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Standard Guide for Video Surveillance System¹

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1. Scope

1.1 This guide covers the recommended video surveillance system for protecting resin cannabis, resin cannabis products, resin cannabis waste, currency, people, property, and assets.

1.2 *Units*—The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations as defined by the Authority Having Jurisdiction (AHJ) prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Terminology

2.1 *Definitions of Terms Specific to This Standard:*

2.1.1 *authority having jurisdiction (AHJ), n*—the organization, office, or individual responsible for issuing permits approving layout drawings, equipment, enforcing the requirements of a code or standard or approving materials, an installation, or procedure. Usually the AHJ is the building or fire official of the city or county in which the job site is located. In some cases such as the healthcare facilities, transient accommodations and day care facilities, the AHJ is the city or county building or fire official.

2.1.2 *digital video, n*—electronic representation of moving visual images (video) in the form of encoded digital data.

2.1.3 *digital video recorder, DVR, n*—records video in a digital format to a local or networked mass storage device.

2.1.4 *Internet protocol, IP, n*—set of rules governing the format of data sent over the Internet or other network.

2.1.5 *personal identification number, PIN, n*—four- to six-digit code assigned to individuals and inputted onto a keypad for access.

2.1.6 *two-factor authentication, n*—at least two of the following: an access control credential (for example, badge, FOB, wireless device), personal identification number (PIN), or biometric, or combinations thereof.

2.1.7 *uninterruptible power supply, UPS, n*—ensure continuous operation of camera systems using a surge protector with a built-in backup battery.

2.1.8 *video management software, VMS, n*—ability to view all cameras in operation with capacity to accommodate additional cameras analytics that sound an alert when motion is detected; multi-user capabilities to accommodate all users; accessibility via the Internet; and multi-screen video display.

3. Significance and Use

3.1 The video surveillance system safeguards various areas considered critical to operations. The surveillance system uses cameras capable of capturing images and videos that can be compressed, stored, or sent over communication networks. The main difference between a digital video surveillance system and an analog video surveillance system is that a digital video surveillance system is capable of capturing and storing the video signal in a digital format. A digital video surveillance solution can be managed from anywhere and provide interoperability. The cameras can be networked and footage encrypted and digitally archived, which is considered crucial for most resin cannabis businesses because the video feed can be secured and shared with government authorities.

4. Summary of Guide

4.1 The following video surveillance technologies, equipment, capabilities, and procedures are industry best-practice-based.

4.2 An on- or off-site monitoring station is designed to manage video surveillance information, along with receiving and sending alarm notifications.

4.3 Using video surveillance technology, select personnel with designated backups are able to monitor appropriate access.

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4.4 A video surveillance system should have all, or some of the following basic capabilities, among others: indoor; outdoor; daytime; nighttime; fixed; and pan, tilt, and zoom (PTZ).

4.5 With video management software (VMS), all cameras in operation can be viewed with the capacity to accommodate additional cameras analytics that sound an alert when motion is detected. There are multi-user capabilities for all users, accessibility via the Internet, and multi-screen video display.

4.6 A camera can be fixed to only look at one specific view or it can be movable through the use of PTZ (that is, moving left and right, up and down, and closer and far away). PTZ cameras are used to cover wider fields of view.

4.7 Coverage is capable of capturing clear visual identification of individuals and activities and provides an unobstructed view of all areas, unless prohibited by law, including all points of entrances to and exits from the facility, from both indoor and outdoor vantage points.

4.8 Cameras positioned in the building and around the property include, but are not limited to, exterior perimeter; parking lots; entrances and exits; loading dock; storage rooms; vaults; offices; areas in which product is grown, processed, manufactured, stored, handled, inventoried, sold, delivered, transported, or destroyed; rooms with exterior windows, roof hatches or skylights; and rooms that contain equipment, product, currency, drop boxes, safes, vaults, data, and proprietary records.

4.9 Operate under all lighting conditions of each area under surveillance with the capability to produce immediately a clear, color or black and white, still photograph in a digital form.

4.10 Installation of additional lighting is an acceptable means to increase picture clarity and brightness.

4.11 Cameras should be programmed and focused to maximize the quality of the recorded image.

4.12 Footage should clearly and accurately display the date and time, synchronized, and not significantly obscure the picture.

4.13 Should have the ability to record all images captured by each surveillance camera and store for a minimum number of 60 days in a format that should be easily accessed for investigative purposes.

4.14 Failure notification system provides an immediate audible, text, or visual notification of any failure in the system. The failure notification system logs the failure and sends by telephone, e-mail, or text message as an alert to a designated security person.

4.15 To bridge the short time period between power loss and switch to a generator system, an uninterruptible power supply (UPS) will ensure continuous operation of camera systems and servers.

5. Policies and Procedures

5.1 Policies and procedures specifying instructional requirements applicable to the video surveillance system to protect resin cannabis and currency, such as roles and responsibilities

for responding to analytics that sound an alert when motion is detected and notification protocols for alerts.

5.2 A complete index and guide to the hardware, software, devices, technical documentation, monitors, and controls should be available either in hardcopy or electronic form. This guide should include a map of the alarm locations, direction of coverage, device numbers, and operating instructions for the video surveillance equipment.

6. Maintenance Requirements

6.1 The video surveillance system should be maintained in good working order at all times, per the manufacturer's specifications.

6.2 Conduct and document monthly maintenance inspections to ensure that any repairs, alterations, and upgrades are made for proper operation of the system.

6.3 Designated personnel oversee the functioning of the system and need to report immediately any malfunctioning or technical problems.

6.4 The system conducts a self-test when set and identifies attempted sabotage of the system.

6.5 All equipment is inspected, tested, and documented at regular intervals, not to exceed 30 calendar days from the previous inspection and test to ensure the systems remain functional.

6.6 All maintenance records should be maintained for a period of time in compliance with applicable regulatory standards.

7. Monitoring and Notification

7.1 The video surveillance system is monitored at all times by personnel who determine the appropriate steps to be taken in response to an attempted or actual unauthorized access or tampering with the system.

7.2 The 24 h per day, seven days per week, monitoring station either on- or off-site or both should have connectivity with all video surveillance cameras.

7.3 Video surveillance coverage is capable of monitoring all individuals, activities, and coverage of all enclosed areas, unless prohibited by law, including all points of entrances and exits from the facility.

7.4 Video surveillance cameras should be positioned in and around the property including, but not limited to, exterior perimeter; parking lots; entrances and exits; loading dock; storage rooms; vaults; offices; areas in which product is grown, processed, manufactured, stored, handled, inventoried, sold, delivered, transported, or destroyed; rooms with exterior windows, roof hatches or skylights; and rooms that contain equipment, product, currency, drop boxes, safes, vaults, data, and proprietary records.

7.5 There should be a notification system for interruptions and failures including audible alarms, telephone, cell phone, text message, or e-mail, or combinations thereof.

7.6 If any of the video analytics sensors are triggered when the cameras are in operation, a monitoring station should