification and its requirements are based on the belief that the achievement of Hazardous Substance Free (HSF) products and production processes cannot be realized without an effective integration of management disciplines. This Specification is a supplement to and exists in concert with the ISO 9001 Quality Management System (QMS) framework for the comprehensive, systematic, and transparent management and control of processes pursuant to HSF goals. This 3<sup>rd</sup> edition of IECQ QC 080000 has been prepared in response to feedback from application of the 2<sup>nd</sup> Edition. Changes included in this 3<sup>rd</sup> Edition include:

- Recognition of current implementation of the EU RoHS Directive
- Inclusion of other relevant EU Directives, e.g. REACH
- Provision for use of various national regulations

IECQ QC 080000, originally based on the EIA Standard 954, *Electrical and Electronic Components and Products Hazardous Substance Free Standard and Requirements*, to serve as guidance for manufacturers in the fulfilment of HSF legal and customer requirements which may include regulatory requirements such as:

- Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) and its recasted version, 2011/65/EU
- Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on Waste Electrical and Electronic Equipment (WEEE) and its recasted version
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Directive 94/62/EC of the European Parliament and Council of 20 December 1994 on packaging and packaging waste
- Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC
- Directive 2009/48/EC of the European Parliament and of the Council of 18 June 2009 on the safety of toys
- Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of-life vehicles
- The Consumer Product Safety Improvement Act (CPSIA) of 2008 of U.S.A
- Administration on Control of Pollution by Electronic and Electrical Products of China

etc., or their adaptation and updated version thereafter.

NOTE Legislation exists or is pending in a number of jurisdictions around the world that will require the elimination of a specified list of hazardous substances (HS), including lead, mercury, cadmium, hexavalent chromium, poly-brominated biphenyls (PBB), and poly-brominated diphenyl ethers (PBDE) etc., or notification of substances of very high concerns, from a wide range of products. As a result, producers and users of electrical and electronic components must be able to know that their products either are hazardous-substance free (HSF); or, if the products are not HSF, the quantitative amounts of HS that are present.

The processes used to identify, control, quantify, and report the HS content in an electrical or electronic component, or an element thereof, must be defined and understood in sufficient detail to assure all concerned parties of the HSF status of a product. The processes must be appropriately documented and conducted in a controlled and consistent manner, to facilitate verification of compliance to applicable requirements and regulations; to allow efficient and effective compliance checks; that it can be implemented by producers and users in many different locations; and to allow harmonization of compliance and enforcement methods. Above all, they must minimize technical barriers to the trade of products around the world.

This third edition of IECQ QC 080000 replaces the second edition from 1 July 2012. The transition arrangements for IECQ HSPM Certification according to this edition are detailed in IECQ MC/257/INF.

This edition of QC 080000:2012 clarifies how organizations can use IECQ QC 080000 to manage their hazardous substances other than just emphasizing the removal and avoiding restricted substances in the products. Advantages of the new edition include:

- The QC 080000:2012 not only includes requirements on restricting hazardous substances in products, it also includes management requirements on working with hazardous substances. These management requirements will enable an organization to put in place processes to accommodate other hazardous substances directives and regulations other than RoHS. New requirements in the re-casted RoHS such as compliance assessment, preparation of technical file, preparation of self-declaration, use of markings, change control, product recall, and the information communication within the supply chain in REACH, etc. can now be managed through these new requirements in QC 080000:2012.
- Better alignment and consistency with ISO 9001:2008 in terms of terminology and wordings to facilitate an organization's incorporation of the IECQ HSPM requirements into their existing management system.
- Remove the ambiguity and clarify the intention of some requirements in the 2005 version.

The text of this publication is based on the following documents:

Document	Report on MC Consultation
IECQ MC/238/CA	IECQ MC/255/R

## **Hazardous Substance Process Management System Requirements (HSPM)**

### **1 Scope**

#### **1.1 General**

This Specification is intended for use by

- manufacturers, suppliers, repairers, and maintainers of products to develop processes to identify, control, quantify, and report the amounts of HS in the products they manufacture or supply; and
- customers and users of the products to know the HSF status of a product, and to understand the processes by which it is determined.

This Specification defines the requirements for establishing processes to identify and control the introduction of hazardous substances (HS) into its products. In the event that hazardous substances are introduced into the products, this Specification defines the requirements for implementing processes to test, analyze, or otherwise ascertain the HS content, and to make it available to the customer. Documented processes shall be within the organization's business and quality management systems.

The requirements of this Specification are in addition to those contained within ISO 9001.

#### **1.2 Application**

In principle, all requirements of this International Specification are intended to be applicable to all organizations in Electrical and Electronic sectors. Organizations in other sectors may also adopt this specification for the management of hazardous substances.

### **2 Normative references**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 9001, *Quality Management Systems – Requirements*