Health Care Without Harm Europe

Sustainable procurement criteria | Examination gloves

These criteria have been developed by the Plastics Working group of HCWH Europe's Healthcare Market Transformation Network. The document was inspired by and builds on the sustainable procurement criteria for disposable gloves developed by the Swedish National Agency for Public Procurement. The purpose of this document is to provide a set of standardised tender criteria addressing priority sustainability issues identified in relation to the use of examination gloves in the European healthcare sector.[1] Procurers are free to adapt these criteria as required, in line with their own local policies and sustainability goals.

In addition to adopting a broad and balanced range of sustainability criteria in their tendering processes, we encourage healthcare procurers to employ the *best price-quality ratio* (BPQR) in product selection.[2] This enables a tender to be evaluated against award criteria that ensure that environmental and social considerations are incorporated into the contract. A price or cost criterion must also be included.

These criteria will be developed and improved over time, ensuring they keep pace with market developments and procurement best practice. We therefore welcome feedback and suggestions and will update this document periodically, taking into consideration feedback received, as well as any market or regulatory changes, and new product or material innovations. Please contact us at europe@hcwh.org.

[1] Required criteria should be considered as minimum sustainability requirements while award criteria are additional, optional criteria.

[2] BPQR criterion must be formulated to allow contracting authorities to effectively verify information provided by potential vendors and if tenders meet that criterion.

Labour rights

Required criteria		
	Criteria	**Notes**
1	Vendors should map their supply chain, including raw materials, to understand where there are potential risks of forced labour/modern slavery.	Documenting information relating to companies, suppliers, and individuals across the entire supply chain shows how and where vendors' products and services are produced, and by whom. It is a foundation for building a responsible sourcing program. Structure of supply chains: Tier 1 – Suppliers that work directly with vendors. Tier 2 - Suppliers that provide Tier 1 with materials. Tier 3 - Suppliers that supply Tier 2 or work in raw materials.
2	Vendors provide Code of Conduct/Modern Slavery audits for any factories producing their products. Audits must assess health and safety, working environment, working conditions, human rights, and environment.	
3	Vendors report the percentage of migrant workers at sites. Factories with more than 10% migrant workers must have policies in place to ensure that migrant workers are protected, that there are zero recruitment fees, and that workers are not deprived of passports or other ID. The vendor must submit a copy of the audit of compliance with this requirement.	
4	Upon request, vendors shall provide the addresses of all manufacturing sites used in the supply chain.	

5	The contract must be performed in accordance with the International Labour Organization's eight core conventions covering forced labour, child labour, discrimination, freedom of association, and the right to organise. The vendor shall ensure that these conditions are met throughout the supply chain, including subcontractors.	
Award criteria		
	Criteria	**Notes**
6	Vendors report Code of Conduct audit results that are no more than two years old and performed by a third party in accordance with established methods such as SA8000, SMETA IV pillar, BSCI, or equivalent.	To make this criterion more accessible, it is possible to remove the requirement for a third party; however, it is necessary to specify that the audit is for Code of Conduct, covering at least human rights and labour rights, in accordance with established methods. NOTE: Whilst this might increase vendors' capacity to meet the requirement, it introduces a risk of lower reliability in audit findings.
7	Vendors report any risks that have been identified through audits and explain how these risks have been addressed.	
8	Vendors ensure that their management team is regularly informed of compulsory labour/modern slavery risks and are involved in related decision-making.	

Materials and supply chain management

Required criteria		
	Criteria	**Notes**
10	Products do not contain polyvinyl chloride (PVC).	PVC is derived from vinyl chloride, a known human carcinogen, that is toxic throughout its lifecycle. The production of PVC uses chemicals of concern. In disposal, incinerating PVC can produce highly toxic chemicals. Recycling PVC is challenging and can hinder the recycling of other types of plastic.
11	Vendors provide the average weight per unit (g/unit) of the size Medium product, and the error range defined by the manufacturer.	This information will support an assessment of resource consumption and waste generation. The weight of gloves varies greatly between equivalent products of the same size. Consequently there is potential for reducing both raw material consumption and waste produced.
12	Vendors make Scope 1 and 2 GHG footprint calculations publicly available, covering all operations (headquarters and manufacturing), using a recognised methodology (e.g. GHG Protocol).	There are climate impacts throughout the lifecycle of gloves including resource extraction, production, transport, and waste disposal. One UK study estimates that gloves account for 45% of the total carbon footprint of all PPE.
Award criteria		
	Criteria	**Notes**
13	Vendors standardise and disclose product weights. Preference should be given to products with the lowest unit weight value, whilst maintaining quality standards.	
14	Vendors have a policy or plan that addresses GHG emissions reduction, including a dedicated role for carbon management in the organisation. Carbon mitigation (rather than reliance on offsets) should be prioritised.	

15	Vendors provide third-party verified measurements of GHG emissions from across the entire supply chain, including manufacturing processes and scope 1 and 2 emissions as a minimum. Vendors specify the methods used, for example disclosure through the Carbon Disclosure Project (CDP) or using the Greenhouse Gas Protocol.	Scope 1 - direct emissions from owned or controlled sources. Scope 2 - indirect emissions from electricity generation, steam, heating and cooling consumed by the vendor. Scope 3 - all other indirect emissions that occur in a value chain. To make this criterion more accessible SMEs, it is possible to remove the requirement for a third party.
16	Vendors require Tier 1 suppliers to hold a carbon-reduction policy with carbon reduction targets to manage the emissions from the product supply chain.	
17	Vendors' manufacturing sites are certified to a recognised environmental management standard, e.g. ISO 14040, ISO 14001, ISO 14025 or equivalent.	
18	Vendors have a comprehensive and up to date environmental protection action-plan.	
19	Vendors provide certification or equivalent for GHG emission management systems that include product manufacturing processes.	
20	Vendors use 100% renewable energy in their manufacturing processes.	In this document, renewable energy refers to: wind, solar, geothermal, ambient energy, tidal, wave, hydropower, landfill gas, and sewage treatment gas.
21	Vendors use low emission modes of transport for delivery of raw materials and distribution.	The carbon footprint of transport can be reduced through the use of efficient, electric vehicles that are designed to reduce emissions and use of raw resources.

Chemicals

Request technical documentation, product data sheets, or other disclosure sheets as evidence that requirements are met.

Required criteria		
	Criteria	**Notes**
22	Vendors disclose a list of chemicals used in their products that are known to cause adverse health effects, based on current data.	Transparency of product ingredients is critical for assessing potential occupational and environmental risks of products, throughout their lifecycle, including potential exposures during use.
23	Products do not contain phthalates or esters of orthophthalic acid, at concentrations above 50 ppm (50 mg/kg) per substance.	This requirement only applies to products containing plasticisers.
24	Products are not treated with or do not intentionally contain biocidal chemicals.	Human toxicity and ecotoxicity profiles differ among biocidal agents, but none are entirely benign. The unnecessary addition of biocidal agents can also contribute to more widespread antibiotic resistance.
25	Products are free of powder residue; powder levels should not exceed 2 mg/glove.	Powder in gloves can carry allergens or become an allergen. Powder can spread through the air and cause inflammation, knots in the connective tissue of the skin, and allergic reactions in the airways. Test results (according to EN ISO 21171 or ASTM D6124) can serve as evidence of meeting this criterion.
26	Products are not treated with or do not contain substances intended to moisturise or soften the hands (skincare additives).	Avoid unnecessary additives that do not contribute to the barrier properties of the glove. Substances added to gloves can be allergens; excluding them helps reduce potential hypersensitivity.

27	Products are free of substances of high concern. Products do not contain substances on the REACH[3] candidate list in concentrations above 0.1% by weight (1000 mg/kg) per substance. If new substances are added to the 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.	The REACH candidate list includes substances that are hazardous to humans and/or the environment that may be added to the REACH restriction list, so early phasing out is preferable. The candidate list is regularly updated by the European Chemicals Agency (ECHA) and updates are available on the ECHA website.
28	Vendors provide a list of accelerants and other allergens contained in products, e.g. thiurams, dithiocarbamates, thiazoles. This can be provided through a specification sheet or other disclosure sheet with this information.	Many gloves are made with accelerants that can be contact allergens and can cause skin irritation or sensitisation. A small percentage of users (3.6%), with suspected allergic contact dermatitis, can suffer a reaction to accelerants. Transparency of product ingredients is critical for assessing potential occupational and environmental risks of products, throughout their life cycle, including potential exposures during use.
29	In the pre-clinical evaluation, disposable medical gloves should be tested according to: • EN ISO 10993-5 • EN ISO 10993-10	
30	Products must not contain the following dyes in concentrations above 0.1% by weight: (refer to Annex Table A).	The identified dyes have a variety of associated hazard properties. For example, some azo dyes can break down into more hazardous aromatic amines, which are mutagenic and carcinogenic.

[3] The Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

31	Products must not contain the following fluorinated substances in concentrations above 0.1% by weight: (refer to Annex Table B).	The identified fluorinated substances have a variety of associated hazardous properties, including serious eye irritation. Some of these compounds are harmful if they come into contact with skin or when inhaled, and may be fatal if swallowed.
32	Products do not contain medium chain chlorinated paraffins [CAS 85535-85-9], in concentrations above 0.1% by weight.	Similar to short chain chlorinated paraffins, medium chain chlorinated paraffins may be persistent, bioaccumulative, and toxic to aquatic organisms at low concentrations.
33	Products do not contain added Bisphenol A [CAS 80-05-7] and its structural analogues. Impurities and residues shall not be present in amounts over 0.01% by weight (100 mg/kg) in any individual part of products.	

Packaging

Required criteria		
	Criteria	**Notes**
34	To reduce packaging waste, vendors should minimise packaging whilst ensuring that it prevents damage and preserves product integrity. Packaging must be appropriate for the size, shape, and weight of products.	
35	Vendors reduce product waste through improvements in packaging design, e.g. by preventing multiple gloves being dispensed at once.	A study from Region Skåne showed that 6% of gloves were discarded due to them falling on the floor and becoming unusable.
36	Vendors prioritise product packaging that does not contain plastic. Vendors avoid packaging materials for which recycling schemes are unlikely to be established: ● Polyvinyl Chloride (PVC) ● Polyvinyliden Chloride (PVDC) ● Polystyrene (PS) ● Expanded Polystyrene (ePS) ● Regenerated Cellulose ● Non-recyclable plastics/paper combinations	Adhesive tape in secondary packaging may contain plastic. Plastic-free alternatives should be prioritised.
37	Vendors avoid packaging additives that impede recycling: ● Halogenated organic compounds ● Phthalates ● Organotin compounds ● Lead (Pb), Cadmium (Cd), ChromiumVI(Cr6+), Mercury (Hg) compounds ● Dimethylfumarate (DMFu) CAS 624-49-7 ● Bisphenols ● Carbon-based master-batches, e.g. carbon black pigments [CAS 1333-86-4]. Impurities up to 100 ppm are permitted.	

38	Vendors use packaging that easily allows the reclamation of mixed materials with minimum effort, e.g. ● Avoid bonding systems that prevent separation of individual materials ● Labels should be recyclable or easy to remove to support recycling; alternatively use embossing or in-mould direct printing	
39	Packaging should be selected on the basis of its ease of recycling.	
40	Vendors use reclaimed or recycled packaging materials wherever possible.	
Award criteria		
41	Paper, carton, paperboard, and wooden pallets are Chain of Custody (CoC) certified under the Forest Stewardship Council (FSC) system or equivalent.	
42	Cellulose in packaging must be recycled, unbleached pulp or bleached without chlorine gas, according to the TCF or ECF method. The AOX (adsorbable organic halides) emissions must not exceed 0.25 kg/tonne of pulp.	Chlorine bleaching creates by-products that pose risks to human health and the environment. The use of chlorine to bleach pulp creates dioxins, furans, and related by-products.
43	Vendors use homogenous materials in packaging, i.e. not a mixture of materials.	The use of homogenous materials helps facilitate recycling.
44	Packaging has a high percentage of recycled content, without compromising performance.	
45	Demonstrate or commit to introducing an extended producer responsibility (EPR) system that allows the separate collection of product and packaging waste and supports recycling (preferably) or another method of recovery from an authorised waste management provider.	EPR shifts responsibility for the postconsumer management of products and packaging from local governments to producers.

Suggested contractual obligations

This section provides suggested obligations to include in contracts to ensure that the required environmental and social criteria are met:

- Set goals and timelines that require progress reports on achieving environmental and social criteria.
- Monitor adherence to social and environmental requirements and address non-compliance with contract requirements, e.g. the buyer has the right to conduct scheduled or unscheduled audits.
- Contracts must be performed in accordance with the International Labour Organisation's eight core conventions that address forced labour, child labour, discrimination, freedom of association, and the right to organise.
- Require vendors to ensure that conditions are met by subcontractors who directly participate in the performance of the contract, regardless of the number of intermediaries. Vendors ensure that subcontractors participate in follow-up.
- Vendors report routines for systematic quality work as well as documented procedures and instructions to ensure that:
    - Requirements for the product are fulfilled during the contract period.
    - Documentation proving that the requirements are met is available.
    - There is a contact person with the contracting authority.
- To ensure compliance with the above points, procedures and instructions should include:
    - Monitoring and logging, e.g. regular inspection of raw material and product quality.
    - Reporting and treatment of deviations related to the requirements.
    - Reporting and documentation of production changes.
    - Reporting, documentation, and handling of complaints.
    - Traceability throughout the supply chain.
    - Risk assessments of potential suppliers that address modern slavery before entering into production agreements. Risk assessments identify potential modern slavery risks and impacts that may be missed through audits.

Suggestions for market dialogue and innovation

These suggestions can be used to establish a dialogue with your suppliers about how products and supply chains can be further improved beyond the criteria set out above, and where innovation is needed.

Product, materials, and supply chain

- Develop new non-fossil fuel-based materials for products.
- Explore the possibility of safely using recycled material in products.
- Create high-performing products that can be reused.
- Provide raw materials supply tracing and shorten supply chains with more localised manufacturing.
- Product data sheets should include all chemicals being used at each stage of production, e.g. accelerants, biocides, and residues left in the final product. Further innovation is needed for avoiding accelerators in the manufacturing process.
- Optimise manufacturing to reduce materials, e.g. weight and thickness, while maintaining high performance.
- Reduce the wastage of gloves through packaging improvement and design.

End-of-life

- Create circular systems to recover and recycle products. Manufacture products that are easily recyclable, observing circular economy and extended producer responsibility principles, including addressing product design for recycling. HCWH Europe does not consider waste to energy to be a sustainable waste management solution.
- Commit to an extended producer responsibility system that allows the separate collection of product waste and its subsequent treatment through recycling (preferably) or another type of recovery. Vendors have the responsibility of the end-of-life of their products.
- Enable closed-loop recycling through innovation and avoid downcycling,[4]. Ensure recycled products have market value.
- Tackle the challenges of adding an additional waste stream in hospitals.
- Lifecycle methodologies and quality differ from manufacturer to manufacturer. Innovation is needed to improve, standardise, and strengthen LCAs.

[4] A closed-loop recycling system is when recycled material is used to create the same product, i.e. the recycled material from gloves would be used to create new gloves.

ANNEX

Table A - Dyes

Substance	CAS number
Dinatrium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl] -4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene -2,7-disulfonate	1937-37-7
Disodium 3,3'-[[1,1'-biphenyl]- 4,4'-diylbis(azo)]bis(4-aminonapthalene-1-sulfonate)	573-58-0
4-o-tolylazo-o-toluidine	97-56-3
(6-(4-hydroxy-3-(2-metoxyphenylazo) -2-sulfonate-7-naphtylamin) - 1,3,5-triazin-2,4-diyl)bis[(amino-1-metyletyl) ammonium] formate	108225-03-2
Disodium[5-[[4'-[[2,6-dihydroxy-3-[(2-hydroxy-5-sulphophenyl)azo]phenyl]azo][1,1'-biphenyl]-4-yl]azo]salicylato(4-)]cuprate(2-) (CI Direct Brown 95)	16071-86-6
Trisodium[4'-(8-acetylamino-3,6-disulfonato-2-naphthylazo)-4''-(6-benzoylamino-3-sulfonato-2-naphthylazo)-biphenyl-1,3',3'',1'''-tetraolato-O,O',O'',O''']copper(II)	164058-22-4
Tetrasodium 3,3'-[[1,1'-biphenyl]- 4,4'-diylbis(azo)]bis[5-amino-4-hydroxynaphtalene-2,7-disulfonate]	2602-46-2
4-aminoazobenzene	60-09-3

Table B – Fluorinated substances

Substance	CAS number
Heneicosafluoroundecanoic acid (PFUnDA)	2058-94-8
Heptacosafluoro-tetradecanoic acid (PFTeDA)	376-06-7
Pentadecafluorooctanoic acid (PFOA)	335-67-1
Pentacosafluorotridecanoic acid (PFTrDA)	72629-94-8
Perfluorononan-1-oic acid (PFNA)	375-95-1
Ammonium pentadecafluorooctanoate (APFOA)	3825-26-1
Tricosafluorododecanoic acid (PFDoDA)	307-55-1