Xerox Environment, Health and Safety Supplier Requirements: Chemical Bans/Restrictions and Part Marking

EHS 1001

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1 Introduction

1.1 Objective

This document establishes Xerox Corporation's environmental, health and safety (EH&S) requirements for its suppliers with regard to regulatory compliance, chemical bans and restrictions, and parts marking. The requirements support Xerox's commitment to regulatory compliance, safe products, protection of the environment/human health and customer satisfaction as stated in the company's corporate EH&S policy (Appendix B).

1.2 Applicability

Xerox Corporation's suppliers of products, materials, parts and packaging.

1.3 Responsibilities of Xerox Suppliers

Xerox suppliers:

- shall meet all requirements of this standard
- shall certify compliance with this specification using all forms in Appendix C
- shall retain information and/or data to demonstrate compliance with this specification including but not limited to the Xerox or supplier part number, part or material description, substance or substances disclosed, substance percentage used by weight, supplier certificates of compliance of components and materials, results of analysis and analytical source where applicable, and the name of a responsible person
- shall provide, upon request, Xerox and/or third parties responsible for verification with copies of the aforementioned information as well as any other applicable compliance documentation
- shall have an Environmental Management System

1.4 Future Updates

Xerox will review this document on a periodic basis and will make any necessary revisions to ensure that these requirements remain relevant to current EH&S regulations, stakeholder requirements and industry practices. The changes are explained in Appendix D. Forms completed using earlier versions of this document remain valid unless new data is specifically requested.

1.5 Questions/Additional Information

Please direct any questions about these requirements to your Xerox procurement contact.

2 Specification

2.1 Regulatory Compliance

Suppliers shall comply with all applicable EH&S laws and regulations in the jurisdictions in which they operate and shall comply with all EH&S laws and regulations applicable to the product, part, material, packaging or commodity provided to Xerox.

2.2 Ozone Depleting Substances

Supplier shall not incorporate an Ozone Depleting Substance (ODS) as defined by the Montreal Protocol and the US Environmental Protection Agency Clean Air Act Amendments of 1990 in the manufacture or processing of a product, part, or commodity provided to Xerox. A list of ODS' is available at http://www.epa.gov/ozone/ods.html.

2.3 Chemical Substance Bans and Restrictions

Supplier shall meet the *Xerox Specifications for Control of Chemical Substances in Products, Parts, Materials and Packaging* as specified in Appendix A.
Supplier shall provide the weight (in grams) of each battery contained in any given part or product.

2.4 Parts Marking

Supplier shall mark plastic parts, assemblies and end-items provided to Xerox, with the resin content identification code as specified in Xerox Multinational Design Standard 88P215 "Methods and Requirements for Part Marking Identification" or ISO Standard 11469, "Plastics – Generic identification and marking of plastic parts". Note that this requirement applies to parts weighing more than 24 grams.

2.5 Packaging

- Supplier must comply with the requirements as defined in Xerox Standard EH&S-710, "EH&S Requirements for Packaging"
  http://www.xerox.com/downloads/usa/en/f/FILE_EHSA_XRX_INFO_REQUIREMENTS_710.pdf
- This standard specifies the minimum environment, health, and safety requirements for packaging of products, parts, or materials shipped to any manufacturing site, distribution center or customer from suppliers or other Xerox locations.

Appendix A

Xerox Specifications for Control of Chemical Substances in Products, Parts, Materials and Packaging

A.1 OBJECTIVE

This appendix details Xerox Corporation's specifications for prohibiting and restricting certain chemical substances in products, parts, materials and packaging provided to Xerox for use in Xerox products. Additional requirements apply to Xerox consumables.

A.2 DEFINITIONS

Accessories: items not integral to, but necessary for, use of a product. Accessories include, but are not limited to, items such as power cords, finishers, feeders or product manuals.

Batteries: any source of electrical energy generated by direct conversion of electrical energy, and consisting of one or more primary battery cells (non-rechargeable) or of one or more secondary battery cells (rechargeable).

Consumables: items such as inks, toners, fuser lubricant or papers.

Electronic product: electrical and electronic equipment that is within the scope of the waste electrical and electronic equipment Directive 2002/96/EC and/or the restriction of the use of certain hazardous substances in electrical and electronic equipment Directive 2002/95/EC.

Engineered Nanomaterials: Engineered nanomaterials are those which have been manufactured to have at least one dimension between approximately 1 and 100 nanometers (nm); including but not limited to nanoparticles, nanofibers, nanopowders, nanotubes and nanowires, generically referred to as nano-objects, as well as aggregates and agglomerates of these materials. This includes a wide range of surface chemistries and applications.

Impurity: residual quantities of chemical substances that are unintentionally present in raw materials or are by-products of the manufacturing process.

Ingredient: any chemical substance intentionally used in the formulation of a material for use in the manufacture of electrical and electronic products or components thereof.

Material: any chemical substance or homogeneous mixture of substances.

New product: any piece of equipment put on the market for the first time, regardless of the date of launch of the particular model, and supplied as new.

Packaging: refers to containment for the purposes of marketing, protection or handling of a product and shall include a unit package, an intermediate package and a shipping container.

Part: any functional unit comprised of one or more mechanical or electrical components.

Put on the market: the initial action by which a product is made available for the first time, i.e. leaves the factory or enters distribution, in the applicable territory.

Re-used product: any piece of equipment that has already been placed for the first time on the applicable market and is then supplied as used or previously owned, without modification other than repair, reconditioning or upgrade.

Spare parts: any part made available for replacement of like parts in existing equipment.

A.3 SPECIFICATIONS

A.3.i Prohibited Substances

The substances listed in Tables A1 and A2 shall not be used as ingredients in any material or part provided to Xerox for use in equipment, or in spare parts for use in products, or in accessories, or in packaging except as defined by further qualification or exemptions. Additional requirements apply to Xerox consumables as outlined in EH&S 701 Xerox Environment, Health and Safety Requirements for Materials.

RoHS[1] Prohibited Substances:

Table A1 covers European Union RoHS prohibited or banned substances. These requirements apply to electronic products put into distribution for the first time after July 1, 2006 and/or parts and materials intended for use in electronic products put into distribution for the first time after July 1, 2006. Xerox only allows the use of these prohibited materials for applications that have been determined by the European Union to be exempt because substitutes are technically infeasible at this time or because substitutes would have adverse safety or environmental effects.

A list of approved RoHS exemptions may be found in Table A3.

Table A1. RoHS Prohibited Substances

Substance	Qualification
Cadmium and its compounds	Prohibited unless its application is exempted per ROHS[1]. The substances shall not be present in concentrations exceeding 0.01 % by weight per homogeneous material used in parts or products[2] .
Hexavalent Chromium and its compounds	Prohibited unless its application is exempted per ROHS[1]. The substances shall not be present in concentrations exceeding 0.1 % by weight per homogeneous material used in parts or products[2].
Lead and its compounds	Prohibited unless its application is exempted per ROHS[1]. The substances shall not be present in concentrations exceeding 0.1 % by weight per homogeneous material used in parts or products[2].
Mercury and its compounds	Prohibited unless its application is exempted per ROHS[1]. The substances shall not be present in concentrations exceeding 0.1 % by weight per homogeneous material used in parts or products[2].
Polybrominated biphenyls (PBBs)	The substances shall not be present in concentrations exceeding 0.1 % by weight per homogeneous material used in parts or products[2].
Polybrominated diphenylether (PBDEs) including deca-BDE	The substances shall not be present in concentrations exceeding 0.1 % by weight per homogeneous material used in parts or products[2].

[1] EU Directive 2002/95/EC on the restrictions of the use of hazardous substances in electrical and electronic equipment (RoHS)

[2] EU Decision 2005/618/EC establishing the maximum concentration values for ROHS. Homogeneous material means a material that can not be mechanically disjointed into different materials. The term "homogeneous" means "of uniform composition throughout", for example individual types of plastics, ceramics, glass, metals, alloys, paper, board, resins, plating, coating and finishes. The term "mechanically disjointed" means that the materials can be, in principle, separated by mechanical actions such as for example: unscrewing, cutting, crushing, grinding and abrasive processes.

Table A2. Other Prohibited Substances in Xerox products, parts, materials, accessories and packaging

Applies to any material or part provided to Xerox for use in equipment, or in spare parts for use in products, or in accessories, or in packaging

Substance	Qualification	Reference
Asbestos and asbestos materials	Shall not be an ingredient.	76/769/EEC*, Marketing and Use of Dangerous Substances and amendments: (83/478/EEC; 85/610/EEC; 87/217/EEC; 91/659/EEC; 99/77/EEC). United States: Toxic Substances Control Act (restricts new uses);
Azo Colorants	Shall not be an ingredient if chemical breakdown results in release of aromatic amines listed in Directive 2002/61/EC.	76/769/EEC, Marketing and Use of Dangerous Substances and amendments: (2002/61/EC; 2003/03/EEC).: http://europa.eu.int/eurlex/pri/en/oj/dat/2002/l_243/l_243200209111en00150018.pdf; Blue Angel Eco-Logo
Benzene	Shall not be an ingredient, or present as an impurity in concentrations ≥0.1 % by weight.	76/769/EEC, Marketing and Use of Dangerous Substances, Blue Angel Eco-Logo
Cadmium and its compounds	In **non-electronic products and accessories**: banned from use as pigment, dye, or stabilizer in concentrations greater than 0.01 % by weight . In **packaging**: the sum of the concentration levels of incidentally introduced lead, cadmium, mercury and hexavalent chromium must be less than 100 parts per million. In **batteries**: banned in concentrations ≥0.002 % by weight	76/769/EEC, Marketing and Use of Dangerous Substances and amendments: (91/338/EEC, 2006/66/EC, 93/86/EEC); 2002/95/EC (EU/RoHS Directive and its amendments) ; China Management Measures on EIP Pollution Control; EU Battery Directive 2006/66/EC; EU Packaging & Packaging Waste Directive 94/62/EC Article 11
Formaldehyde	Shall not exceed specified emission limits for composite wood products. Wood packaging materials, including pallets, are exempt from these requirements. See Table A2.1 for specific emission limits.	California Code of Regulations Sections 93120-93120.12, Title 17.
Hexachlorobenzene	Shall not be an ingredient.	Xerox Requirement Canada - Prohibition of Certain Toxic Substances Regulations, 2005.
Hexavalent Chromium and its compounds	In **packaging**: the sum of the concentration levels of incidentally introduced lead, cadmium, mercury and hexavalent chromium must be less than 100 parts per million.	2002/95/EC (EU RoHS Directive and its amendments); China Management Measures on EIP Pollution Control; EU Packaging & Packaging Waste Directive 94/62/EC Article 11
Inorganic Cyanide Compounds	Shall not be an ingredient. See Table A2.2 for a specific list of compounds.	Xerox Requirement

Substance	Qualification	Reference
Lead and its compounds	Banned from use in paints or as a stabilizer in concentrations greater than 0.01 % by weight. In **packaging**: the sum of the concentration levels of incidentally introduced lead, cadmium, mercury and hexavalent chromium must be less than 100 parts per million. In **batteries**: requires marking with the chemical symbol if concentrations ≥0.004 % by weight.	76/769/EEC, Marketing and Use of Dangerous Substances and amendments: (86/677/EEC, 2006/66/EC, 93/86/EEC); 2000/53/EC 2002/95/EC (EU/RoHS Directive and its amendments), China Management Measures on EIP Pollution Control; EU Battery Directive 2006/66/EC; EU Packaging & Packaging Waste Directive 94/62/EC Article 11
Mercury and its compounds	In **packaging**: the sum of the concentration levels of incidentally introduced lead, cadmium, mercury and hexavalent chromium must be less than 100 parts per million. In **batteries**: banned in concentrations ≥0.0005 % by weight In **button batteries**: banned in concentrations >2 % by weight	76/769/EEC, Marketing and Use of Dangerous Substances and amendments: (86/677/EEC, 2006/66/EC, 98/101/EEC; 2002/95/EC (EU/RoHS Directive and its amendments); EU Battery Directive 2006/66/EC; EU Packaging & Packaging Waste Directive 94/62/EC Article 11
Ozone Depleting Substances (ODS)	Shall not be ingredients.	List of ODS' available at http://www.epa.gov/ozone/ods.html
Pentacholorophenol	Shall not be an ingredient. Prohibited in the treatment of wood.	76/769/EEC, Marketing and Use of Dangerous Substances with amendment,1999/51/EC
Perfluorooctane sulfonate (PFOS)	Shall not be an intentionally added ingredient in preparations in concentrations of ≥ 0.005 % by weight. Shall not be an intentionally added ingredient in semi-finished products or articles, or parts at concentrations ≥ 0.1 % by weight calculated with reference to the mass of structurally or microstructally distinct parts.	76/769/EEC, Marketing and Use of Dangerous Substances and amendment 2006/122/EC: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:372:0032:0034:EN:PDF
Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis (1,1-dimethylethyl)-(CAS# 3846-71-7)	Shall not be an ingredient.	Japanese law concerning the evaluation of chemical substances
Polychlorinated Biphenyls (PCBs)	Shall not be ingredients.	The Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances (Class 1 chemical substances: Japanese law), 76/769/EEC, Marketing and Use of Dangerous Substances with amendment 85/478/EEC
Polychlorinated Napthalenes (more than three chlorine atoms)	Shall not be ingredients.	The Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances (Class 1 chemical substances: Japanese law).
Polychlorinated terphenyl (PCTs)	Shall not be ingredients.	The Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances (Class 1 chemical substances: Japanese law), 76/769/EEC, Marketing and Use of Dangerous Substances with amendment 85/478/EEC.

Substance	Qualification	Reference
Halogen-Containing Polymers	Shall not be used for plastic packaging (includes PVC)	Xerox Requirement ; Blue Angel Eco-Logo
Radioactive Substances	Shall not be ingredients.	U.S. Nuclear Regulatory Commission Title10 CFR Part 20 (Annex C). Laws for the Regulation of Nuclear Source Material, Nuclear Fuel Material, and Reactors, 1986 (Japanese law)
Short Chain Chlorinated Paraffins	Shall not be ingredients.	EU Marketing and Use Directive (76/769/EEC +2002/45/EC)
1,1,2-Trichloroethane	Shall not be an ingredient.	Xerox Requirement
Tributyl Tin (TBT), Triphenyl Tin (TPT), and Tributyl Tin Oxide (TBTO)	Shall not be ingredients.	The Law concerning the Examination and Regulation of Manufacture etc. of Chemical Substances (Class 2 chemical substances: Japanese law) Class 1 chemical substances Japanese law for TBTO) Amendment to EU Directive 76/769/EEC, effective 2012

Table A2.1 – State of California Phase 1 and Phase 2 Formaldehyde Emission Standards for Hardwood Plywood (HWPW), Particleboard (PB), and Medium Density Fiberboard (MDF) – Phase 1 (P1) and Phase 2 (P2) Emission Standards (ppm)

Effective Date	HWPW-VC	HWPW-CC	PB	MDF	Thin MDF
1-1-2009	P1: 0.08	----------	P1: 0.18	P1: 0.21	P1: 0.21
7-1-2009	----------	P1: 0.08	----------	----------	----------
1-1-2010	P2: 0.05	----------	----------	----------	----------
1-1-2011	----------	----------	P2: 0.09	P2: 0.11	----------
1-1-2012	----------	----------	----------	----------	P2: 0.13
7-1-2012	----------	P2: 0.05	----------	----------	----------
Based on primary test method [ASTM E 1333-96(2002) in parts per million (ppm) Note: HWPW-VC=veneer core; HWPW-CC=composite core					

* **Note:** Effective June 1, 2009 substances regulated under EU 76/769/EEC will be incorporated into Annex XVII of EU REACH 1907/2006.

Table A2.2 – Inorganic Cyanide Compounds

No.	Chemical Name	CAS Number	Formula
1	Hydrogen cyanide	74-90-8	HCN
2	Sodium cyanide	143-33-9	NaCN
3	Potassium cyanide	151-50-8	KCN
4	Silver cyanide	506-64-9	AgCN
5	Cyanogen bromide	506-68-3	BrCN
6	Barium cyanide	542-62-1	$Ba(CN)_2$
7	Copper cyanide	544-92-3	CuCN
8	Nickel cyanide	557-19-7	$Ni(CN)_2$
9	Zinc cyanide	557-21-1	$Zn(CN)_2$
10	Barium tetracyanoplatinate	562-81-2	$BaPt(CN)_4$
11	Dipotassium tetracyanomercurate	591-89-9	$K_2Hg(CN)_4$
12	Calcium cyanide	592-01-8	$Ca(CN)_2$
13	Mercury dicyanide	592-04-1	$Hg(CN)_2$
14	Lead dicyanide	592-05-2	$Pb(CN)_2$
15	Copper cyanide	4367-08-2	$Cu(CN)_2$
16	Potassium dicyanocuprate	13682-73-0	$CuK(CN)_2$
17	Potassium cobaltic cyanide	13963-58-1	$K_3Co(CN)_6$
18	Potassium dicyanoaurate	13967-50-5	$KAu(CN)_2$
19	Sodium copper cyanide	14264-31-4	$Na_2Cu(CN)_3$
20	Copper dicyanide	14763-77-0	$Cu(CN)_2$
21	Potassium nickel cyanide	39049-81-5	$K_2Ni(CN)_3$

TABLE A3. ROHS Exemptions[3]

Substance	Applications that are exempted
Mercury, Lead, Hexavalent Chromium, Cadmium, PBDEs, PBBs	▪ Spare parts for use in electronic products first put on the EU marketplace before 1 July 2006. ▪ Parts for upgrading the functionality or extending the capacity of electronic products first put on the EU marketplace before 1 July 2006. ▪ Re-used electrical and electronic products first put on the EU marketplace before 1 July 2006.
Mercury	▪ Mercury in compact fluorescent lamps not exceeding 5 mg per lamp. [1] ▪ Mercury in straight fluorescent lamps for general purposes not exceeding: o Halophospate 10 mg [2.1] o Triphosphate with normal lifetime 5 mg [2.2] o Triphosphate with long lifetime 8 mg [2.3] ▪ Mercury in straight fluorescent lamps for special purposes. [3] ▪ Mercury in other lamps not specifically mentioned above. [4] ▪ Mercury used as a cathode sputtering inhibitor in DC plasma displays with a content up to 30 mg per display until 1 July 2010. [36]
Lead	• Lead in glass of (a) cathode ray tubes, (b) electronic components, (c) fluorescent tubes. [5] • Lead as an alloying element in steel containing up to 0.35 % lead by weight, aluminum containing up to 0.4 % lead by weight and as a copper alloy containing up to 4 % lead by weight. [6] • Lead: o in high melting point type solder (i.e. tin-lead solder alloys containing 85 % by weight or more of lead). [7.1] o in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signaling, transmission as well as network management for telecommunication. [7.2] o in electronic ceramic parts (e.g. piezoelectronic devices). [7.3] • Lead in lead-bronze bearing shells and bushes [9b] • Lead in compliant pin connector systems. [11] • Lead as a coating material for the thermal conduction module C-ring. [12] • Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80 % and less than 85 % by weight. [14] • Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages. [15] • Lead in linear incandescent lamps with silicate coated tubes. [16] • Lead halide as radiant agent in High Intensity Discharge (HID) lamps used for professional reprography applications. [17] • Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP ($BaSi_2O_5$:Pb) as well as when used as speciality lamps for diazo-printing reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ($(Sr,Ba)_2MgSi_2O_7$:Pb). [18] • Lead with PbBiSn-Hg and PbInSn-Hg in specific compositions as main amalgam and with PbSn-Hg as auxiliary amalgam in very compact Energy Saving Lamps (ESL). [19]

[3] These exemptions are consistent with the EU Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS). The numbers in square brackets correspond to the listings in the Annex to the Directive. When further decisions on these exemptions are forthcoming, this standard may be updated.

Substance	Applications that are exempted
Lead (cont…)	• Lead Oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays [LCD). [20] • Lead as impurity in RIG (rare earth iron garnet) Faraday rotators used for fibre optic communications systems. [22] • Lead in finishes of fine pitch components other than connectors with a pitch of 0.65mm or less with NiFe lead frames and lead in finishes of fine pitch components other than connectors with a pitch of 0.65mm or less with copper lead-frames. [23] • Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors. [24] • Lead oxide in plasma display panels (PDP) and surface conduction electron emitter displays (SED) used in structural elements; notably in the front and rear glass dielectric layer, the bus electrode, the black stripe, the address electrode, the barrier ribs, the seal frit and frit ring as well as in print pastes. [25] • Lead oxide in the glass envelope of Black Light Blue (BLB) lamps. [26] • Lead alloys as solder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers. [27] ▪ Lead bound in crystal glass as defined in Annex 1 (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC. [29] ▪ Lead in soldering materials in mercury free flat fluorescent lamps (which e.g. are used for liquid crystal displays, design or industrial lighting). [31] ▪ Lead oxide in seal frit used for making window assemblies for Argon and Krypton laser tubes. [32] ▪ Lead in solders for the soldering of thin copper wires of 100 µm diameter and less in power transformers. [33] ▪ Lead in cermet-based trimmer potentiometer elements.[34] ▪ Lead in the plating layer of high voltage diodes on the basis of a zinc borate glass body. [37]
Cadmium	▪ Cadmium and its compounds in electrical contacts and cadmium plating[4] except for applications banned under Directive 91/338/EEC amending Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations. [8] ▪ Cadmium alloys as electrical/mechanical solder joints to electrical conductors located directly on the voice coil in transducers used in high-powered loudspeakers with sound pressure levels of 100 dB (A) and more. [30] ▪ Cadmium in photoresistors for optocouplers applied in professional audio equipment until 31 December 2009. [35] ▪ Cadmium and cadmium oxide in thick film pastes used on aluminum bonded beryllium oxide. [38]
Hexavalent chromium	▪ Hexavalent chromium as an anti-corrosion of the carbon steel cooling system in absorption refrigerators. [9]
Lead and Cadmium	▪ Lead and cadmium in optical and filter glass. [13] ▪ Lead and cadmium in printing inks for the application of enamels on borosilicate glass. [21]

[4] Cadmium plating means any deposit or coating of cadmium on a metallic surface.

A3ii. Reportable Substances ("Reportable" if intend to use)

The following substances (Table B1) have been shown to have the potential to cause adverse health effects or have the potential to generate hazardous waste. Consequently, these substances may be subject to legislative control in certain market areas.

If a "reportable" material is considered for use in equipment, spare parts, or accessories, it must be reported to Xerox using form EHS-1001B.

Additional requirements apply to Xerox consumables as defined in Xerox EH&S Standard 701 for Materials.

Table B1. Xerox Reportable Substances

Antimony and its compounds
Arsenic and its compounds
Beryllium and its compounds
Bismuth and its compounds
Bis-phenol A (BPA)
Indium
Nickel and its compounds
Phthalate (DINP)
Phthalate (DIDP)
Phthalate (DNOP)
Tris (2-chloroethyl) phosphate (TCEP) (CAS# 115-96-8)
Engineered nanomaterials – specify type
PVC (PVC in packaging is prohibited)
Selenium and its compounds

The following substances (Table C1) have been identified as "substances of very high concern" and as such are subject to specific requirements under the EU REACH Regulation 1907/2006. Use of these substances in Xerox parts, accessories or consumables is to be reported to Xerox using form EHS1001C. In some instances, individual substances are already prohibited from use in products or parts supplied to Xerox, as outlined in Tables A1 and A2.

Important Note

The number of substances of very high concern will increase in time as the European Chemicals Agency adds substances of very high concern to its candidate list. Table C1 below is current as of December 2009 and will be updated periodically but it is essential that suppliers inform themselves of the latest position, since this is updated by the European Chemicals Agency every six months. Information on the latest list of substances of very high concern is available through the European Chemicals Agency website at: http://echa.europe.eu/.

When completing Xerox EHS-1001 Form C, "Supplier Use of REACH Substances", Xerox is relying on its suppliers to be aware of the latest candidate list and to report accordingly.

Table C1. REACH Reportable Substances

Substance	CAS #
Anthracene	120-12-7
4,4'- Diaminodiphenylmethane	101-77-9
Dibutyl phthalate	84-74-2
Cobalt dichloride	7646-79-9
Diarsenic pentaoxide	1303-28-2
Diarsenic trioxide	1327-53-3
Sodium dichromate	7789-12-0, 10588-01-9
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene	81-15-2
Bis (2-ethyl(hexyl)phthalate) (DEHP)	117-81-7
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α – HBCDD, β-HBCDD, γ-HBCDD)	25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8)
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8
Bis(tributyltin)oxide	56-35-9
Lead hydrogen arsenate	7784-40-9
Benzyl butyl phthalate	85-68-7
Triethyl arsenate	15606-95-8

Appendix B

Xerox Environment, Health and Safety Policy

Xerox Corporation is committed to the protection of the environment and the health and safety of its employees, customers and neighbors. This commitment is applied worldwide. The following principles shall govern all business practices in the design, manufacture, procurement, marketing, distribution, maintenance, reuse/recycling and disposal of products and related services:

1. Protection of the environment and the health and safety of our employees, customers and neighbors from unacceptable risks takes priority over economic considerations and will not be compromised.
2. Xerox operations must be conducted in a manner that safeguards health, protects the environment, conserves valuable materials and resources, and minimizes risk of asset losses.
3. Xerox is committed to designing, manufacturing, distributing and marketing products and processes to optimize resource utilization, prevent pollution and minimize environmental impacts.
4. All Xerox operations and products are, at a minimum, committed to compliance with applicable governmental requirements and Xerox standards.
5. Xerox is dedicated to continuous improvement of its performance in environment, health and safety.

Appendix D

Revision History

Date	Section	Change
October 2004, revision 2.1	VI.A.4	Consumables removed from scope of standard
October 2004, revision 2.1	Appendix B2	Table B3 changed to "reportable substances" and list reduced to relevant metals and compounds in hazardous waste legislation (all organic compounds removed, bismuth added)
March 2005, revision 2.2	Table B2. ROHS Exemptions	Updated table with exemptions approved by EU Technical Advisory Committee on December 10, 2005
March 2005, revision 2.2	Appendix C	Revision to form EHS 1001A, B and C to clarify their intent and use
March 2005, revision 2.2	Table 1, Prohibited Substances	This table was split into Table 1A to reflect RoHS requirements only and Table 1B for other prohibited substances. This change was made to avoid confusion. The requirements remain the same.
March 2005, revision 2.2	Footnote, A.3.i	Revised to include the EU's definition of "homogenous substance".
March 2005, revision 2.2	Table 3	Nickel, Tin and Zinc compounds reinstated for hazardous waste purposes.
November 2005, revision 2.3	Table 1-A	Table and footnote revised for consistency with Decision 2005/618/EC and Commission guidance dated May 2005.
November 2005, revision 2.3	Table 2	Table revised to align the numbering system with that in the Annex to Directive 2002/95/EC, to include new listings from Commission guidance dated May 2005, and to adopt new exemptions in Decisions 2005/717/EC and 2005/747/EC. Footnote revised.
November 2005, revision 2.3	Table B3	Table revised to include radioactive substances, and flame retardants other than PBBs and PBDEs.
January 2006, revision 3.0	Table 1-B	Table revised to be consistent with Joint Industry Guide.
January 2006, revision 3.0	Table B3	Table revised to be consistent with Joint Industry Guide.
December 2006, revision 3.1	Table 2	Table revised to adopt new exemptions in Decisions 2006/310/EC, 2006/690/EC, 2006/691/EC and 2006/692/EC.
August 2007	1.3 2.5 A.2 Table 1-B Table 2	Added EMS responsibility. Added packaging requirements. Added definition of batteries. Table revised to include ban on use of cadmium in portable batteries in Directive 2006/66/EC, and updated to harmonized list. Added prohibition of halogen–containing plastics as packaging. Table revised to remove exemption [28] on chromium passivisation, which became obsolete on 1 July 2007.
June 6, 2008	Tables 1A, 1B, 2, 3 and Forms EHS-1001A and EHS-1001B	Table 1A - Specification that deca-BDE is prohibited was added under Polybrominated diphenylether (PBDEs) Table 1B - Hexachlorobenzene and Perfluorooctane Sulfonates were added Table 1B - Requirements for batteries was added under Cadmium, Lead and Mercury Table 1B - References were added

		Table 2 RoHS Exemptions - Exemption 9a for decaBDE in polymeric applications was removed Table B3 Reportable Substances - Added the following: Bisphenol-A, Indium, DEHP Table B3 Reportable Substances - Polybrominated Flame retardants now includes HBCDD and TBBPA Table B3 Reportable Substances - Added specification that use of PVC in packaging is prohibited Table B3 Reportable Substances - Changed "Nickel compound - not including the metallic element" to Nickel and its compounds Form EHS-1001A - Replaced column A.3.ii for reporting weight of component batteries, and removed exemption 9a Form EHS-1001B - Added columns for Bisphenol-A, Indium, DEHP Form EHS-1001B - Changed text in Polybrominated Flame retardants to include HBCDD and TBBPA
December 1, 2008	Table 1B Table B3	Table 1B – Replaced 91/157/EEC with 2006/66/EC Table 1B – Specified marking requirement for batteries containing lead Tables 1B and 1C – Added specification for formaldehyde emissions Table 1D – Added table of inorganic cyanide compounds Table B3 – Replaced Diethylhexyl phthalates (DEHP) with Phthalates (including DEHP, BBP, DBP)
March 31, 2009	Table 1B Table B3 Table B4 and EHS1001C	Appendix A.2 – added a definition for engineered nanomaterials Table A1 – Added references to Blue Angel Table A2 – Added Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis (1,1-dimethylethyl), removed PBDO. Table B1 – Deleted HBCDD, DEHP, BBP and DBP as these are now included in Table C1. Risk assessment data has resulted in the delisting of TBBPA. Added DINP, DIDP, DNOP, TCEP and engineered nanomaterials. Table C1 – Added REACH substances of very high concern and associated EHS-1001C reporting form. Editorial changes to table numbering scheme
June 15, 2009	Table A3	Added EU RoHS exemptions 30-38