

OFFICE OF THE STATE AUDITOR

DIANA DIZOGLIO

Official Audit Report – Issued September 26, 2023

Cannabis Control Commission

For the period January 1, 2019 through December 31, 2020



OFFICE OF THE STATE AUDITOR
DIANA DIZOGLIO

September 26, 2023

Commissioners
Cannabis Control Commission
2 Washington Square
Worcester, MA 01604

Dear Commissioners:

I am pleased to provide to you the results of the enclosed performance audit of the Cannabis Control Commission. As is typically the case, this report details the audit objectives, scope, methodology, findings, and recommendations for the audit period, January 1, 2019 through December 31, 2020. As you know, my audit team discussed the contents of this report with agency managers. This report reflects those comments. I am available to discuss this audit if you or your team have any questions.

Best regards,



Diana DiZoglio
Auditor of the Commonwealth

cc: Shawn Collins, Executive Director of the Cannabis Control Commission

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LIST OF ABBREVIATIONS

BQL	below quantitative level
CCC	Cannabis Control Commission
CMR	Code of Massachusetts Regulations
ITL	independent testing laboratory
MDAR	Massachusetts Department of Agricultural Resources
ME	marijuana establishment
RFID	radio-frequency identification

EXECUTIVE SUMMARY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of the Cannabis Control Commission (CCC) for the period January 1, 2019 through December 31, 2020. The purpose of our audit was to determine whether CCC ensured that recreational marijuana products sold met the safety standards required by the following:

- Sections 15(a)(1) through (3) of Chapter 94G of the General Laws;
- Section 500.160(1) through (4) and (10) of Title 935 of the Code of Massachusetts Regulations, which was in effect during the audit period; and
- CCC’s “Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries.”

Below is a summary of our findings and recommendations, with links to each page listed.

Finding 1 Page 13	CCC did not identify all products considered expired and prevent their sale to consumers before they were retested.
Recommendation Page 13	CCC should develop and implement monitoring controls to identify all products with materials that were last tested more than one year ago and prevent the sale of those products to consumers.
Finding 2 Page 15	CCC did not ensure that marijuana establishments (MEs) and independent testing laboratories (ITLs) properly reported marijuana products that tested positive for pesticides.
Recommendations Page 16	<ol style="list-style-type: none">1. CCC should use existing Metrc capabilities to create a report that identifies all positive pesticide tests for CCC’s Investigations and Enforcement Unit to monitor MEs’ and ITLs’ compliance with reporting requirements.2. CCC should develop adequate policies and procedures to ensure that ITLs’ standard operating procedures include instructions for responding to laboratory results that indicate that contaminant levels are above acceptable limits.
Finding 3 Page 19	CCC did not provide cybersecurity awareness training to its employees.
Recommendation Page 20	CCC should ensure that all new employees receive initial cybersecurity awareness training and that all employees complete annual cybersecurity awareness training thereafter.

OVERVIEW OF AUDITED ENTITY

Chapter 55 of the Acts of 2017 established the Cannabis Control Commission (CCC) as the independent agency responsible for developing and enforcing regulations over the marijuana (or cannabis) industry in Massachusetts. According to its website, CCC's mission is "safely, equitably and effectively implementing and administering the laws enabling access to medical and adult use [or recreational] marijuana in the Commonwealth." CCC is located at 2 Washington Square in Worcester.

According to Chapter 55 of the Acts of 2017, CCC has five commissioners, which include the following:

[One commissioner] of whom shall be appointed by the governor and shall have a background in public health, mental health, substance use or toxicology; 1 of whom shall be appointed by the attorney general and shall have a background in public safety; 1 of whom shall be appointed by the treasurer and receiver-general and shall have experience in corporate management, finance or securities; and 2 of whom shall be appointed by a majority vote of the governor, attorney general and treasurer and receiver-general, 1 of whom shall have professional experience in oversight or industry management, including commodities, production or distribution in a regulated industry and 1 of whom shall have a background in legal, policy or social justice issues related to a regulated industry.

An executive director, appointed by the commissioners, oversees CCC's day-to-day activities. CCC received state appropriations of \$7,987,871; \$13,419,742; and \$15,196,869 for fiscal years 2019, 2020, and 2021, respectively. According to CCC officials, in January 2019, CCC had 40 staff members, including the commissioners and the executive director. By December 31, 2020, CCC had 86 staff members, including the commissioners and the executive director.

Massachusetts Recreational Marijuana Industry

On November 8, 2016, Massachusetts Ballot Initiative Question 4 passed with 53.6% of the vote. On December 15, 2016, marijuana was legalized in Massachusetts for people 21 years of age and older. On July 27, 2017, the Legislature approved Chapter 55 of the Acts of 2017, CCC's enabling statute. The inaugural commissioners were appointed on September 1, 2017, and CCC's executive director was hired in October 2017. The first licensed sales of marijuana products for recreational use in Massachusetts began in November 2018. According to CCC officials, some of the earliest recreational marijuana products originated through the medical marijuana market, which was regulated by the Department of Public Health. Medical licensees initially could transfer some existing plants and products that had successfully passed the Department of Public Health's testing protocols to their recreational inventory.

In accordance with Chapter 55 of the Acts of 2017, oversight of the Medical Use of Marijuana Program transferred from the Department of Public Health to CCC in December 2018.

CCC Licensure

All businesses that operate in the Massachusetts marijuana industry must be licensed by CCC, including medical marijuana treatment centers (previously known as registered marijuana dispensaries) that were previously licensed under the Department of Public Health before December 2018. CCC issues the following licenses, for recreational marijuana establishments (MEs) and medical marijuana treatment centers, to businesses intending to cultivate, manufacture, transport, test, sell, or deliver marijuana products.

Medical Marijuana Treatment Center	Marijuana Research Facility
Marijuana Cultivator	Independent Testing Laboratory
Craft Marijuana Cooperative	Standards Testing Laboratory
Marijuana Product Manufacturer	Microbusiness
Marijuana Retailer	Delivery-Only Licensee
Existing Licensee Transporter	Social Consumption Establishment
Third-Party Transporter	Delivery Endorsement

To obtain a license, an applicant must first host a public community outreach meeting to inform the public of its proposal to open an ME in the community and present details—including its location, operation, and compliance with local ordinances and bylaws—and respond to any concerns the public may have. The applicant documents the meeting on a CCC-provided Community Outreach Meeting Attestation Form and submits the form to CCC and the municipal government. The municipal government uses this information to assess the impact of the proposed ME on the community and negotiates a Host Community Agreement with the applicant if it determines that the ME would benefit the community. The applicant then submits a license application to CCC that includes the Host Community Agreement, a list of individuals with a controlling interest in the business, its financial resources, its operating policies and procedures, and other documentation specific to the type of license desired in accordance with CCC’s regulations.

CCC sends the applicant a notice when its application is deemed complete, informing that CCC (1) has sent a notice to the applicant’s host municipality, requesting verification that the applicant is in

compliance with the municipality’s local ordinances or bylaws within 60 days and (2) will consider the application for a provisional license within 90 days, in accordance with state law. During that 90-day period, CCC runs a comprehensive background check on all individuals affiliated with the application. If CCC ultimately approves an application, the applicant receives a provisional license once the applicant pays the appropriate fee for the business type.

As of December 31, 2020, CCC had approved 212 final recreational licenses and 85 final medical-use licenses. In addition, CCC had approved 293 provisional recreational licenses and 36 provisional medical-use licenses.

Overview of Marijuana Products

CCC regulations require that all marijuana products are manufactured with plants grown by licensed MEs. Marijuana products sold by CCC-licensed MEs are manufactured in a variety of forms. CCC classifies these products using the following four categories.

Category	Description
Usable marijuana	These products consist of marijuana plants that have been trimmed, dried, and packaged as a finished product. They are sold in containers as finished marijuana flower or buds and in a pre-rolled form as a single item or in small packs similar to cigarettes.
Marijuana resins	These products are solid marijuana products made by gathering and compressing the cannabinoid-rich ¹ materials from the marijuana plant. Marijuana resins are commonly known as hashish or kief, and are usually sold by MEs in containers, typically in quantities of one or one-half grams.
Marijuana concentrates	These products are made by using solvents to extract and concentrate compounds from marijuana plants. Concentrate products are created in the form of an oil, paste, wax, or solid material. MEs sell concentrates as a finished product, typically in quantities of one gram or less, or they can be used as an ingredient in other marijuana-infused products.
Marijuana-infused products	These products are made using marijuana resins and concentrates to create numerous marijuana products in edible and inedible forms. Edible forms include baked goods, lozenges, candies, and teas. Inedible forms include ointments, oils, tinctures, and aerosol or electronic cigarettes (and their cartridges).

1. Cannabinoids are compounds produced by marijuana plants that have medical properties and psychotropic (or mood altering) effects.

Marijuana Production and Testing Processes

Section 4 of Chapter 94G of the General Laws requires all CCC licensees, and CCC itself, to use one statewide seed-to-sale system to account for all marijuana production from seed through harvest and testing through sale. CCC selected Metrc, a third-party electronic tracking and reporting database, to meet this requirement. CCC uses Metrc to track and monitor the following marijuana production processes to ensure compliance with all regulations.

Cultivation

Licensees cultivate marijuana plants in batches from seeds or cuttings from a mother plant. Each batch is assigned a radio-frequency identification (RFID) tag that includes a Metrc identification number to initiate the tracking process. When the batched plants reach a height of about eight inches, the marijuana cultivator grades the batch, selects the well-developed plants for further production, and destroys the remainder. Each selected plant is then assigned a unique RFID tag, while the destroyed product is measured and recorded as destroyed under the original batch's RFID tag. The selected plants are then moved to growing rooms within the facility. Each growing room has a Metrc location number. The ME records the move in Metrc, which then automatically transfers each plant's RFID tag to the new growing rooms' Metrc location number to track inventory. The plants then grow under climate-controlled conditions through the vegetative, flowering, and harvest phases. The vegetative phase is approximately seven weeks, and it is when plants reach most of their mature growing height. The cultivator sets the lighting in the growing room to be on for 16 hours a day to simulate natural growing conditions. The cultivator records the vegetative phase start and end dates and any location changes in Metrc.

Flowering is the phase of growth where signs of flowers appear on the plant stems. Marijuana cultivators induce flowering by reducing the lighting time to 12 hours a day to simulate natural harvest conditions. Cultivators record the flowering phase start and end dates and any location changes in Metrc. Plants are ready for harvest at the end of the flowering phase, which is approximately eight weeks long.

At the end of the flowering phase, cultivators weigh and combine several flowering plants into a single harvest batch. A harvest batch is a collection of marijuana plants that are cultivated and harvested together. The cultivator assigns an RFID tag number to each plant and a total harvest

weight to a single harvest batch identification number for inventory control purposes. Harvested plants lose a significant amount of weight because of the post-harvest curing and drying process. The cultivator adjusts the final harvest weight in Metrc (to account for the weight loss), which CCC monitors to ensure that the weight reduction is reasonable by industry standards and no product was diverted or removed within Metrc. The cultivator also adjusts the harvest batch weight in Metrc to account for plant waste materials, such as roots and stems, which are removed from the batch. CCC's Investigations and Enforcement Unit conducts compliance visits at licensed cultivation facilities to ensure that plant inventories are accurate and complete. Specifically, investigators download the cultivator's inventory from Metrc to handheld scanners that read plant RFID tags and locations to verify the accuracy of the inventory. CCC's Investigations and Enforcement Unit immediately investigates any discrepancies at the site. CCC officials told us that during these onsite compliance visits, investigators and compliance officers also check plants for damage or signs of chemical application (e.g., chemical burn marks on plants); review chemical and waste logs; review video footage of licensees' activities; review employee training, documentation regarding Criminal Offender Record Information checks, and responsible vendor training records; check for pesticides on-site to ensure compliance with the Massachusetts Pesticide Control Act; interview employees when applicable; follow up on complaints when applicable; and check chemical labels for compliance with Section 25(b) of the Federal Insecticide, Fungicide, and Rodenticide Act.

Testing

Independent testing laboratories (ITLs) are required to test all harvest batches for potency, microbiological contaminants, and pesticide residue. CCC's protocol for representative sampling in effect during the audit period required cultivators to create one test sample for every 10 pounds of a harvest batch. Metrc tracks the transfer of the test packages by the cultivator or a licensed third-party transporter and records test results. Marijuana cultivators create manifests in Metrc that include information such as weight, types of tests required, and the means of transport (by the cultivator or a licensed third-party transporter) on a barcoded Metrc tracking label that is affixed to the test package.

Upon receipt of each test package, the ITL verifies the manifest information and assigns a laboratory identification number to the package to track and record the test results of each harvest batch. Once the samples pass all required tests, Metrc releases the harvest batch for further processing as

a production batch. According to Section 1 of Chapter 94G of the Massachusetts General Laws, a production batch is a “batch of finished plant material, cannabis resin, cannabis concentrate or marijuana-infused product made at the same time, using the same methods, equipment and ingredients.” Under CCC testing protocols, any harvest or production batch that fails the testing can be remediated, such as by reducing moisture content, eliminating bacterial contaminants, or in some cases—such as samples with traces of pesticides—being destroyed.

Packaging and Transfer

After an ITL completes final product testing, the cultivator packages finished products with a label created in Metrc that includes a unique batch number that identifies the production batch associated with the manufacturing, processing, and cultivating of the product.

Using Metrc, the ME manages the transfer of finished products for sale and creates a shipping label and manifest that lists all products contained in the shipment and identifies the CCC-licensed transporter that is accepting the finished products to be transported. MEs may also transport the product itself, using the same process in Metrc. The receiving ME accepts the transfer from the transporter by verifying the manifest information in Metrc. At each transfer, the accepting ME becomes legally responsible for the custody and condition of the finished products. According to CCC officials, the transferred inventory must be reconciled by the accepting ME within eight hours of its receipt of the delivery, including weighing the inventory and counting the number of products in the transferred inventory on camera.

Sale at Marijuana Retailers

After accepting delivery from the transporter, the ME enters the associated Metrc information into its point-of-sale and inventory systems. The point-of-sale system is connected to Metrc and records all sale transactions and adjusts the retailer’s inventory levels as sales and deliveries occur. CCC can use this information to ensure that MEs accurately report retail sales, inventory adjustments, and related information in compliance with all applicable laws and regulations.

Laboratory Testing

CCC licenses ITLs to perform tests in compliance with CCC’s “Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered

Medical Marijuana Dispensaries.” To obtain a license, an applicant must be accredited by the International Organization for Standardization and the International Electrotechnical Commission under their joint standard for laboratory proficiency (ISO/IEC 17025). To obtain the accreditation, an ITL must be evaluated by third-party examiners on behalf of the International Organization for Standardization to ensure that an ITL is technically proficient and consistently produces precise and accurate test results.

CCC’s testing protocols provide marijuana cultivators, product manufacturers, and ITLs with the required and recommended best practices to sample and test marijuana and products made from marijuana to comply with CCC regulations. The protocols include sampling and testing standards regarding the following types of contaminants that could be introduced to marijuana and products made from marijuana at various stages of cultivation and processing.

- **Metals:** Metals are naturally occurring elements that enter agricultural products through air, water, and soil. The levels of contamination can vary by geographic location, the plants’ ability to absorb contaminants, and the agricultural and manufacturing processes used to produce finished marijuana products. CCC protocols require testing for arsenic, cadmium, lead, and mercury. Long-term ingestion and/or inhalation of these substances have been associated with several illnesses and diseases, including cancer and disorders of the nervous, digestive, and immune systems.
- **Pesticides:** Pesticides are manufactured substances that are intended to destroy or repel insects or used to regulate plant growth. Pesticides can be applied in a variety of methods to the growing environment or directly on plants. CCC’s protocols require testing for nine specific pesticides.² Adverse health effects from pesticide exposure depend on the pesticide and can range from temporary skin and eye irritation to long-term medical conditions, including cancer and reproductive disorders.
- **Microbiological contaminants and mycotoxins:** Microbiological contaminants are natural chemical toxins produced by living things—including plants, fungi, and bacteria—as a defense against predators, insects, or infestation. Mycotoxins are toxic substances produced from certain molds or fungi present on plants as they are grown or stored. CCC’s protocols require testing for microbiological contaminants and mycotoxins in both unprocessed and processed marijuana material and in marijuana resins extracted from marijuana material with carbon dioxide or solvents. Some microbiological contaminants can potentially cause gastrointestinal distress or liver damage over time. Certain mycotoxins that ITLs are required to test for, such as aflatoxins and ochratoxin A, have been associated with an increased risk of liver cancer and birth defects and could lead to kidney and immune system problems.

2. The nine pesticides are bifenthrin, bifenthrin, cyfluthrin, etoxazole, imazalil, imidacloprid, myclobutanil, spiromesifen, and trifloxystrobin.

- **Solvents:** Solvents are chemicals used to isolate cannabinoids and other compounds from marijuana material. The process can result in trace amounts of leftover solvents in the final resins or concentrate products. CCC’s protocols list 48 solvents that are allowed in the production of marijuana resins. ITLs test only for the solvent or solvents that the licensee declares were used in the process. Solvents such as ethanol and hexane, allowable for use by CCC’s protocols, have been associated with potential health issues, including dependence, headaches, nausea, and impairment of the central nervous system.

ITLs develop contaminant-testing procedures in compliance with CCC’s testing protocols. ITLs report test results to marijuana cultivators or product manufacturers on a certificate of analysis, which ITLs use to certify that the test results are accurate, complete, and compliant with their own quality control criteria and that the tests were performed with procedures that are accredited by the International Organization for Standardization. Certificates of analysis report three possible test outcomes, as follows.

Test Result	Definition
Limit of Quantitation or Positive Test	This indicates the presence of at least the smallest concentration of a contaminant that can be detected and measured consistently with a high degree of accuracy.
Below Quantitative Level	This indicates that the contaminant or a similar compound has been detected but at concentrations that are too low to be measured with a consistent or reliable degree of accuracy.
Not Detected	This indicates that the contaminant or a similar compound is absent or below a designated cutoff value.

Two ITLs operated in Massachusetts during the audit period to serve the MEs that produced and/or sold recreational marijuana products. During that time, the two ITLs performed 1,512,325 individual tests for potency and contaminants. The average turnaround time—the time between when a test was ordered and when the test results were reported to the ME—was between 4 and 12 days, during most of the audit period.³ A Massachusetts marijuana industry advocacy group we interviewed stated that consistent reporting times are more critical to MEs operating efficiently than relatively short turnaround times and that it was satisfied with ITLs’ performances during the audit period. As of June 15, 2021, four additional ITLs were operating to serve both the medical and recreational markets in Massachusetts, and another 13 ITL license applications were in various stages of the review and approval process, which generally takes about a year to complete.

3. ITL productivity was adversely impacted by reduced staffing and closures during the 2019 electronic cigarette crisis and the 2019 coronavirus pandemic. During these periods, turnaround times were significantly higher.

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of certain activities of the Cannabis Control Commission (CCC) for the period January 1, 2019 through December 31, 2020.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Below is our audit objective, indicating the question we intended our audit to answer, the conclusion we reached regarding the objective, and where the objective is discussed in the audit findings.

Objective	Conclusion
1. Does CCC ensure that recreational marijuana products sold meet the safety standards required by Section 15(a)(1) through (3) of Chapter 94G of the General Laws; Section 500.160(1) through (4) and (10) of Title 935 of the Code of Massachusetts Regulations, which was in effect during the audit period; and CCC’s “Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries”?	No; see Findings <u>1</u> and <u>2</u>

To achieve our objective, we gained an understanding of CCC’s internal control environment related to the objective by reviewing applicable policies and procedures, as well as by interviewing CCC and Metrc employees and management, three independent testing laboratories (ITLs), a marijuana cultivator and product manufacturer, and a marijuana industry advocacy group. To obtain sufficient, appropriate audit evidence to address our audit objective, we performed the procedures described below.

- Using SQL Server Management Studio,⁴ we accessed the Metrc database and identified 25 pesticide tests where the use of a prohibited substance was detected at two marijuana establishments (MEs). To ensure that the MEs submitted a proposed plan of action to destroy the plant material and assess the source of contamination as required by regulation, we reviewed CCC investigation records and found 4 additional pesticide tests for the same MEs. We cross-referenced each occurrence with CCC records, which included emails and internal incident reports from MEs, to determine whether MEs and ITLs reported positive pesticide test results to CCC within 72 hours, as required by regulation.
- We examined marijuana contaminant testing and sales data in Metrc to determine whether all products sold during the audit period were tested in compliance with protocols determined by CCC in accordance with Section 15(a)(2) of Chapter 94G of the General Laws. Specifically, using SQL Server Management Studio, we accessed Metrc and identified 246,433 production packages composed of tested and untested materials that were directly associated with a product sold during the audit period (i.e., packages containing materials from which these sold products were made). Sales of products made from these packages totaled \$1,131,462,496, and consisted of 98,741 pounds of marijuana flower, totaling \$661,913,668, and an additional 11,576,180 individual products containing marijuana, totaling \$469,548,828. We traced the production history to identify steps where production packages were combined and cross-referenced the packages to the laboratory test data to determine whether each production package was completely tested for all 21 contaminants, as required by CCC protocols.
- Using SQL Server Management Studio, we accessed Metrc and identified all 160,625 completely tested production packages that were directly associated with a product sold during the audit period. Sales of products made from these packages totaled \$721,017,945, and consisted of 84,697 pounds of marijuana flower, totaling \$565,736,408, and an additional 3,512,289 individual products containing marijuana, totaling \$155,281,537. We then traced the production history for those packages to determine the date of the final contaminant test. We compared the final test date to the sale date of the product to identify any marijuana products that were sold more than one year after their final contaminant tests were completed.

Data Reliability Assessment

We assessed the reliability of the data obtained from Metrc by reviewing System and Organization Control reports⁵ that covered the audit period and ensured that certain information system control tests had been performed (see Finding 3). We also interviewed officials from CCC and Metrc about the system.

To determine the completeness and accuracy of laboratory testing records in Metrc, we selected a random sample of 40 testing records from Metrc and traced them to hardcopy certificates of analysis. We also randomly selected 40 hardcopy certificates of analysis and traced them back to the Metrc data.

4. SQL Server Management Studio is a software application used to recreate databases and perform analytical procedures.

5. These reports review the effectiveness of internal controls over a service organization's information systems and are conducted by independent certified public accountant or accounting firms.

In addition, we compared the total number of laboratory testing records in Metrc to those found in the ITLs' laboratory information management systems from the audit period.

Based on the data reliability procedures described above, we determined that the data obtained for our audit period were sufficiently reliable for the purposes of our audit work.

DETAILED AUDIT FINDINGS WITH AUDITEE'S RESPONSE

1. The Cannabis Control Commission did not identify all products considered expired and prevent their sale to consumers before they were retested.

Of the 160,625 packages that were completely tested and sold by marijuana establishments (MEs) during the audit period, we determined that 1,517 (less than 1%) contained some amount of product that had been last tested for contaminants more than one year before. Sales of these products totaled \$10,192,986 and consisted of 130,875 individual products in various forms and another 737 pounds of flower or buds.

The sale and consumption of marijuana products that contain materials that were last tested for contaminants more than one year before could result in a potential public health risk and loss of consumer confidence in the Massachusetts marijuana industry.

Authoritative Guidance

According to Section 500.160(4) of Title 935 of the Code of Massachusetts Regulations (CMR), which was in effect during the audit period, "Marijuana or Marijuana Products with testing dates in excess of one year shall be deemed expired and may not be dispensed, sold, Transferred or otherwise conveyed until retested."

Reasons for Issue

The Cannabis Control Commission (CCC) has not developed and implemented monitoring controls to identify all products with materials that were last tested for contaminants more than one year ago and prevent the sale of those products to consumers.

Recommendation

CCC should develop and implement monitoring controls to identify all products with materials that were last tested more than one year ago and prevent the sale of those products to consumers.

Auditee's Response

The Commission agrees with the recommendations and has taken actions to implement it. The Commission staff made improvements to controls since the start of adult-use sales and will continue to make changes. . . .

Based on the audit report, over 99% of products sold met the one-year period of testing. We agree that anything less than 100% is unacceptable. . . .

Through its regulatory scheme, the Commission built and deployed seed-to-sale reporting and prioritized investigators' and compliance officers' routine compliance inspections as controls. . . . To enhance these controls, the Commission requested that its vendor, Metrc, make modifications and enhancements in the seed-to-sale system in 2022 to highlight testing dates. Additionally, and again to improve controls, every fiscal year since its inception, the Commission has sought and gratefully secured funding to increase the number of investigation and enforcement staff and contracted support, including from specialized vendors for seed-to-sale software and financial and background investigations, which strengthen controls for testing and other elements of compliance.

Specific to this finding, the Commission has implemented controls—independent from the audit's finding and recommendations—since 2020 to ensure products are sold within the test validity dates. These improvements include:

- The Data Manager creating a monthly report of testing dates from Metrc and provide the report to investigators and compliance officers. The report covers all licensees' inventory, prioritizing retailers and [medical marijuana treatment centers].*
- Investigator or Compliance Office will issue a notice of deficiency (NOD) if a product is out of testing validity dates. The first NODs for this deficiency were issued in April 2022.*

Relatedly, the Commission seeks to clarify that products sold beyond the test date were not "expired" in the sense that other consumer goods may be. The shelf stability of cannabis depends largely on the specific product and any other ingredients, additives, and hardware that may be associated with it. For instance, edible products made with perishable ingredients may be recommended for consumption within a calendar year. Other products may be consumable outside of a calendar year. The purpose of the retest, and the reason the Commission requires it, is to ensure any new contaminants have not been introduced to the product, or that there has not been any degradation of the potency or cannabinoid concentration, for instance. This is especially true for products such as vape products and flower. Patients and consumers are advised, therefore, to carefully read the label of products for any specific consumption requirements or suggestions.

Auditor's Reply

The Office of the State Auditor acknowledges that what is expired in the scenario described in Finding 1 is the test date of the product, not necessarily the product itself. We also acknowledge that, depending on the type of product and its associated ingredients, some products may be consumable outside of a calendar year. However, as noted above, state regulations consider products themselves to be expired (and not to be sold until retested) when the last testing dates were over one year ago.

In its response, CCC states that it had controls in place during the audit period and has continued to enhance these controls since its inception. As noted above, during the audit period, we identified \$10,192,986 worth of product that contained some amount of material that was last tested for contaminants more than one year before it was sold to consumers. We believe this indicates that the process in place during the audit period needed improvement, and based on its response, CCC is taking appropriate measures to address our concerns in this area.

2. The Cannabis Control Commission did not ensure that marijuana establishments and independent testing laboratories properly reported marijuana products that tested positive for pesticides.

CCC did not ensure that MEs and independent testing laboratories (ITLs) reported positive pesticide tests to CCC within 72 hours as required. Specifically, MEs and ITLs did not report positive pesticide tests until 4 to 16 days after the possibility of pesticide contamination was known from test results in 22 of 58 instances during the audit period. Additionally, we found 1 instance where the ITL did not report a positive pesticide test to CCC at all.

If CCC does not ensure that positive pesticide tests are reported on time, CCC's ability to investigate possible pesticide violations, and protect consumers, could be impaired.

Authoritative Guidance

Section 15(a)(3) of Chapter 94G of the Massachusetts General Laws states, "An independent testing laboratory shall report any results indicating contamination to [CCC] within 72 hours of identification."

According to 935 CMR 500.160(3), which was in effect during the audit period,

A Marijuana Establishment shall have a written policy for responding to laboratory results that indicate contaminant levels are above acceptable limits established in the protocols identified in 935 CMR 500.160(1).

(a) Any such policy shall include:

- 1. notifying the Commission within 72 hours of any laboratory testing results indicating that the contamination cannot be remediated and disposing of the Production Batch.*
- 2. notifying the Commission of any information regarding contamination as specified by the Commission or immediately upon request by the Commission.*

(b) The notification shall be from both the Marijuana Establishment and the Independent Testing Laboratory, separately and directly.

Reasons for Issue

CCC did not have adequate policies and procedures, including a monitoring component, to ensure that MEs and ITLs report positive pesticide tests to CCC within 72 hours of identification. Although Metrc has reports available that can identify positive pesticide tests, CCC did not use these reports to monitor MEs' and ITLs' compliance with reporting requirements.

Further, CCC did not have adequate policies and procedures to ensure that ITLs' standard operating procedures include instructions for responding to laboratory results that indicate that contaminant levels are above acceptable limits. We reviewed the standard operating procedures that were in effect during the audit period for both ITLs that operated during the audit period and found that neither included instructions for reporting positive pesticide tests to CCC.

Recommendations

1. CCC should use existing Metrc capabilities to create a report that identifies all positive pesticide tests for CCC's Investigations and Enforcement Unit to monitor MEs' and ITLs' compliance with reporting requirements.
2. CCC should develop adequate policies and procedures to ensure that ITLs' standard operating procedures include instructions for responding to laboratory results that indicate that contaminant levels are above acceptable limits.

Auditee's Response

The Commission agrees with the recommendations in this finding. We disagree, however, with the finding that the Commission did not have controls; in fact, in the case of pesticide testing, the Commission's controls were effectively deployed and worked. During the audit period, Enforcement staff issued NODs, started an investigation, and came to an agreement with a Licensee that resulted in a financial sanction and, importantly, operational corrections to deter future risk.

Regarding second recommendation, we appreciate the observation that the Commission did not have a specific requirement for ITLs to have the 72-hour reporting requirement in their Standard Operating Procedures (SOPs).

Through the audit period to present, all applicants must have a compliant Quality Control (QC) plan, which includes 935 [CMR] § 500.160, before commencing their operations. Review of these documents takes place throughout the licensing process. As part of the licensing process, ITLs must submit SOPs that include instructions for result reporting that indicate contaminant levels

above acceptable limits along with other steps to show adherence to the current Testing Protocols. To improve controls for this aspect of licensing, the Commission hired more staff to focus on ITLs, adopted new Testing Protocols, and created seed-to-sale configurations to ensure ITLs have the proper procedural requirements in their SOPs.

As to the first observation and recommendation, the Commission has enacted changes. In 2021, the Commission staff worked with its vendor, Metrc, to modify the seed-to-sale system to ensure that untested product cannot go to retail. As part of this process, the Commission required contaminant limits be embedded into Metrc to prevent an ITL from entering values outside of the contaminant thresholds while still passing the product.

Additionally, the Commission requires lab test batches to be included in Metrc. A "lab test batch" is a categorized group of required test types/analytes [substances being analyzed] that are linked together with built-in dependencies. Test samples are created to require all test types/analytes to be tested and entered into Metrc to ensure public safety.

The creation of lab test batches enables the categorization of test types, which requires ITLs to enter results under specific test categories instead of being entered as individual tests. With this type of entry, all required tests are entered and passed before the test status changes to a "Test Pass" status for the product.

Changes to the testing requirements in Metrc:

- *June 2021 implemented lab test batches to ensure all testing is complete.*
 - *Embedded limits within Metrc to prohibit the ITLs from passing a product with test results outside of the contaminant limits.*
 - *The creation of a Product Category Chart to ensure product test type requirements are easily identified.*
- *Licensees add results from remediated products into Metrc. Any retest that does not appear to be fully correct goes from Metrc to the Commission staff for review to determine if the retesting meets standards.*

While we agree with the recommendations, the Commission disagrees with how the audit team comes to this finding, questions the numbers reported in the current draft, and respectfully requests that this finding be revised. The audit team based its numerical findings on a misinterpretation of the 72-hour reporting requirement.

The controlling date for the purposes of the 72-hour reporting requirement is the report date on the Certificate of Analysis (COA). The report date on the COA is the date the laboratory completed its internal quality assurance processes, any retesting, and approved the results. Using the report date on the COA is consistent with the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) standard 17025:2017 that requires results be reviewed and authorized prior to release (Section 7.8.1.1).

The pesticide failure notification to the Massachusetts Department of Agricultural Resources (MDAR) is also based on the COA report date. . . .

Each of these instances [of late or missing reporting] were known to the Commission; in fact, a Commission investigator discovered some of the deficiencies during an onsite inspection. The resulting investigations produced actions against Licensees. One of the investigations resulted in a \$350,000 fine for pesticide use before the audit was completed. The Commission's controls—which includes its staff—worked. The Commission provided all failure notifications, testing results, and other reports to the audit team, including investigatory and enforcement documents that demonstrated the Commission's knowledge and active investigation of the failures to report pesticides to the Commission.

The draft report references reporting required at the "possibility of pesticide contamination." As a preliminary matter, the Commission recognizes that MDAR has primary jurisdiction over the use of pesticides in the Commonwealth and coordinates closely with MDAR to ensure that its licensees are not using pesticides unless they have been approved by MDAR. The Cannabis Control Commission and MDAR, for the purposes of investigation, agree that a pesticide is not detected until a laboratory issues a COA and that licensees are required to notify us within 72 hours of such. Using the report date on the COA is consistent with the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) standard 17025:2017 which requires results be reviewed and authorized prior to release (Section 7.8.1.1).

Auditor's Reply

We appreciate CCC for explaining its rationale for noncompliance with Section 15(a)(3) of Chapter 94G of the General Laws. Specifically, CCC indicates that it follows best practices set by the International Organization for Standardization and the International Electrotechnical Commission; however, this audit assessed whether CCC complied with the General Laws. We understand that, for testing purposes, we used the pesticide test date reported on the certificate of analysis as the starting point for the 72-hour reporting window. This date would be the first date on which the possibility of pesticide contamination was known to the ITL. As noted above, Section 15(a)(3) of Chapter 94G of the General Laws states, "An independent testing laboratory shall report any results indicating contamination to [CCC] within 72 hours of identification." Further, 935 CMR 500.160(3) requires that MEs and ITLs have written policies that include "notifying the [CCC] within 72 hours of any laboratory testing results indicating that the contamination cannot be remediated." Yet, in its response, CCC asserts that the Office of the State Auditor misinterpreted the 72-hour reporting requirement, claiming that the 72-hour reporting window does not begin until the ITL issues the certificate of analysis. We found that there was a delay of 1 to 13 days between the pesticide test date and the date the certificate of analysis was ultimately issued by the ITL and recorded in Metrc.

CCC's response to this finding states that using the report date on the certificate of analysis is consistent with the International Organization for Standardization and International Electrotechnical Commission

standard ISO/IEC 17025. However, when we requested this standard during the audit, CCC told us it could not provide a copy of it. Further, CCC did not tell us that it used this standard as guidance until after we presented this issue. Finally, if CCC plans to continue to use the report date on the certificate of analysis as the starting point for the 72-hour reporting window, this must be clearly stated in its regulations; otherwise, CCC will remain noncompliant with the General Laws.

In its response, CCC asserts that during the audit period, controls were in place and working as intended. We acknowledge that CCC may have been aware of these instances of late or missing reporting, but the instances were only detected by an inspection after the event had already occurred. We believe that CCC needs to strengthen its existing process by implementing additional preventative controls, which should be designed to prevent the event from occurring in the first place. Again, we reiterate our recommendation that CCC should use Metrc to create a report that would automatically send all positive pesticide test results to CCC's Investigations and Enforcement Unit.

3. The Cannabis Control Commission did not provide cybersecurity awareness training to its employees.

CCC employees did not receive cybersecurity awareness training during CCC's first 15 months of operation. CCC was established in December 2018, and CCC's cybersecurity awareness training was implemented in March 2020. A lack of such training may lead to user error or compromise the integrity and security of protected information in CCC's information technology systems.

Authoritative Guidance

The Executive Office of Technology Services and Security's Information Security Risk Management Standard IS.010, effective October 15, 2018, requires the following:

6.2.3 New Hire Security Awareness Training: All new personnel must complete an Initial Security Awareness Training Course. . . .

6.2.4 Annual Security Awareness Training: All personnel will be required to complete Annual Security Awareness Training.

Section 6 of state Executive Order 504, which was effective January 1, 2009 through October 25, 2019, states,

All agency heads, managers, supervisors, and employees (including contract employees) shall attend mandatory information security training within one year of the effective date of this Order.

For future employees, such training shall be part of the standardized orientation provided at the time they commence work. Such training shall include, without limitation, guidance to employees regarding how to identify, maintain and safeguard records and data that contain personal information.

Reasons for Noncompliance

CCC management stated that at the time they began operations, they prioritized the completion of CCC's information technology systems and the development of related policies and procedures over procuring a cybersecurity awareness training program and conducting training.

Recommendation

CCC should ensure that all new employees receive initial cybersecurity awareness training and that all employees complete annual cybersecurity awareness training thereafter.

Auditee's Response

The Commission acknowledges this finding. The Commission implemented cybersecurity training for all employees in February 2020. All new staff members, including Commissioners, are now required to complete initial training within 30 days of their first day of work. The Commission has quarterly cybersecurity training and random testing, through the KnowBe4 cybersecurity training platform.

Auditor's Reply

Based on its response, CCC has taken measures to address our concerns in this area.

OTHER MATTERS

The Cannabis Control Commission’s reporting of possible pesticide violations was not in compliance with the Massachusetts Department of Agricultural Resources’ requirements.

We noted that the Cannabis Control Commission’s (CCC’s) reporting requirements for possible pesticide violations differed from the requirements of the Massachusetts Department of Agricultural Resources (MDAR), which has exclusive jurisdiction over the use of pesticides in Massachusetts, during the audit period.

A memorandum of understanding, dated September 1, 2018, between CCC and MDAR affirms MDAR’s exclusive jurisdiction over pesticide use in Massachusetts, including pesticide use related to the production of marijuana. The memorandum states that CCC “shall notify MDAR if it discovers a potential pesticide violation or actual violation during an inspection or investigation of a Marijuana Establishment or thereafter.” MDAR officials stated the following in an email to us on September 29, 2022:

The Massachusetts Department of Agricultural Resources (“MDAR”) has exclusive jurisdiction over pesticides pursuant to [Chapter 132B of the Massachusetts General Laws] and also acts as the state lead agency under the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”) as designated by the United States Environmental Protection Agency. MDAR’s jurisdiction over pesticides as it relates to marijuana was further confirmed in Section 26 of Chapter 55 of the Acts of 2017.

MDAR officials told us that they have consistently maintained this position since marijuana cultivation began in Massachusetts, first under the state Department of Public Health for medical marijuana, and then under CCC when it assumed responsibility for all marijuana-related activities in the state in 2018.

On September 26 and October 16, 2018, MDAR issued advisories to all Massachusetts marijuana cultivators affirming its exclusive jurisdiction, in conjunction with the federal Environmental Protection Agency, over pesticide use and its prohibition of the use of registered pesticides on marijuana.

During the audit period, CCC’s “Protocol for Sampling and Analysis of Finished Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries,” effective December 2017, allowed finished marijuana material to be dispensed to patients or used to make other

medical products if no pesticide was detected above the limit of detection.⁶ This was an adaptation of the state Department of Public Health’s testing protocols for medical marijuana. CCC has set the limit of detection for pesticides at 10 parts per billion.

During our review of marijuana establishments’ (MEs’) compliance with pesticide test reporting requirements, we found four instances where marijuana materials with a test result of “below quantitative level” (BQL)⁷ were classified as a “pass” in Metrc. A classification of “pass” in Metrc allows finished marijuana products made from the marijuana material to be sold in MEs. The four BQL test results we found in our audit test sample had reported concentration levels of 4.4 parts per billion.

After our review, we met with CCC to determine whether marijuana materials with BQL test results were allowed to continue into final production and sold to consumers without any notification from the MEs to CCC, or without CCC notification to MDAR, of a possible pesticide violation. CCC officials told us that they had co-jurisdiction over the use of pesticides in marijuana production and had determined that marijuana materials with BQL test results would be allowed to continue to final production and sale because BQL test results are not reliable indicators of possible pesticide use. They further stated that CCC was not required to report BQL test results to MDAR but noted that when CCC formally adopted the state Department of Public Health’s testing protocols in March 2021, it added the requirement that MEs and independent testing laboratories report BQL test results to CCC. CCC later stated in a memorandum to us, dated September 1, 2022, that it was “within the Commission’s authority to refer a case to MDAR for purposes of their investigation and enforcement of [the Pesticide Control Act],” but that it was not required to do so.

We asked MDAR officials about the jurisdictional and reporting issues we discussed with CCC. MDAR officials told us that, while CCC sets certain testing limits for its own reporting purposes,

It is MDAR’s understanding that CCC inspectors look for pesticides during their inspections with the facilities and report this information to MDAR. It is also MDAR’s understanding that any lab result that indicates anything other than a “ND” or non-detect for pesticides, is reported to MDAR for further investigation and determination as to whether any violation of law has occurred.

6. The limit of detection is the smallest measured concentration of a specific substance where it is possible to detect the presence of the substance in the test sample with acceptable certainty.
7. See the “[Laboratory Testing](#)” subsection of this report for a description of the three possible pesticide test results.

A reported concentration level of 4.4 parts per billion, as noted in the four test samples we observed, exceeds a test result of Not Detected and would meet the reporting threshold established in the September 1, 2018 memorandum of understanding between CCC and MDAR.

CCC's "Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries" and CCC's current operating practice do not require its licensees or CCC to report BQL test results to MDAR.

CCC should work with MDAR to clarify their jurisdictional and test result reporting differences, and amend their memorandum of understanding accordingly, to ensure that CCC and MDAR administer the Pesticide Control Act effectively and consistently throughout the Commonwealth.

Auditee's Response

The Commission acknowledges and recognizes that MDAR enjoys exclusive jurisdiction over the use of pesticides. MDAR has been a vital partner to the Commission, particularly during the audit period while the Commission worked on reconciling requirements between the then new adult-use and existing medical-use markets. The Commission remains appreciative of the continued collaboration with MDAR to protect the marijuana supply chain. . . .

The Commission's collaborative relationship with MDAR is reflected in a September 27, 2018 Memorandum of Understanding entered into by both agencies. As set forth in that Memorandum of Understanding, the Federal Insecticide, Fungicide, and Rodenticide Act . . . assigns to MDAR primary enforcement responsibility for pesticide-use violations within the Commonwealth. In addition, the Massachusetts Pesticide Control Act . . . grants MDAR the authority to regulate the use of pesticides in general, and [Chapter 55 of the Acts of 2017] grants MDAR regulatory authority over pesticide use relative to marijuana in particular. . . . At the same time, MDAR recognizes that the Commission is authorized to administer the Adult Use of Marijuana Program pursuant to . . . Chapter 55 of the Acts of 2017. . . . MDAR and the Commission agree that the implementation of their respective statutory and regulatory responsibilities governing inspections, investigations, and enforcement necessitate interagency cooperation. . . .

MDAR regulates pesticide use and application while the Commission directs which pesticides to test for in the regulated cannabis market. The Commission requires Licensees to test for pesticides, along with heavy metals and other contaminants. The Commission refers positive tests for pesticides to MDAR so they may exercise their authority. As of 2023, the Commission reports all positive pesticide tests, including those below quantification level (BQL), to MDAR.

We acknowledge that, during the audit period, the Commission's testing protocols did not specifically state that the Commission had to report any (i.e., BQL) pesticide detection to MDAR. To the extent that MDAR may have raised concerns with the Commission regarding the scope of its testing protocol or reporting requirements, the Commission took steps to address these

concerns. That said, the Commission continues to improve these controls, and the current testing protocol now requires all evidence of pesticides be reported to MDAR.

The audit team asked how a pesticide test result of 10 parts per billion is permissible given MDAR's "zero tolerance" for any evidence of pesticides, reflecting [federal Environmental Protection Agency, or EPA] policies. The EPA has not approved any pesticides for use with cannabis, because cannabis remains federally illegal. Because cannabis is legally regulated in the Commonwealth, however, the Commission must set testing standards. From its inception, the Commission has referred potential violations of permissible pesticide use to MDAR for purposes of their investigation and enforcement of [Chapter 132B of the Massachusetts General Laws].

In 2018, the Commission adopted the [state Department of Public Health's, or DPH's] existing testing protocols until the Commission issued its own updated protocols in 2021. The DPH's protocols allowed for a product to "pass" testing if pesticides were detected at or below 10 parts per billion (ppb). Furthermore, in allowing BQL testing, the Commission accounted for the testing capabilities and standards for the [independent testing laboratories], which cannot test to a perfect "zero," a challenge shared by other states. This protocol and our regulations, also respect that, by law, all independent testing laboratories must be accredited by an external third party to the most current International Organization for Standardization (ISO) 17025 standard. This accreditation requires that their processes and methods be validated external from the Commission, which establishes reliable and consistent quantitative levels of detection above absolute zero. In sum, tests to absolute zero are not reliable.

Despite that lack of reliability, a test indicating detection below 10 [parts per billion] may still indicate the need for further inquiry or investigation by MDAR, given its statutory obligations. Consequently, the Commission reports that finding to MDAR, so that MDAR may exercise its authority. The Commission entered [a memorandum of understanding] committing to this collaboration. The Commission exercises its regulatory authorities to support MDAR in performing its regulatory functions.

Auditor's Reply

Based on its response, CCC has taken measures to address our concerns in this area.

POST-AUDIT ACTION

In response to this audit report, the Cannabis Control Commission (CCC) provided the following comments related to its post-audit actions.

The actions listed below relate to issues mentioned in the audit. This is not a complete list of all changes made since December 2020.

- *Seed-to-Sale Changes:*
 - *June 2021 implemented lab test batches to ensure all testing is complete.*
 - *Embedded limits within Metrc to prohibit the Independent Testing Laboratories (ITLs) from passing a product with test results outside of the contaminant limits.*
 - *The creation of a Product Category Chart to ensure product test type requirements are easily identified by all users.*
 - *Failures are reported in Metrc for test failed or retest failed, and failed product cannot be transferred to retail.*
 - *Licensees add results from remediated products into Metrc. Any retest that does not appear to be fully correct goes from Metrc to the Commission staff for review to determine if the retesting meets standards.*
 - *The Data Manager creating a monthly report of testing dates from Metrc and provide the report to investigators and compliance officers. The report covers all licensees' inventory, prioritizing retailers and Medical Marijuana Treatment Centers (MTCs).*
- *Case management system: the case management system was built during the audit period, but is in wider use now.*
- *Increased staff to about 100, including Commissioners and Executive Director*
 - *Increased to 16 investigators.*
 - *Increased to 9 Licensing Specialists.*
 - *Hired Director of Testing.*
 - *All Commissioners changed.*
 - *Additional hiring is ongoing (2023) for legal, administrative, and other positions.*
- *Increased ITLs from 2 to 13.*
- *Accepted Massachusetts Department of Agricultural Resources (MDAR) policy modifications (sub-regulatory) on hemp and issued guidance to Commission licensees and notices to public on how to distinguish hemp products regulated by MDAR and cannabis products regulated by the Commission.*

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- *As of 2023, the Commission reports all positive pesticide tests, including below quantification level (BQL), to MDAR.*
 - *All Marijuana and/or Marijuana Products grown, produced, and sold in the Commonwealth of Massachusetts have required contaminant testing based on the product type and based on the state of the product at the time of testing.*
 - *Lab batch parameters were integrated into the system of record (SOR) by the Commission in June 2021 to ensure all products had complete and compliant testing results before further processing of the product or transfer of the product. These batches require Licensees to select a product type when submitting a testing sample(s), to ensure all testing required of that product has been performed and tested compliantly, prior to allowing the product to be transferred out of the involved Licensee. Lab batches require Licensees to select one of two batches for raw product—"Raw Plant Material (Extraction Only)" or "Raw Plant Material"—ensuring each batch receives the appropriate testing.*
 - *Issued updated Regulations and Guidance documents resulting in:*
 - *Product catalogue to allow anyone over 21 years of age to see all regulated products in the Massachusetts market.*
 - *Updated labeling requirements.*
 - *Prohibited Vitamin E Acetate as agent/ingredient within vaping cartridges [related to electronic cigarette or vaping use—associated lung injuries].*
 - *Issued updated Protocols in February 2021 resulting in:*
 - *Additional reporting obligations for Independent Testing Laboratories (ITL) on pesticide detection limits to ensure compliance. Pesticide detection above the limit of detection (LOD) but below the quantification level (BQL) is now considered out of compliance and reported to MDAR, given their statutory jurisdiction over pesticide use and application.*
 - *Additional heavy metal information and additive disclosures.*
 - *Additional heavy metal and Vitamin E Acetate screening requirements for finished vaporizer products.*
 - *Section 8.0 [of the Protocols] outlines requirements for remediation, reanalysis, and destruction of Marijuana Products.*
 - *Testing caps on marijuana products.*
 - *Clarification on the amount of cannabis allowed per [medical marijuana] patient in a 60-day period.*
 - *Clarifying language on labeling requirements.*
 - *The Commission implemented robust cybersecurity training for all employees in February 2020 that meets [state Executive Office of Technology Services and Security] standards and includes multiple trainings per year for staff.*
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Auditor's Reply

We appreciate the actions taken by CCC in response to our audit report. The Office of the State Auditor will be able to assess CCC's actions in a future audit.