

## Comments to UN Special Rapporteur on Toxics and Human Rights

### Electronics Watch Input on Gender and Toxics

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#### ABOUT US

The **mission of Electronics Watch** is to use public procurement leverage to promote and protect the rights of workers in global supply chains.

Electronics Watch is an independent monitoring organisation that helps public sector organisations work together, and collaborate with civil society monitors in production regions, to protect the rights of workers in their electronics supply chains. Electronics Watch envisions a world in which the rights of all workers in the electronics supply chain are respected, workers' voices are heard, and working conditions are safe and decent.

#### PREVIOUS EXPERIENCE

While engaging with workers and trade unionists we understand in greater detail about the situation in which they are working. Some of the recurring issues that we have observed while we carry out worker driven monitoring in countries of electronics production are as follows:

- no training or knowledge on working with chemicals to keep them safe.
- do not know what chemicals they are working with.
- exposure to fumes/odour of chemicals/radiation
- no breaks provided.
- reproductive health problems in both women and men workers
- noisy equipment
- heat
- chemical spills
- ergonomics problems, high stress levels
- PPE

Electronics Watch monitors on the ground in areas of production and mining to understand what the issues are impacting workers and trade unions along with its monitoring partners. To understand the grievances, gather data and to seek remedy on behalf of the workers. Strengthening the voices of workers especially women workers so that they come forward with their complaints, seek remedy and are agencies of change on the ground. Thereby empowering more workers to seek justice to work in

safe workplaces and live a life of dignity. In the course of our work to protect workers health and to enable public buyers to protect the health of workers in their supply chains, Electronics Watch has produced tools and guidance for action.

## I CHEMICAL GUIDANCE

Electronics Watch produced the chemical guidance for public buyers titled [How to Protect Workers from Chemical Hazards in Electronics Supply Chains Guidance for Public Buyers V. 1.0](#). Many of these workers—at all tiers of the supply chain—handle toxic chemicals, such as solvents, adhesives, resins and etchants that can cause illness and even death after prolonged exposure with inadequate industrial hygiene. This is an acute problem for public buyers who have a special responsibility to protect the health, safety and wellbeing of the people in their jurisdictions, but should not exercise this responsibility at the expense of the health, safety and wellbeing of people in different parts of the world who make vital equipment for public administrations.

This Guidance is the product of extensive collaboration among occupational health and safety experts and advocates, and Electronics Watch affiliates and monitoring partners. Experts helped to focus the Guidance on a set of 28 chemicals of concern relevant to the public procurement process and define the actions necessary to protect workers from harm. We propose a two-fold public procurement strategy to help protect workers from chemical hazards. First, we have developed a list of 28 chemicals of concern (Annex 1) which include 12 chemicals that should be immediately discontinued in favour of safer alternatives and 16 chemicals that may have no feasible alternatives in certain applications but should be used with caution, that is, with adequate industrial hygiene measures. Public buyers can use this list of chemicals of concern in pre-award measures, such as selection and award criteria, to screen out the worst offenders and reward suppliers who improve chemical safety in the manufacturing process. This Guidance includes several possible contract clauses and options for verification.

12 chemicals to be discontinued					
16 chemicals to be used with caution					
CASRN	Chemical Name	Recommendation	GS Score	REACH	Application
127-18-4	Tetrachloroethylene	Discontinue use and replace with safer alternative.	BM-1	Yes	Solvent
108-88-3	Toluene		BM-1	Yes	Solvent
71-43-2	Benzene		BM-1	Yes	Solvent
75-09-2	Dichloromethane		LT-1	Yes	Solvent
106-94-5	1-Bromopropane		BM-1	Yes (SVHC)	Solvent
25637-99-4	Hexabromocyclododecane		LT-1	Yes (SVHC)	Ingredient in resins and plastics
71-55-6	Methylchloroform		LT-P1	Yes	Solvent
110-54-3	n-Hexane		BM-1	Yes	Solvent
110-82-7	Cyclohexane		LT-P1	Yes (SVHC)	Solvent
79-01-6	Trichlorethylene		LT-1	Yes (SVHC)	Solvent
67-56-1	Methyl alcohol		BM-1	Yes	Solvent
872-50-4	n-methyl Pyrrolidone		Use only as photoresist developer where alternatives not feasible. Use with proper IH and environmental controls.	BM-1	Yes (SVHC)

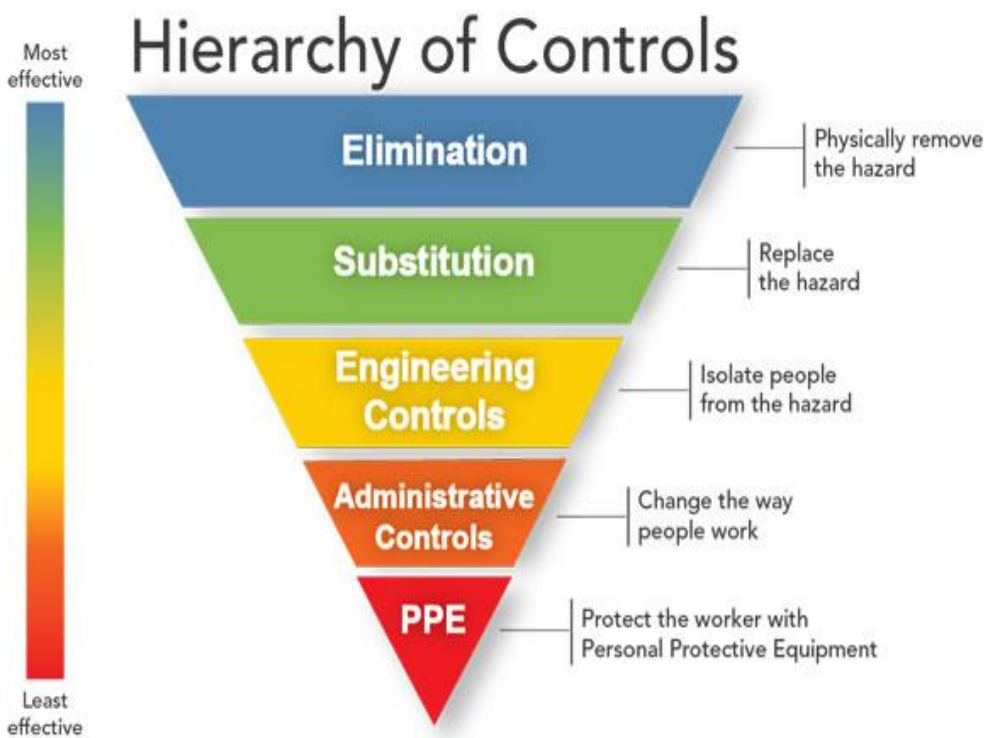
## II THE PRECAUTIONARY PRINCIPLE

The precautionary principle requires companies to take action when credible threats of harm exist, even though some uncertainty may remain.<sup>i</sup> It aims at prevention, based on early detection of potentially dangerous processes, and detecting harmful processes at the start. This is particularly important where there is the potential for serious and irreversible health effects such as developmental damage, cancer, or life-long illness such as asthma. The principle aims at prevention of harm based on early detection of potentially dangerous conditions. It shifts the burden of proof from workers to prove a work-related harm to companies to prove the absence of harm. The precautionary principle is included in Article 191 of the Treaty on the Functioning of the European Union. It is also embedded as Principle 7 in the UN Global Compact, a set of ten principles for businesses to conduct themselves sustainably and responsibly. Principle 7 directs companies to exercise prevention measures, taking early action before damage occurs, as this is the most effective approach. The precautionary principle has four central components;<sup>ii</sup>

1. Taking preventive action in the face of uncertainty;
2. Shifting the burden of proof to the proponents of an activity;
3. Exploring a wide range of alternatives to possibly harmful actions; and,
4. Increasing public participation in decision making.

### III HIERARCHY OF CONTROLS

For any situation in which workers are exposed to toxic chemicals there is a Hierarchy of Controls in which the control methods at the top of the hierarchy (the top of the inverted triangle below) are more effective and protective than those at the bottom. Following this hierarchy leads to the implementation of safer systems, where the risk of illness is substantially reduced. However, employers often do not follow the hierarchy of controls because the methods at the top may be more expensive than those at the bottom. Some employers rely on the least effective control measures—personal protective equipment—in lieu of more effective controls higher on the hierarchy, such as elimination, substitution, or the use of engineering controls.



*Credit: Electronics Watch. Not to be shared or distributed.*

### IV ELECTRONICS WATCH CODE

#### Standards

The [Electronics Watch Code](#) sets out the standards for the production of goods purchased by its affiliates. The standards in this Code are general enough that they capture the widest possible range of violations, but also specific enough to be easily interpreted and enforced.

Occupational Health and Safety Standards (Relevant ILO Conventions: Relevant ILO Conventions: No.

115<sup>iii</sup>, No. 119<sup>iv</sup>, No. 120<sup>v</sup>, No. 136<sup>vi</sup>, No. 139<sup>vii</sup>, No. 148<sup>viii</sup>, No. 155<sup>ix</sup>, No. 161<sup>x</sup>, No. 170<sup>xi</sup>, No. 174<sup>xii</sup>, No. 183<sup>xiii</sup>, No. 187<sup>xiv</sup>, and No. 190<sup>xv</sup>)

The Goods must be produced under healthy and safe working conditions, in compliance with domestic and international labour standards, guaranteeing respect for Employees' and Communities' health and the environment.<sup>xvi</sup> The Goods should be produced in Factories that maintain effective occupational health and safety (OHS) programmes in the following three areas: comprehensive OHS programmes; identification, evaluation, and control of health and safety hazards; and worker participation in the development, implementation, and verification of OHS programmes.

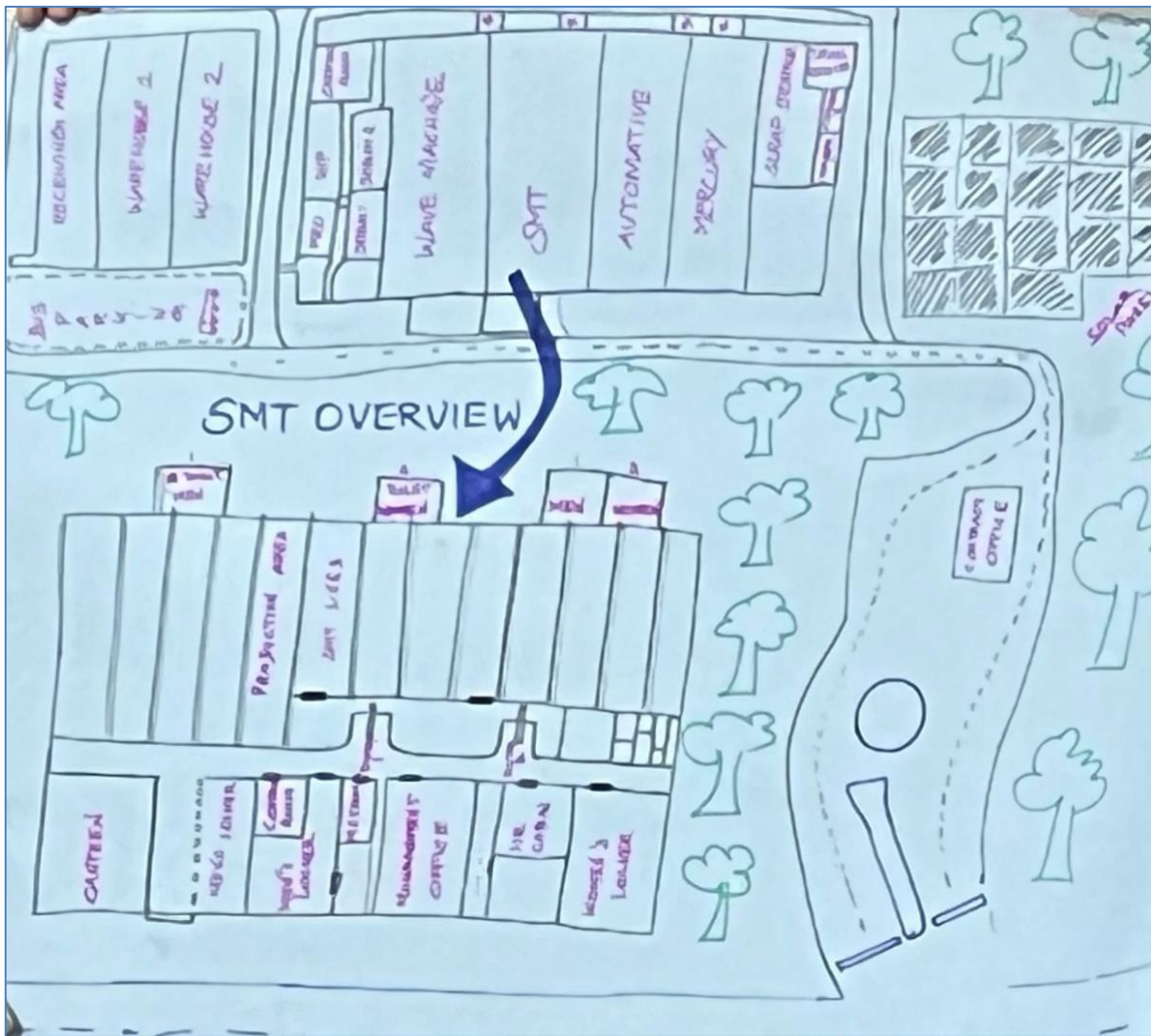
Violations include the following areas but are not limited to:

1. Evaluation and monitoring
2. Transparency
3. Training
4. Worker voice
5. Safe materials
6. Physical Environment
7. Occupational injury and diseases

Hazardous should be replaced with substitutes that “should be significantly less toxic, persistent, bio accumulative or bio concentrating, carcinogenic, ***mutagenic, neurotoxic, endocrine disrupting, or hazardous to reproduction and development*** than the chemicals they replace.”

#### IV TRAINING FOR WORKERS ON CHEMICAL HAZARDS

Training of trainers have been carried out for organisers, worker leaders and trade unionists on occupational health and safety with a focus on mapping workplaces to understand what are the hazards that should be addressed to ensure safe and healthy work environment. Understanding chemical hazards, how does it impact the body and health of the workers especially women workers who are the majority of workplaces in this industry, setting up occupational health and safety committees to ensure workers can engage in a democratic manner with the management to bring the change they wish to address hazards at the workplace.



Mapping of a workplace, Credit: Electronics Watch. Not to be shared or distributed.

Electronics Watch in our current strategic plan will be focused on working towards workers exercising their right to organise and access to remedy with the support of public buyers who are affiliated to Electronics Watch.

**SUBMISSION BY:**

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<sup>i</sup> EU Legislation Communication (COM(2000) (final) on the precautionary principle (2000) <https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=LEGISSUM%3A132042>

<sup>ii</sup> Kriebel, Tickner, et al., (September 2001) "The Precautionary Principle in Environmental Science", *Environmental Health Perspectives*, Pg. 871, Volume 109, Number 9.

<sup>iii</sup> C115- Radiation Protection Convention, 1960 (No. 115) Convention concerning the Protection of Workers against Ionising Radiations (Entry into force: 17 Jun 1962).

<sup>iv</sup> C119 - Guarding of Machinery Convention, 1963 (No. 119) Convention concerning the Guarding of Machinery (Entry into force: 21 Apr 1965).

<sup>v</sup> C120 - Hygiene (Commerce and Offices) Convention, 1964 (No. 120) Convention concerning Hygiene in Commerce and Offices (Entry into force: 29 Mar 1966).

<sup>vi</sup> C136 - Benzene Convention, 1971 (No. 136) Convention concerning Protection against Hazards of Poisoning Arising from Benzene (Entry into force: 27 Jul 1973).

<sup>vii</sup> C139 - Occupational Cancer Convention, 1974 (No. 139) Convention concerning Prevention and Control of Occupational Hazards caused by Carcinogenic Substances and Agents (Entry into force: 10 Jun 1976).

<sup>viii</sup> C148 - Working Environment (Air Pollution, Noise and Vibration) Convention, 1977 (No. 148).

<sup>ix</sup> C155 - Occupational Safety and Health Convention, 1981 (No. 155).

<sup>x</sup> C161 - Occupational Health Services Convention, 1985 (No. 161) Convention concerning the Protection of Workers against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration (Entry into force: 11 Jul 1979).

<sup>xi</sup> C170 - Chemicals Convention, 1990 (No. 170) Convention concerning Safety in the use of Chemicals at Work (Entry into force: 04 Nov 1993).

<sup>xii</sup> C174 - Prevention of Major Industrial Accidents Convention, 1993 (No. 174) Convention concerning the Prevention of Major Industrial Accidents (Entry into force: 03 Jan 1997).

<sup>xiii</sup> C183 - Maternity Protection Convention, 2000 (No. 183) Convention concerning the revision of the Maternity Protection Convention (Revised), 1952 (Entry into force: 07 Feb 2002).

<sup>xiv</sup> C187 - Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) Convention concerning the promotional framework for occupational safety and health (Entry into force: 20 Feb 2009).

<sup>xv</sup> C190 - Violence and Harassment Convention, 2019 (No. 190) Convention concerning the elimination of violence and harassment in the world of work.

<sup>xvi</sup> In Sections B and C of this Code, the term "Community" refers to the people who live within a geographic region who have been or can be affected by, or have an interest in, the occupational health and safety or environmental practices of a Factory. Following the definition of "the public concerned" in the Aarhus convention (1998), non-governmental organizations promoting environmental protection and meeting any requirements under national law shall be deemed to have an interest (Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters).