



**ISO/TMB "Technical Management Board"**  
Secretariat: ISO  
Secretary: **Rossi Marco Mr**



**FORM 1 - Safety, security and good production practices of cannabis facilities and operations**

<b>Document type</b>	<b>Related content</b>	<b>Document date</b>	<b>Expected action</b>
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## FORM 1: PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY

<b>Circulation date</b> Click here to enter a date.	<b>Reference number:</b> Enter Number (to be given by ISO Central Secretariat)
<b>Closing date for voting</b> Click here to enter a date.	
<b>Proposer</b> SCC - Canada	<b>ISO/TS/P</b> Enter Number

A proposal for a new field of technical activity shall be submitted to the ISO Central Secretariat, which will assign it a reference number and process the proposal in accordance with the [ISO/IEC Directives Part 1, Clause 1.5](#). The proposer may be a member body of ISO, a technical committee, subcommittee or project committee, the Technical Management Board or a General Assembly committee, the Secretary-General, a body responsible for managing a certification system operating under the auspices of ISO, or another international organization with national body membership. Guidelines for proposing and justifying a new field of technical activity are given in the [ISO/IEC Directives Part 1, Annex C](#).

### Proposal (to be completed by the proposer)

<b>Title of the proposed new committee (The title shall indicate clearly yet concisely the new field of technical activity which the proposal is intended to cover).</b>
Safety, security and good production practices of cannabis facilities and operations
<b>Scope statement of the proposed new committee (The scope shall precisely define the limits of the field of activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned).</b>
Standardization in the field of safety, security and quality systems of cannabis facilities and operations in jurisdictions where such facilities and operations are legal, covering the supply chain from cultivation, processing, production, packaging, distribution, transportation and retail stores for cannabis and cannabis products.
Standardization includes but not limited to terminology; methods of tests; cannabis equipment and their operation; waste disposal; air quality; good production practices; good manufacturing practices; security of facilities and operations; and related quality management systems.
Excluded:
<ul style="list-style-type: none"><li>• fire protection of buildings and facilities (covered by ISO/TC 21)</li><li>• methods of analysis of food products and traceability (covered by ISO/TC 34)</li><li>• fire safety of buildings and materials (covered by ISO/TC 92)</li><li>• quality management systems (covered by ISO/TC 176)</li><li>• environmental management systems and monitoring (covered by ISO/TC 207)</li><li>• cosmetics - good manufacturing practices (GMP) (covered by ISO TC 217)</li><li>• occupational health and safety management systems (covered by ISO/TC 283)</li><li>• alarm and electronic security systems (covered by IEC/TC 79)</li></ul>

- The proposer has checked whether the proposed scope of the new committee overlaps with the scope of any existing ISO committee**
- If an overlap or the potential for overlap is identified, the affected committee has been informed and consultation has taken place between proposer and committee on**
  - i. modification/restriction of the scope of the proposal to eliminate the overlap,**
  - ii. potential modification/restriction of the scope of the existing committee to eliminate the overlap.**
- If agreement with the existing committee has not been reached, arguments are presented in this proposal (under question 7) as to why it should be approved.**

**Proposed initial programme of work. (The proposed programme of work shall correspond to and clearly reflect the aims of the standardization activities and shall, therefore, show the relationship between the subject proposed. Each item on the programme of work shall be defined by both the subject aspect(s) to be standardized (for products, for example, the items would be the types of products, characteristics, other requirements, data to be supplied, test methods, etc.). Supplementary justification may be combined with particular items in the programme of work. The proposed programme of work shall also suggest priorities and target dates.)**

The work of the new ISO/TC will focus on, but not limited to, the following areas of concern:

Safety of cannabis buildings, equipment and plant oil extraction operations

- Safety of buildings
- Safety of devices and equipment
- Competence of personnel
- Preventive maintenance

Good production practices

- Quality management system requirements
- Cannabis oil extraction methods and processes
- Post processing refinement
- Good manufacturing practices for medical cannabis
- Food safety management system for cannabis edibles
- Cannabis waste disposal

Secure handling of cannabis and cannabis products, including transportation

- Risk assessment
- Physical and electronic security systems
- Administrative controls
- Personnel security
- Secure transportation of cannabis

Health and social responsibility of cannabis operations

- Indoor air quality
- Outdoor air quality

Terminology

**Indication(s) of the preferred type or types of deliverable(s) to be produced under the proposal (This may be combined with the "Proposed initial programme of work" if more convenient).**

International Standards, Technical Guides, Technical Reports and Technical Specifications

**A listing of relevant existing documents at the international, regional and national levels. (Any known relevant document (such as standards and regulations) shall be listed, regardless of their source and should be accompanied by an indication of their significance.)**

Proposed seed documents:

ISO IWA 37-1:2022, Safety of cannabis buildings, equipment and oil extraction operations  
ISO IWA 37-2:2022, Secure handling of cannabis and cannabis products  
ISO IWA 37-3:2022, Good production practices (GPP) guide for cannabis

References (potential normative or informative):

ISO 834, Fire-resistance tests — Elements of building construction — Part 1: General requirements  
ISO 4225, Air quality – General aspects – Vocabulary  
ISO/TS 5658-1, Reaction to fire tests – Spread of flame – Part 1: Guidance on flame spread  
ISO 6183, Fire protection equipment — Carbon dioxide extinguishing systems for use on premises — Design and installation  
ISO 7240, Fire detection and alarm systems – Part 14: Design, installation, commissioning and service of fire detection and fire alarm systems in and around buildings  
ISO 9001, Quality management systems - Requirements  
ISO 14001, Environmental management systems – Requirements with guidance for use  
ISO 16069, Graphical symbols — Safety signs — Safety way guidance systems (SWGS)  
ISO/IEC 17025, General requirements for the competence of testing and calibration laboratories  
ISO/IEC 20000-1, Information technology – Service management – Part 1: Service management system requirements  
ISO 21542, Building construction – Accessibility and usability of the built environment  
ISO 22000, Food safety management systems  
ISO/TS 22002-1, Prerequisite programmes on food safety – Part 1: Food manufacturing  
ISO 23601, Safety identification – Escape and evacuation plan signs  
ISO/IEC 27001, Information technology – Security techniques – Information security management systems – Requirements  
ISO 28000, Specification for security management systems for the supply chain  
ISO 28802, Ergonomics of the physical environment — Assessment of environments by means of an environmental survey involving physical measurements of the environment and subjective responses of people  
ISO/IEC TS 29003, Security techniques – identity proofing  
ISO 30061, Emergency lighting  
ISO 31000, Risk management guidelines  
ISO 45001, Occupational health and safety management systems — Requirements with guidance for use and where applicable occupational health and safety legislation  
IEC 60079-10-1, Explosives atmospheres – Part 10-1: Classifications of areas – Explosive gas atmospheres  
IEC 60079-10-2, Explosives atmospheres – Part 10-2: Classifications of areas – Explosive dust atmospheres  
IEC 60079-14, Explosives atmospheres – Part 14: Electrical installations design, selection and erection  
IEC 60839-11-1, Standard for alarm and electronic security systems – Part 11-1: Electronic access control systems – System and components requirements  
IEC 60839-11-2, Standard for alarm and electronic security systems – Part 11-2: Electronic access control systems – Application guidelines  
IEC 62368-1, Audio/video, information and communication technology equipment – Part 1: Safety requirements IEC 62443 series, Security for industrial automation and control systems  
IEC 62676-4, Video Surveillance Systems for Use in Security Applications – Part 4: Application

**A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing ISO and IEC deliverables. (The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized. If seemingly similar or related work is already in the scope of other committees of the organization or in other organizations, the proposed scope shall distinguish between the proposed work and the other work. The proposer shall indicate whether his or her proposal could be dealt with by widening the scope of an existing committee or by establishing a new committee.)**

For relation to or impact on existing work, it is proposed that the structure of standards and organizational requirements for safety, security and good production practices of cannabis facilities and operations (in jurisdictions where such facilities and operations are legal) require a specific technical committee. In order to minimize duplication and negative impacts, it is proposed that this new committee works in liaison with the existing ISO/IEC committees identified below.

In terms of duplication of existing ISO requirements, it has been argued that a cannabis cultivation facility should be treated like any other farm or agricultural facility, the cannabis production like any other hazardous or non-hazardous location and the retail store like any other pharmacy or retail store.

However, in jurisdictions where cannabis production and sales are legal, the cannabis industry presents a unique combination of health, safety, and security issues that are not adequately addressed separately in existing technical committees. These include but are not limited to: the production of medicinal drugs and their ingredients; the production of recreational drugs and their ingredients; the use of hazardous solvents and conditions in processing; risks presented by flammable vapours; and the chain of custody for grower-to-user security and traceability. There are also unique uses of rooms and equipment where special considerations for fire and electrical safety are required.

There are few equipment standards for safety testing for use in these environments. Even cannabis production facilities in regulated contexts have experienced fires or explosions, and pose those corresponding risks to personnel. Given that regulatory authorities in different countries are generally drafting regulations specific to the cannabis industry, the development of international standards with the corresponding specific scopes is appropriate. Regulators have expressed reluctance to “mix-and-match” requirements from a variety of existing ISO standards to address this specific need.

It is therefore proposed that the appropriate solution to meet the specific needs of the cannabis industry is to establish a new committee, and not to widen the scope of an existing committee.

**A listing of relevant countries where the subject of the proposal is important to their national commercial interests.**

Countries where the manufacture, processing, distribution and/or sale of cannabis plants and/or cannabis products is legal or may become legal in the future, including but not limited to:

Canada, USA, UK, Netherlands, Argentina, Brazil, Chile, China, Colombia, Denmark, France, Georgia, Germany, Greece, Haiti, Israel, Italy, Jamaica, Malaysia, Malta, Mexico, North Macedonia, Norway, Pakistan, Philippines, Rwanda, South Africa, Uganda, Uruguay

**A listing of relevant external international organizations or internal parties (other ISO and/or IEC committees) to be engaged as liaisons in the development of the deliverable(s). (In order to avoid conflict with, or duplication of efforts of, other bodies, it is important to indicate all points of possible conflict or overlap. The result of any communication with other interested bodies shall also be included.)**

ISO/TC 34/SC17 (Management systems for food safety)  
ISO/TC 21, Equipment for fire protection and fire fighting  
ISO/TC 92, Fire safety  
ISO/TC 146, Air quality  
ISO/TC 176, Quality management systems  
ISO/TC 207, Environmental management  
ISO/TC 217, Cosmetics  
ISO/TC 262, Risk Management  
ISO/TC 283, Occupational health and safety management  
IEC/TC 79, Alarm and electronic security systems

**A simple and concise statement identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) and how they will each benefit from or be impacted by the proposed deliverable(s).**

The relevant affected stakeholder categories in jurisdictions where cannabis production and sale is (or will be) legal include:

- a) Industry and Commerce (Cannabis producers/operators\*, food manufacturers, equipment manufacturers\*, supply chain\*, retail outlets\*, security industry) will benefit from predictability of specifications, costs, and lead-times associated with construction and operation of their facilities.
- b) Government (local authorities/regulators, fire prevention and firefighting services) will benefit from provision of best-practice requirements for application in regulations.
- c) Consumers (Retail customers) will benefit from levels of security in retail spaces agreed by consensus of experts.
- d) Labour (Cannabis facility workers) will benefit from the availability of consistent health and safety requirements specific to this industry.
- e) Academic and Research Bodies (Laboratories\*) will benefit from the improved clarity on requirements for chain of custody of samples, including their disposal.
- f) Standards Application (Standards and testing organizations) will benefit from the opportunity to apply uniform requirements for evaluation of these facilities, processes, and services.

\* SMEs represent a significant proportion of the stakeholder groups

**An expression of commitment from the proposer to provide the committee secretariat if the proposal succeeds.**

SCC commits to provide committee management services if this proposal is approved. UL Standards & Engagement commits to provide the committee secretariat if this proposal is approved.

**Purpose and justification for the proposal. (The purpose and justification for the creation of a new technical committee shall be made clear and the need for standardization in this field shall be justified. Clause C.4.13.3 of [Annex C](#) of the ISO/IEC Directives, Part 1 contains a menu of suggestions or ideas for possible documentation to support and purpose and justification of proposals. Proposers should consider these suggestions, but they are not limited to them, nor are they required to comply strictly with them. What is most important is that proposers develop and provide purpose and justification information that is most relevant to their proposals and that makes a substantial business case for the market relevance and the need for their proposals. Thorough, well-developed and robust purpose and justification documentation will lead to more informed consideration of proposals and ultimately their possible success in the ISO IEC system.)**

In jurisdictions where cannabis production and sale is legal, the cannabis industry presents a unique combination of health, safety, and security issues that are not adequately addressed separately in existing technical committees. These include but are not limited to: the production of medicinal drugs and their ingredients; the production of recreational drugs and their ingredients; the use of hazardous solvents and conditions in processing; risks presented by flammable vapours; and the chain of custody for grower-to-user security and traceability. There are also unique uses of rooms and equipment where special considerations for fire and electrical safety are required. Documents developed by this committee will support technological, economic, and societal benefits.

The global cannabis market is relatively new and is estimated to be valued at USD 27.7 billion in 2022. It's projected to reach USD 82.3 billion by 2027, recording a Compound Annual Growth Rate of 24.3% in terms of value. The market is driven by the rise in the use of cannabis for recreational and medical use. [[Global Cannabis Market by Product Type \(Flowers, Concentrates, Edibles, Topicals & Tinctures\), Compound \(THC-Dominant, CBD-Dominant, Balanced THC & CBD\), Application \(Medical, Recreational\), and Region \(North America, South America, Europe, RoW\) - Forecast to 2027, September 2022](#)]

Documents developed by this proposed committee will result in predictability of specifications, costs, and lead-times associated with construction and operation of cannabis growing and/or processing facilities. Standardization will support a more robust supply chain for sourcing equipment, and lead to innovation in indoor agriculture practices and equipment.

As more countries move to legalize cannabis for medicinal and/or recreational use, it expands the market to source equipment for various stages of the cannabis production process. Good production practices can support business efficiency which allows for enterprises of various sizes to enter the global market more easily.

Societal benefit is realized through improved security at cannabis growing/production facilities and cannabis retail spaces, and safer work environments for staff at all levels of the cannabis supply chain. The proposed standardization activities will address handling of cannabis and

cannabis products which require robust security features in order to prevent the intrusion of illicit products into the legal market and the diversion of legal products into the black market.

Good production practices as outlined in standards proposed for development by this committee can include waste management and disposal of cannabis and/or cannabis products. Additional standards could be developed to address other environmental issues such as indoor and outdoor air quality, which would protect workers and keep obnoxious odours low in the surrounding areas of the cannabis facilities.

The proposed committee would develop documents to support conformity assessment and others to act as guidance documents. The committee intends to develop documents that are suitable for use or reference in technical regulation.

The proposed committee could monitor the effectiveness of the documents they have developed through the adoption rate or number of adoptions of a particular ISO standard. Metrics comparing security incidents and/or worker injury incidents before and after adoption could be tracked to determine impact of published documents.

Documents developed by the proposed committee will be compliant with ISO's Global Relevance Policy, the principles for developing ISO standards to support public policy, and the potential for easier market access due to conformity with legislation, as applicable.

**Signature of the proposer**

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*Further information to assist with understanding the requirements for the items above can be found in the [Directives, Part 1, Annex C](#).*