



FORM 1: PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY

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

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).
Safety, security and good production practices of cannabis facilities and operations
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).
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">• fire protection of buildings and facilities (covered by ISO/TC 21)• methods of analysis of food products and traceability (covered by ISO/TC 34)• fire safety of buildings and materials (covered by ISO/TC 92)• quality management systems (covered by ISO/TC 176)• environmental management systems and monitoring (covered by ISO/TC 207)• cosmetics - good manufacturing practices (GMP) (covered by ISO TC 217)• occupational health and safety management systems (covered by ISO/TC 283)• alarm and electronic security systems (covered by IEC/TC 79)

- 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 7076-5, *Fire protection — Foam fire extinguishing systems — Part 5: Fixed compressed air foam equipment*

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 — Requirements for any organization in the food chain*

ISO 22095, *Chain of custody– General terminology and models*

ISO/TS 22002-1, *Prerequisite programmes on food safety – Part 1: Food manufacturing*

ISO 22301, *Security and resilience – Business continuity management systems – Requirements*

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 41001, *Facility management – Management systems – Requirements with guidance for use*

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 61162-460, *Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 460: Multiple talkers and multiple listeners – Ethernet interconnection – Safety and security*

IEC 62128-1, *Railway applications – Fixed installations – Electrical safety, earthing and the return circuit – Part 1: Protective provisions against electric shock*

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 62443 (all parts), *Security for industrial automation and control systems*

IEC 62676-2-1, *Video surveillance systems for use in security applications – Part 2-1: Video transmission protocols – General requirements*

IEC 62676-4, *Video Surveillance Systems for Use in Security Applications – Part 4: Application Guidelines*

IEC 62990-2, *Workplace atmospheres – Part 2 Gas detectors – Selection, installation, use and maintenance of detectors for toxic gases and vapours*

ASTM D8219-19, *Standard Guide for Cleaning and Disinfection at a Cannabis Cultivation Center*

ASTM D8220-20, *Standard Guide for Conducting Recall/Removal Procedures for Products in the Cannabis Industry*

ASTM D8222-21a, *Standard Guide for Establishing a Quality Management System (QMS) for Consumer Use of Cannabis/Hemp Products*

ASTM D8229-19, *Standard Guide for Corrective Action and Preventive Action (CAPA) for the Cannabis Industry*

ASTM D8250-19, *Standard Practice for Applying a Hazard Analysis Critical Control Points (HACCP) System for Cannabis Consumable Products*

ASTM D8286-19, *Standard Guide for Processing Cannabis Product Complaints*

ASTM D8308-21, *Standard Practice for Cannabis/Hemp Operation Compliance Audits*

ASTM D8398-22, *Standard Practice for Management Responsibilities in Managing a Quality Management System (QMS)*

ASTM D8477-22, *Standard Practice for Cannabis or Hemp Supplier Lifecycle Management*

ASTM D8244-21a, *Standard Guide for Analytical Laboratory Operations Supporting the Cannabis/Hemp Industry*

ASTM D8282-19, *Standard Practice for Laboratory Test Method Validation and Method Development*

ASTM D8309-21, *Standard Guide for Stability Testing of Cannabis-Based Products*

ASTM D8334/D8334M-20, *Standard Practice for Sampling of Cannabis/Hemp Post-Harvest Batches for Laboratory Analyses*

ASTM D8375-22, *Standard Test Method for Determination of Cannabinoid Concentration in Dried Cannabis and Hemp Raw Materials using Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS)*

ASTM D8399-22, *Standard Test Method for Multi-residue Analysis of Pesticides in Dried Cannabis and Hemp Raw Materials Using Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)*

ASTM D8442-22, *Standard Test Method for Determination of Cannabinoids in Cannabis Raw Materials and Resin Cannabis Products by Gas Chromatography and Flame Ionization Detection*

ASTM D8469-22, *Standard Test Method for Analysis of Multiple Elements in Cannabis Matrices by Inductively Coupled Plasma Mass Spectrometry (ICP-MS)*

ASTM D8196-22, *Standard Practice for Determination of Water Activity (aw) in Cannabis Flower*

ASTM D8197-22, *Standard Specification for Maintaining Acceptable Water Activity (aw) Range (0.55 to 0.65) for Dry Cannabis Flower Intended for Human/Animal Use*

ASTM D8233-19, *Standard Guide for Packaging and Labeling of Consumer Resin Cannabis Products for Sale to Adult Consumers, Legally Authorized Medical Users, and Caregivers in a Business-to-Consumer Retail Environment (Retailers)*

ASTM D8245-19, *Standard Guide for Disposal of Resin-Containing Cannabis Raw Materials and Downstream Products*

ASTM D8342/D8342M-21, *Standard Test Method for Measuring the Probability of a Full Length Burn on a Cannabis/Hemp Pre-roll*

ASTM D8343/D8343M-21, *Standard Practice for Measuring the Physical Properties of Cannabis/Hemp Pre-rolls*

ASTM D8423-22, *Standard Specification for Environmental Conditions for Post-packaged Storage and Retail Merchandising of Cannabis/Hemp Flower*

ASTM D8432-22, *Standard Specification for Environmental Conditions while In Transit for Packaged Cannabis/Hemp Flower*

ASTM D8439-22, *Standard Specification for Medicinal-use Cannabis Inflorescence*

ASTM D8441/D8441M-22, *Standard Specification for International Symbol for Identifying Consumer Products Containing Intoxicating Cannabinoids*

ASTM D8450-22, *Standard Specification for Environmental Conditions While Packaging Cannabis/Hemp Flower*

ASTM D8205-20, *Standard Guide for Video Surveillance System*

ASTM D8217-20, *Standard Guide for Access Control System*

ASTM D8218-20, *Standard Guide for Intrusion Detection System (IDS)*

ASTM D8320-21, *Standard Practice for Implementing an Information Security Program in a Cannabis Operation*

ASTM D8346-21a, *Standard Guide for Requirements for Quality Related Professions Within the Cannabis and Hemp Industries*

ASTM D8347-21a, *Standard Guide for Requirements for Analytical Laboratory Related Professions Within the Cannabis and Hemp Industries*

ASTM D8348-21a, *Standard Guide for Requirements for Transportation and Logistics Related Professions Within the Cannabis and Hemp Industries*

ASTM D8403-21, *Standard Practice for Certificate Programs within the Cannabis and Hemp Industries*

ASTM D8452-22, *Standard Guide for Requirements for Medical-related Professionals within the Cannabis and Hemp Industries*

ASTM D8400-21, *Standard Guide for Assessing Spoilage of Hemp Seed Intended for Human Consumption*

ASTM D8417-21, *Standard Guide for Sampling of Hempseed Intended for Human Consumption*

ASTM D8433-22, *Standard Specification for Food Safety and Quality of Hempseed Intended for Dehulling or Oil Extraction Food Purposes*

ASTM D8440-22, *Standard Specification for Food Safety and Quality of Hempseed Products Intended for Human Consumption*

ASTM D8357-21, *Standard Classification for Cannabis/Hemp Flower Vaporizers*

ASTM D8372-21, *Standard Guide for Cannabis/Hemp Extract Vaporizers*

ASTM D8373-21, *Standard Guide for Cannabis/Hemp Flower Vaporizers*

ASTM D8374-21, *Standard Guide for Personal Cannabis/Hemp Plant Growing Appliances*

ASTM D8376-21, *Standard Classification for Cannabis/Hemp Extract Vaporizers*

ASTM D8390-21, *Standard Classification for Domestic Cannabis/Hemp Plant Indoor Growing Appliances*

ASTM D8270-22a, *Standard Terminology Relating to Cannabis*

ANSI/UL 608, *Standard for Safety Burglary Resistant Vault Doors and Modular Panels*

ANSI/UL 681, *Standard for Safety Installation and Classification of Burglar and Holdup Alarm Systems*

ANSI/UL 687, *Standard for Safety Burglary-Resistant Safes*

ANSI/UL 827, *Standard for Safety Central-Station Alarm Services*

UL 972, *Standard for Safety Burglary Resisting Glazing Material*

CAN/ULC -S301: 2018, *Standard for Signal Receiving Centres Configurations and Operations*

CAN/ULC-S302, *Standard for the Installation, Inspection and Testing of Intrusion Alarm Systems*

CAN/ULC-S304, *Standard for Control Units, Accessories, and Receiving Equipment for Intrusion Alarm Systems*

CAN/ULC-S306, *Standard for Intrusion Detection Units*

CAN/ULC-S318, *Standard for Power Supplies for Burglar Alarm Systems*

CAN/ULC-S324, *Standard for Burglary Resistant Safes*

CAN/ULC-S4400, *Standard for Safety of Premises, Buildings and Equipment Utilized for the Cultivation, Processing and Production of Cannabis*

ANSI/CAN/UL 2900-2-3, *Software Cybersecurity for Network – Connectable Products, Part 2-3: Particular Requirements for Security and Life Safety Signalling Systems*

ANSI/CAN/UL/ULC 1389, *Standard for Safety for Plant Oil Extraction Equipment for Installation and Use in Ordinary (Unclassified) Locations and Hazardous (Classified) Locations*

ANSI/CAN/UL/ULC 4402, *Standard for Safety for Indoor Air Quality in Buildings and Facilities Utilized for the Cultivation and Post-Harvest Processing of Cannabis*

EN 1143-1, *Secure storage units— Requirements, classification and methods of test for resistance to burglary— Part 1: Safes, ATM safes, strongroom doors and strongrooms*

EN 50518, *Monitoring and alarm receiving centre*

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. When it comes to tobacco and tobacco products (ISO/TC 126), the methods of consuming cannabis and cannabis products differ from the tobacco industry as tobacco plants are either smoked (cigarettes, cigars, etc), vaped or chewed. Cannabis can be inhaled similarly to tobacco, but it can also be ingested either as an edible (a food item with a THC and/or CBD component) or as an oil (extracted from the cannabis plant, typically using solvents).

Moreover, 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, Australia, Argentina, Brazil, Chile, Colombia, Denmark, Finland, Georgia, Germany, Greece, Ecuador, Israel, Italy, Jamaica, Costa Rica, Malta, Mexico, New Zealand, North Macedonia, Norway, Pakistan, Philippines, Rwanda, South Africa, Uganda, Uruguay, Switzerland, Thailand, Poland, Panama, Sri Lanka,

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 126, Tobacco and tobacco products
ISO/TC 142, Cleaning equipment for air and other gases
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 267, Facility management
ISO/TC 283, Occupational health and safety management
ISO/TC 292, Security and resilience
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 was estimated to be valued at USD 32.73 billion in 2023. It's projected to reach USD 187.24 billion by 2030, recording a Compound Annual Growth Rate of 28.3% in terms of value. The market is driven by the rise in the use of cannabis for recreational and medical use as more countries/states/regions pass legislation to legalize cannabis. [[Global Cannabis Market by Form \(Concentrated Oil, Cream, Food Additive\), Product Type \(Concentrates, Flower, leaves\), Compound, Source, Distribution Channel, Application - Forecast 2024-2030, January 2024](#)]

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](#).