New sustainability criteria for examination and surgical gloves

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Health Care without Harm is presenting new sustainability criteria to support procurement officers in the development of relevant tenders, in order to improve sustainability and help health care institutions meet their goals. Currently, most tenders for gloves do not include broad sustainability criteria.

Together, hospitals around the globe can use their purchasing power to increase demand for products that reduce harm for people and the planet.

Why choose gloves?

- Gloves are among the highest volume products used in health care
- Labor and human rights abuses have been documented during their manufacture
- Glove production is associated with the use of chemicals of concern, greenhouse gas emissions and natural resource use
- The disposal of gloves results in a high volume of waste
- Not all glove use is necessary. Eliminating unnecessary glove use where possible is the most sustainable option
- There are opportunities for prevention.

What considerations are included in the criteria?

The sustainability criteria include questions about the environmental and social impacts of glove production, and the material and chemical ingredients used.

The criteria include questions about:

- Greenhouse gas emissions
- Hazardous chemical and material use
- Resource consumption
- Packaging
- Social issues and labor conditions.

How are the criteria organized?

The criteria are tiered, and there are required and award levels. The required level is one that all suppliers must meet. The desired or award level can help distinguish suppliers with more active sustainability efforts.

Finally, there are innovation opportunities, which are meant to provide direction for a company's research and development agenda.

How were the criteria developed?

The criteria were drafted by the Health Care Without Harm's Global Supply Chain Transformation Group, in collaboration with health care and product specialists, and based on European model specifications. The process of developing the criteria included a dialogue with industry experts and several major suppliers.

Resources

1) Reducing unnecessary glove usage resources

Royal College of Nursing initiative on reducing unnecessary glove usage:

- Resources available here.

Mater Health Australia initiative on reducing unnecessary glove usage: Baseline showed 62% of those observed were wearing gloves inappropriate to the task. Mater is hoping to save 450,000 US Dollars per year state-wide.

- Video
- Other supporting materials.

2) Health Care Without Harm series | Protection without pollution: COVID-19 waste-reduction strategies

- **Guidance for sustainable glove purchasing:** As health care facilities rethink their purchasing and supply chains in the wake of COVID-19, this guidance can serve as a roadmap for advancing sustainable options. [English] [Spanish] [Portuguese]
- **Guidance for immunization waste management:** The huge need for masks, gloves, and other personal protective equipment, millions of COVID-19 tests, and lifesaving hospital treatment for victims of the disease has, in many cases, led to an increase in health care waste. This guidance provides recommendations on how to better manage and safely dispose of waste associated with immunization. [English] [Spanish] [Portuguese]
- **Guidance for Personal Protective Equipment for immunizations practices:** This document is for health professionals who are using PPE as they administer vaccinations. It emphasizes infection prevention while reducing unnecessary product use and waste. [English] [Spanish] [Portuguese]

3) Webinars on gloves | 4th Saving Lives Sustainably Global Forum 2021

Sustainability Challenges in the Supply Chain at the Global Forum. This session includes an introduction to the gloves criteria and rationale. A representative of Medline discusses their sustainability initiatives related to gloves. Presentations from clinicians that have pioneered projects to reduce unnecessary glove use in the United Kingdom and Colombia include:

- Amy Leonard, Head of Education for Digital Learning, Great Ormond Street Hospital, United Kingdom,
- Nicola Wilson, Lead Practice Educator, Great Ormond St. Hospital, United Kingdom,
- Marly Orrego, Infection Prevention and Epidemiological Surveillance Coordinator, Fundacion Valle de Lili, Colombia.

Supply Chain Sustainability, opening session

- Kathleen McCaughey Manager, Sustainable Supply Chains Sustainability, Region Stockholm, Sweden, discusses forced labor and other labor concerns in the glove supply chain and a successful intervention to address issues.

Quick chart: Sustainable procurement criteria for examination and surgical gloves, version 2.0 (March 2022)

The purpose of this document is to provide a set of standardized tender criteria addressing priority sustainability issues for examination and surgical gloves. The criteria cover surgical and exam gloves only. The criteria do not cover gloves for other uses.

Summary of required criteria	
	Summary of supply chain management specifications (corporate-wide)
1	Supplier has an anti-corruption policy in place including for contractors and subcontractors.
2	Supplier has a forced labor/modern slavery policy or code of conduct in place and requires suppliers to implement these standards within their own supply chain, in line with the company's policy/code of conduct.
3	Supplier has mapped their supply chain, including raw materials, to understand potential risks of forced labor/modern slavery.
4	Supplier must provide Code of Conduct/modern slavery audits for any factories producing products.
5	Supplier must report the percentage of migrant workers at sites.
6	Upon request, supplier shall provide addresses of all sites involved in manufacturing the product.
7	The contract must be performed in accordance with the International Labour Organization's (ILO) eight core conventions: Nos. 29, 87, 98, 100, 105, 111, 138, and 182), including by subcontractors.
8	Supplier ensures their management team is regularly informed of forced or compulsory labor/modern slavery risks and involved in related decision-making.
9	Supplier has measured Scope 1 and 2 GHG footprint or conducted a GHG inventory throughout the company's operations (headquarters and manufacturing) by a recognized methodology and made results publicly available.

	Summary of product specifications
10	Products that are sterilized should use radiation methods.
11	Supplier shall provide the average weight per unit (g/unit) for medium-sized product and the permitted error range.

12	In the pre-clinical evaluation, disposable medical gloves should be tested according to: a) EN ISO 10993-5 (biological evaluation of medical devices, part 5: in vitro cytotoxicity testing), b) EN ISO 10993-10 (Biological evaluation of medical devices, Part 10: Test for irritation and skin sensitization) or equivalent standard.
13	Product does not contain polyvinyl chloride.
14	Product does not contain phthalates, esters of orthophthalic acid, at concentrations above 50 ppm (50 mg/kg) per substance, including di (2-ethylhexyl) phthalate) (DEHP).
15	Product is not treated with or does not intentionally contain biocidal chemicals.
16	Product is free of powder residue. The powder level in the product should not exceed 2 mg/glove.
17	Product is not treated with or does not contain substances intended to moisturize or soften the hands (skin-care additives).
18	Product is free of substances of high concern in concentrations above 0.1% by weight (1000 mg/kg) per substance).
19	Product does not contain added bisphenol A (CAS No. 80-05-7) or any BPA structural analogs in amounts over 0.01% by weight (100 mg/kg) in any individual part of the product.
20	Supplier will provide a list of accelerants and other allergens contained in the product (such as thiurams, dithiocarbamates, or thiazoles).
21	Product does not contain dyes in concentrations above 0.1% by weight.
22	Product does not contain fluorinated substances in concentrations above 0.1% by weight.
23	Product does not contain medium chain chlorinated paraffins, CAS No. 85535-85-9, in concentrations above 0.1% by weight.
	Summary of packaging specifications
24	The supplier should avoid packaging materials for which recycling schemes are unlikely to be established: a) polyvinyl chloride, b) polyvinylidene chloride, c) polystyrene, d) expanded polystyrene, e) regenerated cellulose, or f) non-recyclable plastics/paper combinations.
25	The supplier should avoid packaging additives that impede recycling.
26	Suppliers reduce product waste through improvements in packaging design, such as preventing multiple gloves being dispensed at once.
27	Packaging shall be reduced to the extent possible.
28	Packaging should be selected based on ease of recycling.
29	Secondary and tertiary packaging should be made of recycled material and Forest Service Certified (FSC) or equivalent for paper products.
30	Suppliers should prioritize the use of packaging that does not contain plastics.

End of summary of required criteria

Summary of award/desired criteria	
	Summary of supply chain management specifications (corporate level)
A1	Supplier incorporates measurable diversity and inclusion processes and goals into recruitment, training, remuneration, performance evaluation, ownership, and other structures and through the supply chain, including women, individuals with disabilities, and migrants.
A2	Supplier provides general training on modern slavery to all staff and additional training to those who have special responsibilities related to modern slavery risks.
A3	Supplier reports Code of Conduct audit results that are no more than two years old and performed by a third party according to established methods.
A4	Supplier's manufacturing sites are certified to recognized environmental management standards, such as the International Standardization Organization (ISO).
A5	Supplier discloses percentage of renewable energy used in manufacturing.
A6	Supplier provides third party-verified measurements of GHG emissions across the supply chain including manufacturing (carbon footprint or a GHG inventory must include Scope 1 and 2 at a minimum).
A7	Supplier has a policy or plan that addresses GHG emission reductions and identifies a person responsible for GHG-related matters.
A8	Supplier has a carbon reduction plan in place for Scope 1 and 2 emissions and targets and reduction plans are publicly available.
A9	Supplier participates in a voluntary GHG reporting mechanism.
A10	Supplier measures Scope 3 emissions for business travel, upstream emissions, and downstream emissions. Downstream emissions include sterilization, transport, storage, and disposal.
A11	Supplier has a carbon reduction target in place for Scope 3 emissions. Company has adopted science-based targets (in line with the Paris Agreement).
A12	Supplier uses low-emission modes of transport for delivery of raw materials and distribution that follow EPA SmartWay or equivalent program.
A13	Supplier procedures are in line with International Standardization Organization (ISO) 50001 or a similar energy management approach.
A14	If the product contains new substances that were added to the current candidate list during the contract period, within six months of the list being updated, the vendor shall present an action plan for phasing out the substances.
A15	Supplier has quantified water use at the manufacturing stage and uses water conservation technologies.
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A17	Supplier is rated or certified on ESG performance and can indicate the rating or certifying entity.
A18	Supplier requires Tier 1 suppliers to have a carbon reduction policy and target to manage emissions from the product supply chain.
A19	Supplier measures GHG emissions from the product supply chain. Supplier collects data from the supply chain on emissions that informs decision-making to help reduce emissions.
	Summary of product specifications
A20	For surgical gloves, product must not include the accelerant diphenylguanidine (CAS No. 102-06-7).
A21	Product must not include chemicals that have a harmonized classification as skin sensitizers under the Classification, Labeling and Packaging (CLP) Regulation.
A22	Weight of product should be standardized and disclosed. Products with the lowest unit weight value should be preferred while meeting quality standards.
A23	Supplier shall disclose a list of chemicals used in products that are known to cause adverse health and environmental effects based on authoritative lists of chemicals of concern.
A24	Product does not contain per- or poly-fluorinated alkyl substances or any of a class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom above 100 ppm total fluorine.
	Summary of packaging specifications
A25	Paper/carton/paperboard/wooden pallets are chain of custody-certified under the Forest Stewardship Council system or equivalent.
A26	Cellulose in packaging must be of recycled, unbleached pulp or bleached without chlorine gas.
A27	Suppliers use homogenous materials in packaging.
A28	Packaging has a high percentage of recycled content without compromising performance.
A29	Supplier has implemented an Extended Producer Responsibility scheme that allows the separate collection of product and packaging waste and supports recycling.

Summary of innovation/market dialogue

Innovation in glove material selection, manufacturing, reuse, and disposal is still needed to reduce material and energy consumption, reduce waste, and protect health and the environment.

Product and materials

- Develop new non-fossil fuel-based materials for the product.
- Explore the possibility of safely using recycled material in the product.
- Create a high-performing product that can be reused.
- Provide for raw materials supply tracing.
- Product data sheet should include all chemicals being used at each stage of production (accelerants, biocides, etc.) and any residues left in the final product.

Manufacturing

- Shorten supply chains with more localized manufacturing of the final product.
- Optimize manufacturing to reduce material used (for example, reduce weight and thickness) while maintaining high performance standards.
- Innovation is needed towards not using accelerators in the manufacturing process, especially DPG.

End of life

- Create circular systems to recover,recycle, and manufacture products that are easily recyclable (observe circular economy and extended producer responsibility principles) including addressing product design. Waste to energy is not considered a sustainable solution.
- Commit to establish an extended producer responsibility system. Propose implementation of a system that allows for separate collection of product waste and subsequent treatment by recycling (preferably) or another type of recovery by transport and delivery to an authorized waste manager.
- Innovation is needed in recycling, not downcycling.

Life cycle assessment

- Life cycle methodologies and quality differ from manufacturer to manufacturer. Innovation is needed to improve, standardize, and strengthen life cycle assessments.