Title 15: Mississippi State Department of Health

Part 22: Medical Cannabis Program

Subpart 1: Cannabis Testing Facilities

Chapter 1 REGULATIONS FOR CANNABIS TESTING FACILITY

Subchapter 1 General Provisions

Rule 1.1.1. Legal Authority: Miss. Code Ann. §§ 41-137-1 – 41-137-67.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.2 Definitions.

1. **"Accreditation"** means being currently deemed as technically competent under ISO/IEC 17025:2017 by an international mutual recognition arrangement signatory that has been found to meet ISO/IEC 17011, Conformity Assessment-Requirements for accreditation bodies accrediting conformity assessment bodies.

2. **"Accreditation Body"** means an impartial non-profit organization that operates in conformance with the International Organization for Standardization (ISO) / International Electrotechnical Commission (IEC) standard 17011 and is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for Testing.

3. **"Analytical Batch"** means a set of no more than twenty samples that are prepared together for the same type of analysis, are sequentially analyzed using the same instrument calibration curve, and have common analytical quality control requirements. The batch shall include testing samples as well as all applicable quality control samples, to include one method blank, duplicate laboratory fortified blanks, and duplicate matrix spikes, as required by the analytical method.

4. **"Batch"** means, with regard to usable medical cannabis, a homogenous, identified quantity of usable medical cannabis, no greater than twenty-five (25) pounds, that is harvested during a specified time period from a specified cultivation area, and with regard to oils vapors and waxes derived from usable medical cannabis, means an identified quantity that is uniform, that is intended to meet specifications for identity, strength, and composition, and that is manufactured, packaged and labeled during a specified time period according to a single manufacturing, packaging and labeling protocol.

5. **"Cannabis"** means all parts of the plant of the genus cannabis, the flower, the seeds thereof, the resin extracted from any part of the plant and every compound, manufacture, salt, derivative, mixture or preparation of the plant, its seeds or its resin, including whole plant extracts. Such term shall not mean cannabis-derived drug products approved by the federal Food and Drug Administration under Section 505 of the Federal Food, Drug, and Cosmetic Act.

6. **"Cannabis Products"** means cannabis flower, concentrated cannabis, cannabis extracts and products that are infused with cannabis or an extract thereof and are intended for use or consumption by humans. The term includes, without limitation, edible cannabis products, beverages, topical products, ointments, oils, tinctures and suppositories that contain tetrahydrocannabinol (THC) and/or cannabidiol (CBD) except those products excluded from control under Sections 41-29-113 and 41-29-136, Mississippi Code of 1972, as amended.

7. **"Cannabinoid Extract"** means a substance obtained by separating cannabinoids from cannabis by any of the following methods:

   A. A chemical extraction process using a hydrocarbon-based solvent; or

   B. A chemical extraction process using the hydrocarbon-based solvent carbon dioxide, if the process uses high heat or pressure.

8. **"Cannabis Testing Facility"** or "testing facility" means an independent entity licensed and registered by the Mississippi Department of Health that analyzes the safety and potency of cannabis.

9. **"Concentrate"** means a substance obtained by separating cannabinoids from cannabis by any of the following methods:

   A. A mechanical extraction process;

   B. A chemical extraction process using a nonhydrocarbon-based or other solvent, such as water, vegetable glycerin, vegetable oils, animal fats, food-grade ethanol or steam distillation; or

   C. A chemical extraction process using the hydrocarbon-based solvent carbon dioxide, provided that the process does not involve the use of high heat or pressure.

10. **"Department"** means the Mississippi State Department of Health.

11. **"Demonstration of Capability"** means an examination, provided by a medical cannabis testing facility, undertaken by an analyst to determine whether he or she is able to correctly, accurately, and repeatedly perform a specific analysis or analyze a specific measurement.

12. **"Disqualifying Felony Offense"** means:

    A. A conviction for a crime of violence, as defined in Section 97-3-2, Mississippi Code of 1972, as amended;

    B. A conviction for a crime that was defined as a violent crime in the law of the jurisdiction in which the offense was committed, and that was classified as a felony in the jurisdiction where the person was convicted; or

    C. A conviction for a violation of a state or federal controlled substances law that was classified as a felony in the jurisdiction where the person was convicted, including the service of any term of probation, incarceration or supervised release within the previous five (5) years and the offender has not committed another similar offense since the conviction. Under this subparagraph, a disqualifying felony offense shall not include a conviction that consisted of conduct for which this chapter would likely have prevented the conviction but for the fact that the conduct occurred before the effective date of this act.

13. **"Edible Cannabis Products"** means products that:

    A. Contain or are infused with cannabis or an extract thereof;

    B. Are intended for human consumption by oral ingestion; and,

    C. Are presented in the form of foodstuffs, beverages, extracts, oils, tinctures, lozenges and other similar products.

14. **"Inclusivity"** means, related to microbiological method validation, the sensitivity of the test method. It evaluates the ability of the test method to detect a wide range of target organisms by a defined relatedness.

15. **"Infused Cannabis Products"** means products that are:

    A. Any oil, wax, ointment, salve, tincture, capsule, suppository, dermal patch, cartridge or other product containing a medical cannabis concentrate or usable cannabis that has been processed so that the dried leaves and flowers are integrated into other material.

    B. Do not include an edible cannabis product.

16. **"Initial Display of Competency"** means an examination, provided by a cannabis testing facility, undertaken by an analyst to determine whether he or she is able to correctly, accurately, and repeatedly perform a specific analysis or analyze a specific measurement.

17. **"Laboratory Control Sample" (LCS)** means a blank matrix to which known concentrations of each of the target method analytes are added. The

spiked concentration must be within the calibration range of the method. The LCS must be carried through the entire sample preparation process and must be analyzed in the same manner as a representative sample. The LCS must be made from a standard that is not from the same vendor, or from the same lot if only one vendor is available, that is used for the calibration curve.

18. **"Laboratory Replicate Sample"** means a sub-sample taken of the representative sample used for laboratory quality control purposes to demonstrate reproducibility. It is prepared and analyzed in the identical manner as the representative sample. The results from replicate analyses are used to evaluate analytical precision.

19. **"Limit of Detection" (LOD)** means the lowest quantity of a substance or analyte that can be distinguished from the absence of that substance within a stated confidence limit.

20. **"Limit of Quantitation" (LOQ)** means the minimum concentration of an analyte in a specific matrix that can be reliably quantified while also meeting predefined goals for bias and imprecision. The LOQ can be no lower than the lowest calibration standard used in the analysis.

21. **"Linear Regression"** means the determination, in analytical chemistry, of the best linear equation for calibration data to generate a calibration curve. The concentrate of an analyte in a sample can then be determined by comparing a measurement of the unknown to the calibration curve. A linear regression uses the following equation: $y = mx + b$; where m = slope, b = intercept.

22. **"Matrix"** means the substances that are present in a sample except for the analyte(s) of interest.

23. **"Matrix Spike Sample"** means the second portion of actual sample used to prepare the MS that is spiked and processed in the same manner as the MS. The MS and MSD are used together to measure the precision of methodology.

24. **"Medical Cannabis Establishment"** means a cannabis cultivation facility, cannabis processing facility, cannabis testing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility licensed and registered by the appropriate agency.

25. **"Medical Cannabis Establishment Agent"** means an owner, officer, board member, employee, volunteer or agent of a medical cannabis establishment.

26. **"Method Blank"** means an analyte free matrix to which all reagents are added in the same volumes or proportions as used in the sample preparation and is processed in exactly the same manner as the samples.

27. **"Moisture Content"** means the percentage of water in a sample, by weight.

28. **"Percent Recovery"** means the percentage of a measured concentration relative to the added (spiked) concentration in a reference material or matrix spike sample. A laboratory shall calculate the percent recovery by dividing the sample result by the expected result then multiplying the quotient by 100.

29. **"Practitioner"** means a physician, certified nurse practitioner, physician assistant or optometrist who is licensed to prescribe medicine under the licensing requirements of their respective occupational boards and the laws of this state.

30. **"Principal Officer"** means persons who have ultimate responsibility for implementing the decisions of the cannabis testing facility and, include but are not limited to, the Chief Executive Officer, Chief Administrative Officer, - Chief Financial Officer as applicable.

31. **"Proficiency Test"** means an evaluation of a laboratory's performance against pre-established criteria by means of interlaboratory comparisons of test measurements.

32. **"Proficiency Test Sample"** means a sample that is prepared by a party independent of the testing laboratory with the ISO/IEC 17043 accreditation, where the concentration and identity of an analyte is known to the independent party, but is unknown to the testing laboratory and testing laboratory employees.

33. **"Process Lot"** means any amount of cannabinoid concentrate or extract of the same type and processed at the same time using the same extraction methods, standard operating procedures and from the same batch of batches harvested medical cannabis.

34. **"School"** means an institution for the teaching of children, consisting of a physical location, whether owned or leased, including instructional staff members and students, and which is in session each school year. This definition shall include, but not be limited to, public, private, church and parochial programs for kindergarten, elementary, junior high and high schools. Such term shall not mean a home instruction program.

35. **"Seed-to-Sale System"** means the specialized inventory management system utilized throughout the medical cannabis program that allows for the tracking of cannabis from early life cycle until final sale.

36. **"THC"** or "Tetrahydrocannabinol" means any and all forms of tetrahydrocannabinol that are contained naturally in the cannabis plant, as well as synthesized forms of THC and derived variations, derivatives,

isomers and allotropes that have similar molecular and physiological characteristics of tetrahydrocannabinol, including, but not limited to, THCA, THC Delta 9, THC Delta 8, THC Delta 10 and THC Delta 6.

37. **"Usable Medical Cannabis"** means any medical cannabis product that has completed all required growing/processing steps, is in final form and is intended for sale or distribution and intended for use or consumption by qualifying patients as defined in the Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022.

38. **"Validation"** means the confirmation by examination and objective evidence that the requirements for a specific intended use or analytical method are fulfilled.

39. **"Water Activity"** means the measure of the quantity of water in a product that is available and therefore capable of supporting bacteria, yeasts, and fungi and which is reported in units Aw.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.3 All cannabis testing facility laboratory operations must be physically located within the State of Mississippi.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67.

Rule 1.1.4 All cannabis testing facilities must be currently licensed and registered by the Department and adhere to all regulations and guidance set forth by the Department.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.5 No cannabis testing facilities shall be within one thousand (1,000) feet of the nearest property boundary line of a school, church or child care facility which exists or has acquired necessary real property for the operation of such facility before the date of the cannabis testing facilities' application unless the cannabis testing facility has received approval from the school, church or child care facility and received a waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.6 A cannabis testing facility may be located in any area in a municipality or county that is zoned as commercial or for which commercial use is otherwise authorized or not prohibited.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.7 A cannabis testing facility shall not employ an agent or employee who also is employed or has ownership at any other medical cannabis establishment.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.8 To be licensed and registered by the Department, Cannabis testing facilities must be accredited as defined in this Chapter.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.9 To be licensed and registered by the Department, Cannabis testing facilities must test at least one analyte required by the Department.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.10 Cannabis testing facilities shall test for cannabis-related analytes for which they are licensed and registered by the Department.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.11 Cannabis testing facilities shall only employ persons who are at least 21 years of age and possess a current work permit issued by the Department.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.12 Cannabis testing facilities shall develop and implement an employee training program to ensure competency of cannabis testing facility employees for their assigned function.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.13 Cannabis testing facilities shall conduct a fingerprint-based background check of the Mississippi Central Criminal Database and the Federal Bureau of Investigation Criminal History Database on every person seeking to become a principal officer, board member, agent, volunteer, or employee before the person begins working at the Cannabis testing facility.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.14 Cannabis testing facilities shall not employ a medical cannabis establishment agent, as defined in this Chapter, who has been convicted of a disqualifying felony offense.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.15 Cannabis testing facilities shall ensure, document, and provide to the Department upon request, documentation that each medical cannabis establishment agent, as defined by this Chapter, meets the requirements of the Mississippi Medical Cannabis Act, and Department regulations.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.16 Cannabis testing facilities shall employ a full-time supervisor or management employee who must be responsible for the following:

1. Overseeing and directing the scientific methods of the cannabis testing facility;

2. Ensuring that the cannabis testing facility achieves and maintains a cannabis testing facility quality assurance program; and

3. Providing ongoing and appropriate training to cannabis testing facility employees.

4. To be considered qualified, the supervisor or management employee must have at minimum:

   A. A doctoral degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university;

   B. A master's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 2 years of full-time practical experience;

   C. A bachelor's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 4 years of full-time practical experience; or

   D. A bachelor's degree in any field from an accredited college or university, plus at least 8 years of full-time practical experience, 4 years of which must have been in a supervisory or management position.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.17 Cannabis testing facilities shall employ a full-time analyst who, at minimum must have either of the following:

1. Earned a master's degree or a bachelor's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university; or

2. Completed 2 years of college or university education that included coursework in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 3 years of full-time practical experience.

3. Demonstrated an initial display of competency prior to analyzing any sample. An initial display of competency for a method includes:

   A. Obtaining quality control samples from an outside source or preparing the samples using stock standards that are prepared independently from those used in instrument calibration.

   B. Preparing four (4) aliquots at the concentration specified, or if unspecified, to a concentration of one (1) to four (4) times the LOQ for low concentration analytes either concurrently or over a period of days. For higher concentration analytes (such as potency), the concentration may be greater than four (4) times the LOQ.

   C. Analyzing the aliquots either concurrently or over a period of days.

   D. Using all results, assess the results against established and documented method acceptance criteria.

4. Complete a continuing demonstration of competency annually thereafter for all methods performed. One of the following options must be performed and documented:

   A. Another initial Demonstration of competency (as described above); or

   B. Participation in a proficiency test study offered by an ISO/IEC 17043 proficiency test provider (if available); or

   C. Analysis of one (1) sample of clean matrix that is fortified with a known quantity of the target analyte, with the result compared to method acceptance criteria.

5. If an analyst has not run a specific analysis within one calendar year, he or she must successfully complete an initial display of competency for this analysis and shall not run such analysis until competency has been demonstrated.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.18 Cannabis testing facilities shall maintain operating documents that must include procedures for the oversight of the Cannabis testing facility and procedures to ensure accurate record keeping and adequate security measures.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.19 Cannabis testing facilities shall implement appropriate security measures designed to deter and prevent the theft of medical cannabis and unauthorized entrance into the areas containing medical cannabis.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.20 Cannabis testing facilities shall notify the Department within one (1) business day of any theft or loss of medical cannabis.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.21 Cannabis testing facilities shall not share office space with or refer patients to a practitioner.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.22 Cannabis testing facilities are subject to inspection by the Department during business hours, including but not limited to, inspection of the physical cannabis testing facility, interviews of personnel, review, inspection, and audit of records and documents related to the analyses of dispensary samples to verify compliance with this Chapter.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.23 Cannabis testing facilities shall use the statewide seed-to-sale tracking system certified by the Department and provide reports as required by the Department.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.24 Cannabis testing facilities shall notify the Department within one (1) business day if there is a change of ownership or closure of the entity.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.25 Cannabis testing facilities shall not allow an individual who is younger than twenty-one (21) years old to enter the premises of the cannabis testing facility.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.26 Cannabis testing facilities shall create and require the display of an identification badge for each medical cannabis establishment agent.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.1.27 Cannabis testing facilities shall notify local law enforcement and the Department of any theft, robbery, break-in, or security breach that occurs on the laboratory's

premises, no later than 10 calendar days after the facilities first become aware of the event. The description shall include a description of any property that was stolen or destroyed, and the quantity of any usable cannabis that was stolen.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 2 Documentation Requirements for Applicants

Rule 1.2.1 All applicants for a cannabis testing facility registration certificate and cannabis testing facility license must complete the application document required by the Department and include the documentation outlined in this Subchapter, pay the appropriate nonrefundable application fees to the Department, and be registered and licensed by the Department prior to initiating any testing related to medical cannabis. Cannabis testing facilities may be licensed as full or provisional by the Department.

1. A license will be granted by the Department to a cannabis testing facility that can demonstrate that it has applied for and received acceptable accreditation and that it meets all other requirements outlined in this Subchapter.

2. A provisional license may be granted by the Department to a new cannabis testing facility that has applied for accreditation but has not yet received nor been denied accreditation and that meets all other requirements of this Subchapter. A provisional license may be issued only if the Department is satisfied that preparations are being made to qualify for a regular license and that the health and safety of patients will not be endangered. The license issued under this condition shall be valid until the issuance of a regular license but shall not exceed twelve months following date of issuance whichever may be sooner.

3. Licensing, full or provision, may be denied when an applicant has deficiencies, and the Department determines that the applicant cannot consistently produce valid data.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.2.2 All information and documents required by the Department, including but not limited to, the following must accompany an application for cannabis testing facility registration and licensing:

1. The legal name of the prospective cannabis testing facility;

2. The physical address of the prospective cannabis testing facility, which shall not be within one thousand (1,000) feet of the nearest property boundary line of a school, church, or child care facility which exists or has acquired necessary real property for the operation of such facility before the date of the cannabis testing facility application unless the proposed

entity has received approval from the school, church or child care facility and received the applicable waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility;

3. The name of each owner, principal officer, board member, and lab director of the proposed cannabis testing facility;

4. An attestation that the information provided to the Department to apply for a cannabis testing facility registration and license is true and correct;

5. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;

6. For each owner:

A. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;

B. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a cannabis dispensary, cannabis cultivation facility, cannabis processing facility, cannabis transportation entity, cannabis disposal entity or cannabis research facility.

C. An attestation signed and dated by the owner pledging not to divert cannabis to any individual who or entity that is not allowed to possess cannabis.

7. Verification for each principal officer or board member that they are at least 21 years of age;

8. A valid certificate of accreditation, issued by an accreditation body, as defined in this Chapter, that attests to the laboratory's competence to perform testing, including all the required analytes for the relevant test methods:

A. Cannabinoids;

B. Heavy metals;

C. Microbial impurities;

D. Mycotoxins;

E. Residual pesticides;

F. Residual solvents and processing chemicals;

G. Terpenoids (if performed); and,

H. Foreign Material;

9. A copy of the cannabis testing facility's most recent assessment by the laboratory's accreditation body, the laboratory's responses to any findings of non-compliance with standards or recommendations, and the corrective actions taken by the laboratory to address the findings or recommendations;

10. Laboratory standard operating procedures for all testing methods;

11. Laboratory test method verification and validation documentation for all testing methods, including final data reports approved by the laboratory director, validation material package inserts and all supporting data including instrument raw data and calculation tools;

12. Laboratory standard operating procedures for security measures;

13. Laboratory standard operating procedures for the sampling of cannabis or cannabis products;

14. Laboratory standard operating procedures for the transportation of cannabis or cannabis products;

15. Laboratory standard operating procedures for the reporting of test results for cannabis or cannabis products;

16. Laboratory standard operating procedures for the disposal of samples, digestates, leachates and extracts or other sample preparation products;

17. Copy of an approved waste disposal license issued under this Chapter or an executed contract with an approved waste disposal licensee issued under this Chapter;

18. Testing staff initial demonstration of capability for all applicable tests.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.2.3 All information and documents required by the Department, including but not limited to, the following must accompany an application for cannabis testing facility registration and provisional licensing:

1. The legal name of the prospective cannabis testing facility;

2. The physical address of the prospective cannabis testing facility, which shall not be within one thousand (1,000) feet of the nearest property boundary line of a school, church, or child care facility which exists or has acquired necessary real property for the operation of such facility before the date of the cannabis testing facility application unless the proposed entity has received approval from the school, church or child care facility

and received the applicable waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility;

3. The name of each owner, principal officer, board member, and lab director of the proposed cannabis testing facility;

4. An attestation that the information provided to the Department by the cannabis testing facility to demonstrate an active application for accreditation is true and correct;

5. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;

6. For each owner:

A. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;

B. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a cannabis dispensary, cannabis cultivation facility, cannabis processing facility, cannabis transportation entity, cannabis disposal entity or cannabis research facility;

C. An attestation signed and dated by the owner pledging not to divert cannabis to any individual who or entity that is not allowed to possess cannabis;

7. Verification for each principal officer or board member that they are at least 21 years of age;

8. Documentation issued by an accreditation body, as defined in this Chapter, that confirms that the laboratory has applied for ISO/IEC 17025 accreditation and is awaiting an inspection for all the required analytes for the relevant test methods:

A. Cannabinoids;

B. Heavy metals;

C. Microbial impurities;

D. Mycotoxins;

E. Residual pesticides;

F. Residual solvents and processing chemicals;

G. Foreign Material;

H. Terpenoids, if performed;

9. Laboratory standard operating procedures for all testing methods;

10. Laboratory test method verification and validation documentation for all testing methods, including final data reports approved by the laboratory director, validation material package inserts and all supporting data including instrument raw data and calculation tools;

11. Laboratory standard operating procedures for security measures;

12. Laboratory standard operating procedures for the sampling of cannabis or cannabis products;

13. Laboratory standard operating procedures for the transportation of cannabis or cannabis products;

14. Laboratory standard operating procedures for the reporting of test results for cannabis or cannabis products;

15. Laboratory standard operating procedures for the disposal of samples, digestates, leachates and extracts or other sample preparation products;

16. Copy of an approved waste disposal license issued under this Chapter or an executed contract with an approved waste disposal licensee issued under this Chapter;

17. Testing staff initial demonstration of capability for all applicable tests.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.2.4 Application and Licensing Fees:

1. One-time nonrefundable license application fee - $10,000

2. Annual licensing fee - $15,000

3. All payments must be made through the Department's electronic payment system.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 3 Cannabis Testing Facility License Renewal

Rule 1.3.1 Each Cannabis testing facilities must submit a completed renewal license application and appropriate renewal fee thirty (30) days prior to its current license expiration date.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.3.2 All information and documents required by the Department, including but not limited to, the following must accompany a renewal application for cannabis testing facility registration and licensing:

1. The legal name of the cannabis testing facility;

2. The name of each principal officer and board member of the cannabis testing facility;

3. An attestation that the information provided to the Department to apply for a cannabis testing facility renewal license is true and correct;

4. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;

5. For each owner:

   A. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;

   B. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a dispensary, cannabis cultivation facility, cannabis processing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility; and

   C. An attestation signed and dated by the owner pledging not to divert cannabis to any individual or entity that is not allowed to possess cannabis;

6. Verification for each principal officer or board member that they are at least 21 years of age;

7. A valid certificate of accreditation, issued by an accreditation organization, as defined in this Chapter, that attests to the laboratory's competence to perform testing, including all the required analytes for the relevant test methods:

   A. Cannabinoids;

   B. Heavy metals;

   C. Microbial impurities;

   D. Mycotoxins;

   E. Residual pesticides;

F. Residual solvents and processing chemicals;

G. Terpenoids;

H. Foreign materials;

8. Laboratory standard operating procedures for all testing methods;.

9. Laboratory test method verification or validation documentation for all testing methods, including final reports signed by the laboratory director, validation material package inserts and all supporting instrument raw data and calculation tools;

10. Laboratory standard operating procedures for security measures;

11. Laboratory standard operating procedures for the sampling of cannabis or cannabis products;

12. Laboratory standard operating procedures for the transportation of cannabis or cannabis products;

13. Laboratory standard operating procedures for the reporting of test results for cannabis or cannabis products;

14. Laboratory standard operating procedures for the disposal of samples, digestates, leachates and extracts or other sample preparation products;

15. Copy of an approved waste disposal license issued under this Chapter or an executed contract with an approved waste disposal licensee issued under this Chapter;

16. Testing staff ongoing demonstration of competency documentation.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.3.3 Renewal Fee:

1. Annual renewal fee - $15,000

2. All payments must be made through the Department's electronic payment system.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.3.4 To maintain an active license and registration certificate, cannabis testing facilities must maintain accreditation, as defined in this Chapter.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.3.5 Any loss of accreditation status by a cannabis testing facility will result in immediate revocation of the license and registration of the cannabis testing facility.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.3.6 Any cannabis testing facility that has a license and registration revoked for failure to maintain accreditation, as defined in this Chapter, may file a written petition to the Department to reinstate the cannabis testing facilities' registration and license once the cannabis testing facility submits proof of accreditation, as defined in the Chapter. A reinstatement of registration or license is required prior to the cannabis testing facility resuming cannabis testing operations.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 4 Cannabis Testing Facility Change of Ownership

Rule 1.4.1 Cannabis testing facilities must submit a completed change of ownership license application within one (1) day if there is a change of ownership.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.4.2 All information and documents required by the Department, including but not limited to, the following must accompany a change of ownership application for cannabis testing facility registration and licensing:

1. The legal name of the cannabis testing facility;

2. The name of each principal officer and board member of the cannabis testing facility;

3. An attestation that the information provided to the Department regarding the change of ownership for a cannabis testing facility is true and correct;

4. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;

5. For each owner:

   A. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;

   B. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a dispensary, cannabis cultivation facility, cannabis processing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility; and

C. An attestation signed and dated by the owner pledging not to divert cannabis to any individual or entity that is not allowed to possess cannabis;

6. Verification for each principal officer or board member that they are at least 21 years of age.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 5 Batch Requirements

Rule 1.5.1 A medical cannabis establishment must separate each harvest lot of usable medical cannabis into no larger than twenty-five pound (25lb) batches.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.5.2 Notwithstanding Rule 1.5.1 of this section, medical cannabis establishment may combine batches for purposes of having a batch sampled if each batch is intended for use by a medical cannabis establishment to make a cannabinoid concentrate or extract and each harvest lot was:

1. Cultivated utilizing the same growing practices and grown in close proximity on the licensed or registered premises;

2. Harvested at the same time; and

3. If cured prior to sampling, cured under uniform conditions.

Rule 1.5.3 A medical cannabis establishment may not combine harvest lots into a batch for purposes of sampling and testing for THC or CBD.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.5.4 If harvest lots are combined in accordance with Rule 1.5.2, the batch must be labeled so that it identifies the different harvest lots that were combined.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.5.5 For all concentrates and extracts, a process lot is considered a batch.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.5.6 A medical cannabis establishment must assign each batch a unique batch number and that unique batch number must be:

1. Documented and maintained in the cannabis cultivation facility or cannabis dispensary records for at least two years and available to the Department upon request;

2. Provided to the individual responsible for taking samples; and

3. Included on the batch label.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 6 Sample size, handling, storage and disposal

Rule 1.6.1 Usable medical cannabis may only be sampled after it is cured, unless the usable medical cannabis is intended for sale or transfer to a medical cannabis establishment to make a cannabinoid concentrate or extract.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.6.2 Samples taken must in total represent a minimum of 0.5 percent of the batch and consist of minimally 12 unique increments of 1gram each, with at least 50% of the sample taken homogenized for testing in compliance with the laboratory's sampling policies and procedures. The primary sample, the duplicate sample and any required replicate samples must be prepared and analyzed separately.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.6.3 For cannabis-infused products, a laboratory must take the following number of units based upon the production batch size:

1. Two (2) units for a production batch of up to 100 units.
2. Four (4) units for a production batch of 101 to 500 units.
3. Six (6) units for a production batch of 501 to 1000 units.
4. 8 units for a production batch of 1001 to 5000 units.
5. 10 units for a production batch of 5001 to 10,000 units.
6. 12 units for a production batch greater than 10,001 units.

Source: *Miss. Code Ann. §§ 41-137-1 – 41-137-67*

Rule 1.6.4 For cannabinoid concentrates extracts and products, samples must in total represent a minimum of 0.3 percent of the batch and consist of enough samples from a batch must be taken to ensure that the required attributes in the batch to be tested are homogenous and consistent with the laboratory's accredited sampling policies and procedures.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.6.5 Only individuals employed by a laboratory sampling under these rules may take samples and must follow the laboratory's accredited sampling policies and procedure.

1. A laboratory must prepare medical cannabis sampling policies and

procedures that contain all of the information necessary for collecting and transporting samples from usable medical cannabis in a manner that does not endanger the integrity of the sample for any analysis required by this rule. These policies and procedures must be appropriate to the matrix being sampled.

2. Care must be to avoid contamination of the non-sampled material. Sample containers must be free of analytes of interest and appropriate for the analyses requested.

3. A sufficient sample size must be taken for analysis of all requested tests and the quality control performed by the testing laboratory for these tests.

4. A laboratory must comply with any recording requirements for samples and subsamples in the policies and procedures and at a minimum:

   A. Record the location of each sample and subsample taken.

   B. Subsamples collected from the same batch must be combined into a single sample by a laboratory prior to testing.

   C. Subsamples and samples collected from different batches may not be combined.

   D. Field duplicates may not be combined with the primary samples

   E. Assign a field identification number for each sample, subsample and field duplicate that have an unequivocal link to the laboratory identification number.

   F. Assign a unique identification number for each test batch.

   G. Have a documented system for uniquely identifying the samples to be tested to ensure there can be no confusion regarding the identity of such samples at any time. This system must include identification for all samples, subsamples, preservations, sample containers, tests, and subsequent extracts or digestates.

   H. Place the laboratory identification code as a durable mark on each sample container.

   I. Enter a unique sample identification number into the laboratory records. This number must be the link that associates the sample with related laboratory activities such as sample preparation. In cases where the sample collector and analyst are the same individual, or the laboratory pre-assigns numbers to sample containers, the unique identification number may be the same as the

field identification code.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.6.6 An approved laboratory shall store each test sample under the appropriate conditions to protect the physical and chemical integrity of the sample.

1. Analyzed test samples consisting of cannabis or cannabis-derived product shall be appropriately segregated, controlled, and held in a controlled access area pending destruction or other disposal.

2. Any portion of a cannabis or cannabis-derived test sample that is not destroyed during analysis shall be:

A. returned to the licensed producer who provided the sample under chain of custody; or
B. destroyed in accordance with the wastage requirements of this rule.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.6.7 Sampling must be conducted at a cannabis cultivation facility or dispensary's premises. The testing facility shall have access to the entire batch for the purposes of sampling.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.6.8 A laboratory must maintain the documentation required in these rules for at least five years and must provide that information to the Department upon request.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 7 Testing Requirements and Standards

Rule 1.7.1 Testing Requirements for Usable Medical Cannabis

1. A cultivation facility or processing facility shall test every batch of usable marijuana, in its final form, intended for sale or distribution to a qualified patient or caregiver, prior to selling or transferring the usable medical cannabis for the following:

A. Pesticides in accordance with Rule 1.7.4 of this Chapter;

B. Water activity and moisture content in accordance with Rule 1.7.6 of this Chapter;

C. THC and CBD concentration in accordance with Rule 1.7.7 of this Chapter;

D. Heavy Metals in accordance with Rule 1.7.8 of this Chapter;

E. Mycotoxins in accordance with Rule 1.7.9 of this Chapter;

F. Microbiological contaminants in accordance with Rule 1.7.3 of this Chapter;

G. Terpenes in accordance with Rule 1.7.10 of this Chapter;

H. Foreign material in accordance with Rule 1.7.11 of this Chapter.

2. A cultivation facility or processing facility shall test every batch of usable medical cannabis intended for sale or distribution to a qualified patient or caregiver for water activity and moisture content in accordance with Rule 1.5.6 of this Chapter, unless the cultivation facility or processing facility uses a method of processing that results in effective sterilization.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.7.2 Testing Requirements for Concentrates, Extracts, and Edibles

1. A cultivation facility or processing facility shall test every process lot of cannabinoid concentrate, extract or edible for sale or distribution to a qualified patient prior to selling or transferring the cannabinoid concentrate, extract or edible for the following:

A. Microbial impurities in accordance with Rule 1.7.3 of this Chapter;

B. Pesticides in accordance with Rule 1.7.4 of this Chapter;

C. Solvents in accordance with Rule 1.7.5 of this Chapter;

D. THC and CBD concentration in accordance with Rule 1.7.7 of this Chapter;

E. Heavy Metals in accordance with Rule 1.7.8 of this Chapter;

F. Mycotoxins in accordance with Rule 1.7.9 of this Chapter;

G. Terpenes in accordance with Rule 1.7.10 of this Chapter;

H. Foreign material in accordance with Rule 1.7.11 of this Chapter.

2. A cultivation facility or processing facility is exempt from testing for solvents under this rule if the cultivation facility or processing facility:

A. Did not use any solvent listed in Appendix A, Table 2; and

B. Used a mechanical extraction process to separate cannabinoids from the marijuana; or

C. Used only water, animal fat or vegetable oil as a solvent to separate the cannabinoids from the marijuana.

3. A cultivation facility or processing facility shall test a process lot of a cannabinoid concentrate or extract for microbiological contaminants in

accordance with Rule 1.7.3 of this Chapter, or upon written request by the Department.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.7.3 Standards for Testing Microbiological Contaminants

1. Usable medical cannabis required to be tested for microbiological contaminants shall be sampled using appropriate aseptic technique and tested by a Mississippi licensed and registered cannabis testing facility for microbial impurities.

2. The cannabis testing facility shall report the result of the microbial impurities testing by indicating "pass" or "fail" on the Certificate of Analysis.

3. The sample of inhalable cannabis and cannabis products shall be deemed to have passed the microbial impurities testing if all of the following conditions are met:

   A. Total *Escherichia coli* is not detected above 100 colony forming units/gram.

   B. Shiga toxin–producing Escherichia coli is not detected in 1 gram;

   C. Salmonella spp. is not detected in 1 gram; and

   D. Pathogenic Aspergillus species *A. fumigatus*, *A. flavus*, *A. niger*, and *A. terreus* are not detected in 1 gram.

4. The sample of non-inhalable cannabis and cannabis products shall be deemed to have passed the microbial impurities testing if both the following conditions are met:

   A. Total *Escherichia coli* is not detected above 100 colony forming units/gram;

   B. Shiga toxin–producing Escherichia coli is not detected in 1 gram; and,

   C. Salmonella spp. is not detected in 1 gram.

5. If the sample fails microbial impurities testing, the batch from which the sample was collected fails microbial impurities testing and shall not be released for retail sale.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.7.4 Standards for Testing Pesticides

1. Usable medical cannabis required to be tested for pesticides shall be tested by a Mississippi licensed, and registered cannabis testing facility approved for the analytes listed in Appendix A, Table 1.

2. The cannabis testing facility shall report whether any Residual Pesticides are detected above the limit of detection (LOD) and shall report the result of the testing in ppms on the Certificate of Analysis. The cannabis testing facility shall indicate "pass" or "fail" on the Certificate of Analysis.

3. A batch fails pesticide testing if a cannabis testing facility detects the presence of a pesticide above the action levels listed in Appendix A, Table 1 in a sample:

   A. During an initial test where no reanalysis is requested; or

   B. Upon reanalysis as described in Rule 1.6.7 of this Chapter.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.7.5 Standards for Testing Solvents

1. Usable medical cannabis required to be tested for solvents shall be tested by a Mississippi licensed, and registered cannabis testing facility approved for the analytes listed in Appendix A, Table 2.

2. The cannabis testing facility shall report the result of the residual solvents testing in ppm on the Certificate of Analysis and indicate "pass" or "fail" on the Certificate of Analysis.

3. A batch fails solvent testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter:

   A. Detects the presence of a solvent above the action level listed in Appendix A, Table 2; or

   B. Calculates a RPD of more than 20 percent between the field primary result of the sample and the field duplicate result.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.7.6 Standards for Testing Water Activity and Moisture Content

1. Usable medical cannabis shall be tested by a currently Mississippi licensed and registered cannabis testing facility for:

   A. Water activity; and

   B. Moisture content.

2. If a sample has a water activity rate of more than 0.65 Aw the sample fails. The cannabis testing facility shall report the result of the water activity test on the COA and indicate “pass” or “fail” on the COA.

3. If a sample has a moisture content of more than 15 percent, the sample fails. The cannabis testing facility shall report the result of the moisture content on the COA and indicate “pass” or “fail” on the COA.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.7.7 Standards for THC and CBD Testing

1. A Mississippi licensed and registered cannabis testing facility shall test for the following when testing usable medical cannabis for potency, at a minimum:

   A. Delta-8-tetrahydrocannabinol;

   B. Delta-8-tetrahydrocannabinol acid;

   C. Delta-9- tetrahydrocannabinol;

   D. Delta-9-tetrahydrocannabinol acid;

   E. Cannabidiol (CBD);

   F. Cannabidiolic acid (CBDA);

   G. THC content;

   H. Cannabinol (CBN); and,

   I. Any other cannabinoid determined by the Department.

2. A cannabis testing facility shall establish a limit of quantitation of 1.0 mg/g or lower for all cannabinoids analyzed and reported.

3. A cannabis testing facility shall report the result of the cannabinoid testing on the Certificate of Analysis, including, at minimum:

   A. A percentage for THC, THCA, CBD, and CBDA. The dry-weight percent shall be calculated using the below equation: Dry-weight percent cannabinoid=wet-weight percent cannabinoid/(1 − percent moisture/100) (2);

   B. A percentage for Total THC and Total CBD, if applicable;

   C. Milligrams per gram (mg/g) if by dry-weight or milligrams per milliliter (mg/mL) if by volume for THC, THCA, CBD, and CBDA;

D. Milligrams per gram (mg/g) if by dry-weight or milligrams per milliliter (mg/mL) if by volume for Total THC and Total CBD, if applicable;

E. Total cannabinoid concentration shall be calculated for concentration expressed in weight: Total cannabinoid concentration (mg/g) = (cannabinoid acid form concentration (mg/g) x 0.877) + cannabinoid concentration (mg/g);

F. Milligrams per package for THC and CBD;

G. Milligrams per package for Total THC and Total CBD, if applicable;

H. Milligrams per serving for THC and CBD, if any;

I. Milligrams per serving for Total THC and Total CBD, if any and if applicable;

J. The results of all other cannabinoids analyzed on the COA both as a percentage and in either milligrams per gram (mg/g) if by weight or milligrams per milliliter (mg/mL) if by volume.

5. The sample shall be deemed to have passed the cannabinoid testing if the amount of THC does not exceed the limits below:

A. Cannabis flower or trim potency ≤ 30% total THC.

B. Cannabis tinctures, oils or concentrates ≤ 60% total THC

6. A cannabis testing facility shall report the test results and indicate an overall "pass" or "fail" for the cannabinoid testing on the Certificate of Analysis.

7. A process lot of a cannabinoid concentrate, or extract fails potency testing if, based on an initial test where no reanalysis is requested or upon reanalysis, the amount of THC, as calculated pursuant to Rule 1.7.7 of this chapter, between samples taken from the batch exceeds 30 percent RSD.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.7.8 Standards for Testing for Heavy Metals

1. Usable medical cannabis shall be tested by a current Mississippi licensed and registered cannabis testing facility for the metals listed in Appendix A.

2. A cannabis testing facility shall report the result of the heavy metals test on the Certificate of Analysis and indicate "pass" or "fail" on the COA.

3. A batch fails metals testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in

subchapter 6 of this Chapter detects the presence of metals above the action level listed in Appendix A, Table 3.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.7.9 Standards for Mycotoxin Testing

1. Usable medical cannabis shall be tested by a Mississippi licensed and registered cannabis testing facility for the following mycotoxins: Aflatoxin B1, B2, G1, and G2 Ochratoxin A listed;

2. A batch shall be deemed to have passed mycotoxin testing if both the following conditions are met:

   A. Total of Aflatoxin B1, B2, G1, and G2 does not exceed 20 µg/kg of substance, and

   B. Ochratoxin A does not exceed 20 µg/kg of substance.

3. A cannabis testing facility shall report the result of the mycotoxin testing on the Certificate of Analysis and indicate "pass" or "fail" on the COA.

4. A batch fails mycotoxin testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter detects the presence of mycotoxins above the action level listed in Appendix A.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.7.10 Standards for Terpenoid Testing

1. Terpene analysis is not required. However, if terpene content is listed on product packaging and labeling, a terpene analysis from a MS licensed and registered cannabis testing facility must be performed to confirm the product label.

2. A cannabis testing facility shall report the result of the terpenoid testing on the COA both as a percentage and in either milligrams per gram (mg/g) if by weight or milligrams by milliliter (mg/mL) if by volume.

3. The terpenoid testing results on the label of any one terpenoid claimed to be present shall not be considered inaccurate if the difference in percentage on the COA is plus or minus 10.0%.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.7.11 Standards for Foreign Material Testing

1. Usable medical cannabis shall be tested by a Mississippi licensed and registered cannabis testing facility to determine whether foreign material is present.

2. A cannabis testing facility shall report the result of the foreign material test by indicating "pass" or "fail" on the COA.

3. A cannabis testing facility shall perform foreign material testing on the total representative sample prior to sample homogenization.

4. When the licensed laboratory performs foreign material testing, at minimum, the laboratory shall do all of the following:

   A. Examine both the exterior and interior of the dried flower sample, and;

   B. Examine the exterior of the cannabis product sample.

5. The sample shall be deemed to have passed the foreign material testing if the presence of foreign material does not exceed:

   A. 1/4 of the total sample area covered by sand, soil, cinders, or dirt;

   B. 1/4 of the total sample area covered by mold;

   C. 1 insect fragment, 1 hair, or 1 count mammalian excreta per 3.0 grams; or

   D. 1/4 of the total sample area covered by an imbedded foreign material.

6. If the sample fails foreign material testing, the batch from which the sample was collected fails foreign material testing and shall not be released for retail sale.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.7.12 If a testing facility is not accredited for the full scope of state-required tests, the testing facility will need to subcontract with another Department-licensed testing facility for the relevant tests needed. All subcontracted testing must be documented in the seed-to-sale system and be transferred using appropriate transport processes and chain of custody.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 8 Failed Test Samples

Rule 1.8.1 If a sample fails any initial test, the cannabis testing facility that did the testing may reanalyze the sample. If the sample passes, another cannabis testing facility must resample the batch and confirm that result in order for the batch to pass testing.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.8.2 If a sample fails a test or a reanalysis under Rule 1.6.1 of this Chapter, the batch:

1. May be remediated or sterilized in accordance with this subchapter; or

2. If it is not or cannot be remediated or sterilized under this rule, it must be destroyed in a manner specified by the Department.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.8.3 If a Cultivation facility or dispensary is permitted under this subchapter to sell or transfer a batch that has failed a test, the Cultivation facility or dispensary must notify the Cultivation facility or dispensary to whom the batch is sold or transferred of the failed test within 24 hours of receipt of the COA.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.8.4 Failed microbiological contaminant testing.

1. If a sample from a batch of usable medical cannabis fails microbiological contaminant testing, the batch may be used to make a cannabinoid concentrate or extract if the processing method effectively sterilizes the batch, such as a method using a hydrocarbon-based solvent, or a CO2 closed loop system.

2. If a sample from a batch of a cannabinoid concentrate or extract fails microbiological contaminant testing, the batch may be further processed, if the processing method effectively sterilizes the batch, such as a method using a hydrocarbon-based solvent, or a CO2 closed loop system.

3. A batch that is sterilized in accordance with subsection (1) or (2) of this rule must be sampled and tested in accordance with this Chapter and must be tested, if not otherwise required for that product, for microbiological contaminants, solvents and pesticides.

4. A batch that fails microbiological contaminant testing after undergoing a sterilization process in accordance with subsection (1) or (2) of this rule must be destroyed in a manner specified by the Department.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.8.5 Failed solvent testing.

1. If a sample from a batch fails solvent testing, the batch may be remediated using procedures that would reduce the concentration of solvents to less than the action level.

2. A batch that is remediated in accordance with subsection (1) of this rule must be sampled and tested in accordance with this Chapter and must be tested if not otherwise required for that product under this Chapter, for solvents and pesticides.

3. A batch that fails solvent testing that is not remediated or that if remediated fails testing must be destroyed in a manner specified by the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.6 Failed water activity testing and moisture testing.

1. If a sample from a batch of usable medical cannabis fails for water activity or moisture activity, the batch from which the sample was taken may:

   A. Be used to make a cannabinoid concentrate or extract; or

   B. Continue to dry or cure.

2. A batch that undergoes additional drying or curing as described in subsection (1) of this rule must be sampled and tested in accordance with this Chapter.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.8.7 Failed pesticide testing.

1. If a sample from a batch fails pesticide testing, the batch may not be remediated and must be destroyed in a manner approved by the Department and identified on the Department's website.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.8.8 Failed potency testing.

1. Usable medical cannabis that fails potency testing under Rule 1.7.7 of this Chapter may be repackaged in a manner that enables the item to meet the standard in Rule 1.7.7 of this Chapter.

2. Usable medical cannabis that is repackaged in accordance with this section must be sampled and tested in accordance with these rules.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.8.9 Failed remediation.

1. If a sample fails a test after undergoing remediation or sterilization as permitted under this rule, the batch must be destroyed in a manner approved by the Department.

2. A cultivation facility or processing facility must inform a cannabis testing facility prior to samples being taken that the batch has failed a test and is being retested after undergoing remediation or sterilization.

3. A cultivation facility or processing facility must, as applicable:

   A. Have detailed procedures for sterilization processes to remove microbiological contaminants and for reducing the concentration of solvents.

B. Document all sampling, testing, sterilization, remediation and destruction that are a result of failing a test under these rules.

4. A cannabis or cannabis product batch may only be remediated twice. If the batch fails after a second remediation attempt and the second retesting, the entire batch shall be destroyed in a manner approved by the Department.

5. Within one business day of completing the required analyses of a representative sample obtained from a remediated cannabis or cannabis product batch, the cannabis testing facility shall upload the COA information into the seed-to-sale system.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 9 Tentative Identification of Compounds

Rule 1.9.1 Tentatively Identified Compounds (TICs) are compounds detected in a sample using gas chromatography mass spectrometry that are not among the target analytes for the residual solvent analysis.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.9.2 The Department may initiate an investigation of a cultivation facility or processing facility upon receipt of a TICs report from a cannabis testing facility and may require a cultivation facility or processing facility to submit samples for additional testing, including testing for analytes that are not required by these rules, at the cultivation facility or processing facility's expense.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 10 Certificate of Analysis ("COA")

Rule 1.10.1 The cannabis testing facility shall generate a Certificate of Analysis for each representative sample that the cannabis testing facility analyzes.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.10.2 The cannabis testing facility shall ensure that the COA contains the results of all required analyses performed for the representative sample.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.10.3 The cannabis testing facility shall, within 1 business day of completing all analyses of a sample, upload the COA into the seed-to-sale system. Passed test results must be in the Department's Seed-to-Sale system for a batch to be released for immediate processing, packaging, and labeling for transfer or sale in accordance with these rules.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.10.4 The cannabis testing facility shall not release to any person any cumulative or individual test results prior to completing all analyses and providing the COA to the Department.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.10.5 The COA shall contain, at minimum, the following information:

1. The term "Regulatory Compliance Testing" in font no smaller than 14-point, which shall appear in the upper-right corner of each page of the COA. No text or images shall appear above the term "Regulatory Compliance Testing" on any page of the COA;

2. The cannabis testing facility's name, premises address, and license number; dispensary's authorized to engage in distribution's name, premises address, and license number; cultivator's, or processor's name, premises address, and license number;

3. Batch number of the batch from which the sample was obtained. For cannabis and cannabis products that are already packaged at the time of sampling, the labeled batch number on the packaged cannabis and cannabis products shall match the batch number on the COA;

4. Sample identifying information, including matrix type and unique sample identifiers;

5. Sample history, including the date collected, the date received by the cannabis testing facility, and the date(s) of sample analyses and corresponding testing results;

6. A picture of the sample of cannabis and cannabis products. If the sample is pre-packaged, the picture must include an unobstructed image of the packaging;

7. For dried flower samples, the total weight of the batch, in grams or pounds, and the total weight, of the representative sample in grams;

8. For cannabis product or pre-rolls samples, the total unit count of both the representative sample and the total batch size;

   A. Measured density of the cannabis and cannabis products;

9. The analytical methods, analytical instrumentation used, and corresponding Limits of Detection ("LOD)" and Limits of Quantitation ("LOQ");

10. An attestation on the COA from the cannabis testing facility supervisory or management employee that all LQC samples required by this Chapter were performed and met the acceptance criteria; and,

11. Analytes detected during the analyses of the sample that are unknown, unidentified, or injurious to human health if consumed, if any.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.10.6 The cannabis testing facility shall report test results for each representative sample on the COA as follows: Indicate an overall "pass" or "fail" for the entire batch;

1. When reporting qualitative results for each analyte, the cannabis testing facility shall indicate "pass" or "fail";
2. When reporting quantitative results for each analyte, the cannabis testing facility shall use the appropriate units of measurement as required under this chapter;
3. When reporting results for each test method, the cannabis testing facility shall indicate "pass" or "fail";
4. When reporting results for any analytes that were detected below the analytical method LOQ, indicate "<LOQ", notwithstanding cannabinoid results;
5. When reporting results for any analytes that were not detected or detected below the LOD, indicate "ND"; and,
6. Indicate "NT" for any test that the cannabis testing facility did not perform.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.10.7 The cannabis testing facility supervisory or management employee shall validate the accuracy of the information contained on the COA and sign and date the COA.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.10.8 The cannabis testing facility supervisory or management employee may request to amend a COA to correct minor errors and upload into the seed to sale system.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 11 Post Testing Sample Requirements

Rule 1.11.1 The cannabis testing facility shall retain the reserve sample, consisting of any portion of a sample that was not used in the testing process. The reserve sample shall be kept at minimum for 45 business days after the analyses, after which time it may be destroyed and denatured to the point the material is rendered unrecognizable and unusable.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.11.2 The cannabis testing facility shall securely store the reserve sample in a manner that prohibits sample degradation, contamination, and tampering.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.11.3 The cannabis testing facility shall provide the reserve sample to the Department upon request.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 12 Transportation of Samples

Rule 1.12.1 Employees/agents of the cannabis testing facility are responsible for the collection and transportation of testing samples.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.12.2 Employees/agents of the cannabis testing facility must utilize an electronic inventory management system to create and maintain transportation manifests documenting all transport of medical marijuana and medical marijuana products throughout the State of Mississippi.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.12.3 When transporting medical cannabis or medical cannabis products, all cannabis testing facilities and their employees/agents shall provide copies of the inventory manifests to each originating and receiving medical cannabis establishment at the time the product changes possession.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.12.4 The copy of the inventory manifest to be left with the originating medical cannabis establishment shall include, at a minimum:

1. The license number, business name, address, and contact information of the originating medical cannabis establishment;

2. A complete inventory of the medical cannabis and medical cannabis products to be transported, including the quantities by weight or unit of each type of medical cannabis and medical cannabis products and the batch number(s);

3. The date of transportation and the approximate time of departure;

4. Printed names, signatures, and identification card numbers of personnel accompanying the transport; and,

5. The license number(s), business name(s), address(es), and contact information for all end point recipients.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.12.5 The copy of the inventory manifest to be left with the receiving medical cannabis establishment shall include, at a minimum:

1. The license number, business name, address, and contact information for the receiving medical cannabis establishment;

2. The license number, business name, address, and contact information of the originating medical cannabis establishment;

3. A complete inventory of the medical cannabis and medical cannabis products delivered to the receiving medical cannabis establishment, including the quantities by weight or unit of each type of medical cannabis and medical cannabis products and the batch number(s);

4. The date and estimated time of arrival;

5. The printed names, signatures, and identification card numbers of the personnel accompanying the transport; and,

6. The printed names, titles, and signatures of any personnel accepting delivery on behalf of the receiving medical cannabis establishment.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.12.6 Transportation manifests should reflect a complete chain of custody of all medical cannabis and medical cannabis products being transported, including all instances in which the medical cannabis and medical cannabis products are stored.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.12.7 Originating and receiving licensed entities shall maintain copies of transportation manifests and inventory records logging the quantity of medical cannabis or medical cannabis products received for at least three (3) years from the date of receipt.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.12.8 A transportation manifest must not be altered after departing from the originating medical cannabis establishment's premises, except for the addition of the printed names, titles, and signatures of any personnel accepting delivery on behalf of the receiving cannabis testing facility.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 13 Cannabis Testing Facility Quality Assurance

Rule 1.13.1 The cannabis testing facility shall develop and implement a Quality Assurance (QA) program to assure the reliability and validity of the analytical data produced by the cannabis testing facility. The QA program shall, at minimum, include a written QA manual that addresses the following:

1. Quality control procedures;

2. Cannabis testing facility organization and employee training and responsibilities, including good laboratory practice (GLP);

3. QA objectives for measurement data;

4. Traceability of data and analytical results;

5. Instrument maintenance, calibration procedures, and frequency;

6. Performance and system audits;

7. Corrective action procedures;

8. Steps to change processes when necessary;

9. Record retention and document control;

10. Test procedure standardization; and

11. Method validation;

12. Chain of custody protocols;

13. Premise and sample security;

14. Sample handling, including sample receipt, identification, rejection, storage and destruction;

15. Contingency plans for data that is not within control limits, or is otherwise unacceptable for analysis; and,

16. Disposal of marijuana and laboratory waste.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.13.2 The supervisory or management cannabis testing facility employee shall annually review, amend if necessary, and approve the QA program and manual both when they are created and when there is a change in methods, testing facility equipment, or the supervisory or management testing facility employee.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.13.3 The cannabis testing facilities standard operating procedures for testing methods shall include the following:

1. The name of the testing method;

2. A list of all analytes used in the testing method;

3. The applicable matrix or matrices;

4. Sample receipt and acceptance;

5. Method sensitivity;

6. Potential interferences;

7. Analytical instrument and equipment used;

8. Consumable supplies, reagents, and standards;

9. Sample preservation and hold time;

10. Type, frequency, and acceptable criteria for quality control samples;

11. Type, frequency, and acceptable criteria for calibration standards;

12. Procedures for analyzing batch samples;

13. Data quality assessment and acceptance criteria;

14. Calibration of results;

15. Reagent solution and reference material preparation; and,

16. Current step by step instructions with sufficient detail to perform the assay to include equipment operation and any abbreviated versions used by a testing analyst.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.13.4 The cannabis testing facilities shall develop, implement, and validate test methods for the analyses of samples as follows:

1. To the extent practicable, methods shall compart with the following guidelines:

   A. The Bacteriological Analytical Manual (BAM), 2019, which is incorporated by reference, includes no future editions or amendments, and is available at https://www.fda.gov/food/laboratory-methods-food/bacteriological-analytical-manualbam;

   B. AOAC Official Methods of Analysis, 21st Edition, 2019, which is incorporated by reference, includes no future editions or amendments, and is available at https://www.aoac.org/official-methods-of-analysis-21st-edition-2019; and,

2. To the extent practicable, methods shall be validated in accordance with the following guidelines:

   A. AOAC - Appendix J: Guidelines for Validation of Microbiological Methods for Food and Environmental Surfaces, 2012, which is incorporated by reference, includes no future editions or amendments, and is available at http://www.eoma.aoac.org/app_j.pdf;

   B. AOAC - Appendix K: Guidelines for Dietary Supplements and Botanicals, 2013, which is incorporated by reference, includes no future editions or amendments, and is available at http://www.eoma.aoac.org/app_k.pdf;

C. ICH – Validation of Analytical Procedures: Text and Methodology Q2(R1) 2005, which is incorporated by reference, includes no future editions or amendments, and is available at https://database.ich.org/sites/default/files/Q2_R1__Guideline.pdf or Unofficial version of the Rules in 9 A.A.C. 17, effective September 8, 2022 Page 115 https://www.fda.gov/regulatory-information/search-fda-guidance-documents/q2-r1- validation-analytical-procedures-text-and-methodology.

3. Method validation should, at a minimum, verify accuracy, precision, analytical sensitivity, analytical specificity, limit of detection, limit of quantification, reportable range and the identification of interfering substances.

4. Methods adopted from a matrix specific standard method, inclusivity and exclusivity do not require a comprehensive reassessment, provided that there were no modifications to the methods, including, but not limited to, all of the following:

   A. Referenced media.

   B. Primers.

   C. Probes.

   D. Antibodies.

   E. Critical chemistries that were not modified.

   F. Microbial methods must include environmental monitoring and quality control of all buffers, media, primers, and incubators.

5. The licensed laboratory shall generate a validation report for each test method. Each validation report shall include the following information:

   A. Instrument calibration data, if any;

   B. Raw data, including instrument raw data scanned as a PDF, for each test method, if any;

   C. Cannabis reference materials or certified reference material results;

   D. Data and calculations pertaining to LOD and LOQ determinations, if any;

   E. Quality Control Sample report;

   F. Worksheets, forms, pictures, or copies of laboratory notebook pages

6. The laboratory director shall review, approve, sign, and date the validation report for each test method.

7. Validations must be submitted to the agency for approval with an acceptable and graded external proficiency test by a third party, where all required analytes are shown to have passed.

8. Upon new test methods or altered test methods being used in the laboratory, the new validation report shall be submitted to the Department within 5 business days.

Source: *Miss. Code Ann. §§ 41-137-1 – 41-137-67*

Subchapter 14 Cannabis Testing Facility Quality Control Samples

Rule 1.14.1 The cannabis testing facility shall use Quality Control samples (QC) and adhere to good, approved laboratory practice ("GLP") in the performance of each analysis according to the specifications of this Chapter.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.2 The cannabis testing facility shall analyze QC samples in the same manner as the cannabis testing facility analyzes cannabis and cannabis products samples.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.3 The cannabis testing facility shall use at least one negative control, one positive control, and one cannabis testing facility replicate sample in each analytical batch for each target organism during microbial testing. If one of the controls produces unexpected results, the samples shall be re- prepped and reanalyzed with a new set of controls.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.4 If the result of the microbial analyses is outside the specified acceptance criteria in the following table, the cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

Testing facility Quality Control Sample	**Acceptance Criteria**	**Corrective Action**
Positive control	Produces expected result, positive result	Re-prep and reanalyze the entire analytical batch, once. If problem persists, locate and remedy the source of unexpected result, then re-prep samples and reanalyze with a new set of controls.
Negative control	Produces expected result, negative result	Re-prep and reanalyze the entire analytical batch, once. If problem persists, locate and remedy the source of unexpected result, then re-prep samples and reanalyze with a new set of controls.

laboratory replicate sample	Sample results must concur	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.5 The cannabis testing facility shall prepare and analyze at least one of each of the following QC samples for each analytical batch:

1. Method Blank;
2. Laboratory control sample (LCS); and
3. Duplicate laboratory control sample; and
4. Matrix spike sample; and
5. Duplicate matrix spike sample.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.6 The cannabis testing facility shall analyze, at minimum, a continuing calibration verification ("CCV") sample at the beginning of each analytical sequence and every 20 samples and at the end of each run. The CCV must be a standard that is not from the same vendor/lot that is used for the calibration curve.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.7 If the result of the chemical analyses is outside the specified minimum acceptance criteria in the following table, the cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

Quality Control Sample	**Acceptance Criteria**	**Corrective Action**
Method Blank sample	Not to exceed LOQ	Reanalyze entire analytical batch once. If method blank is still greater than the LOQ for any analyte, locate the source of contamination then re-prep samples and reanalyze.
Laboratory Control Sample	Percent recovery 70% to 130%	Reanalyze the entire analytical batch, once. If problem persists, re-prep samples and reanalyze or re-run the initial calibration curve.

Duplicate Laboratory Control Sample	RPD ≤30%	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.
Matrix spike sample	Percent recovery between 70% to 130%	Reanalyze sample and associated matrix spike sample once. If problem persists, re-prep samples and reanalyze.
Duplicate Matrix Spike Sample	RPD ≤30%	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.
CCV	Percent recovery between 70% to 130%	Reanalyze all samples that followed the last CCV that met the acceptance criteria. If CCV still fails, re-run the initial calibration curve and all samples in the analytical sequence.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.8 A cannabis testing facility shall use the following calculation for determining Relative Percentage Difference (RPD):

RPD = (|Num1-Num2| / ((Num1+Num2) / 2)) x 100

Where:

Num1= Original

Number Num2= Second Number

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.9 A cannabis testing facility shall use the following calculation for determining Relative Standard Deviation (RSD):

$$SD = \sqrt{\frac{(sample1 - mean)^2 + (sample2 - mean)^2, \dots, (sample10 - mean)^2}{total\ number\ of\ samples - 1}}$$

$$RSD = \frac{SD}{mean} x\ 100$$

For purposes of this rule:

s = standard deviation.
n = total number of values.
x_i = each individual value used to calculate mean.
x = mean of n values.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.10 For calculating both RPD and RSD if any results are less than the LOQ, the absolute value of the LOQ is used in the equation.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.11 If any analyte is detected above any action level, as described in this chapter, the sample shall be re-prepped and reanalyzed in replicate within another analytical batch.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.12 For quantitative analyses, the re-prepped sample and its associated replicate shall meet the acceptance criteria of RPD ≤30%.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.13 For qualitative analyses, the re-prepped sample and its associated replicate results must concur.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.14 If any quality control sample produces a result outside of the acceptance criteria, the cannabis testing facility cannot report the result and the entire batch cannot be released for retail sale. The cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.15 If the cannabis testing facility determines that the result is a false-positive or a false- negative, the Department may ask for the cannabis testing facility to re-sample or re-test.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.14.16 The cannabis testing facility shall compile and generate one LQC sample report for each analytical batch that includes LQC acceptance criteria, measurements, analysis date, and matrix.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 15 Limits of Detection (LOD) and Limits of Quantitation (LOQ) for Quantitative Analyses

Rule 1.15.1 The cannabis testing facility shall calculate the LOD for chemical method analyses according to any of the following methods:

1. Signal-to-noise ratio of between 3:1 and 2:1;

2. Standard deviation of the response and the slope of calibration curve using a minimum of 7 spiked blank samples calculated as follows;

   LOD = (3.3 x standard deviation of the response) / slope of the calibration curve; or

3. A method published by the United States Food and Drug Administration (USFDA) or the United States Environmental Protection Agency (USEPA).

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.15.2 The cannabis testing facility shall calculate the LOQ for chemical method analyses according to any of the following methods:

1. Signal-to-noise ratio of 10:1, at minimum;

2. Standard deviation of the response and the slope using a minimum of 7 spiked Blank samples calculated as follows:

   LOQ = (10 × standard deviation of the response) / slope of the calibration curve; or

3. A method published by the USFDA or the USEPA.

Source Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 16 Cannabis Testing Facility Data Package

Rule 1.1~~6~~.1 The cannabis testing facility shall compile and generate one data package for each representative sample that the cannabis testing facility analyzes.

1. All data generated during the testing of a test sample, except data generated by automated data collection systems, is recorded directly, promptly, and legibly in ink. All data shall be annotated with the date of entry and signed or initialed by the person recording the data. Any change in entries shall be made so as not to obscure the original entry, shall indicate the reason for such change, and shall be dated and signed or initialed at the time of the change;

2. In automated data collection systems, the individual responsible for direct data input shall be identified at the time of data input. Any change in an entry shall be made so as not to obscure the original entry, shall indicate the reason for such change, and shall be dated and signed or initialed at the time of the change. A corrective action report shall accompany such

change and shall be made available to the department, a non-profit producer, and a manufacturer upon their request for up to two years after the analysis is completed.

3. For each final result reported, an approved laboratory shall verify that:

A. Any calculations or other data processing steps were performed correctly;

B. The data meet any data quality requirements such as for accuracy, precision, linearity, etc.;

C. Any reference standards used were of the appropriate purity and within their expiration or requalification dates;

D. Any volumetric solutions were properly standardized before use; and,

E. Any test or measuring equipment used has been properly tested, verified, and calibrated, and is within its verification or calibration period.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.16.2 The cannabis testing facility shall provide requested data packages to the Department immediately upon request.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 17 Required Proficiency Testing

Rule 1.17.1 The cannabis testing facility shall participate in a proficiency testing program provided by an organization that operates in conformance with the requirements of ISO/IEC 17043, at least once every six months.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.17.2 The cannabis testing facility shall annually, successfully participate in a proficiency testing program for each of the following test methods:

1. Cannabinoids;

2. Heavy metals;

3. Microbial impurities;

4. Mycotoxins;

5. Residual pesticides;

6. Residual solvents and processing chemicals;

7. Terpenoids (if performed); and,

8. Foreign Material

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.17.3 The cannabis testing facility shall report all analytes available by the proficiency testing program provider and for which the licensee is required to test as required under this chapter.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.17.4 The cannabis testing facility shall participate in the proficiency testing program by following the cannabis testing facility's existing SOPs for testing cannabis and cannabis products.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.17.5 The cannabis testing facility shall rotate the proficiency testing program among the cannabis testing facility employees who perform the test methods.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.17.6 Cannabis testing facility employees who participate in a proficiency testing program shall sign the corresponding analytical reports or attestation statements to certify that the proficiency testing program was conducted in the same manner as the cannabis testing facility tests of cannabis and cannabis products.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.17.7 A supervisory or management cannabis testing facility employee shall review and verify the accuracy of results reported for all proficiency testing program samples analyzed.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.17.8 The cannabis testing facility shall request the proficiency testing program provider to send results concurrently to the Department, if available, or the cannabis testing facility shall provide the proficiency testing program results to the Department within 3 business days after the cannabis testing facility receives notification of their test results from the proficiency testing program provider.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 18 Proficiency Testing Performance

Rule 1.18.1 The cannabis testing facility shall be deemed to have successfully participated in a proficiency testing program for an analyte tested in a specific method if the test results demonstrate a "satisfactory" or otherwise proficient performance determination by the proficiency testing program provider.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.18.2 The cannabis testing facility may not report test results for analytes that are deemed by the proficiency testing program provider as "unacceptable," "questionable," "unsatisfactory", or otherwise deficient.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.18.3 The cannabis testing facility may resume reporting test results for analytes that were deemed "unacceptable," "questionable," "unsatisfactory", or otherwise deficient, only if both of the following conditions are met:

1. The cannabis testing facility satisfactorily remedies the cause of the failure for each analyte; and,
2. The cannabis testing facility submits, to the Department, a written corrective action report demonstrating how the cannabis testing facility has fixed the cause of the failure.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 19 Cannabis Testing Facility Audits

Rule 1.19.1 The cannabis testing facility shall conduct an internal audit at least once per year or in accordance with the ISO/IEC 17025 accrediting body's requirement, whichever is more frequent.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.19.2 The internal audit shall include all the components required by the ISO/IEC 17025 internal-audit standards.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.19.3 Within three (3) business days of completing the internal audit, the cannabis testing facility shall submit the results of the internal audit to the Department.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.19.4 A cannabis testing facility shall contract with an independent, third-party auditor certified to conduct on-site audits at least annually or in accordance with ISO/IEC 17025 accrediting body's requirements standards.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.19.5 Within three (3) business days of receiving the accrediting body on-site audit findings, the cannabis testing facility shall submit the report to the Department.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.19.6 The Department reserves the right to perform additional audits as needed and without advance notice.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 20 Cannabis Testing Facility Employee Qualifications

Rule 1.20.1 The cannabis testing facility may only employ persons who are at least 21 years of age and possess a current Department issued Medical Cannabis Establishment Agent Work Permit.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.20.2 Medical Cannabis Establishment agents of all cannabis testing facilities shall apply for and receive a valid Medical Cannabis Establishment Agent Work Permit from the Department before beginning employment with any cannabis testing facility.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.20.3 Work permits are not transferable to other employees or individuals.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.20.4 Medical Cannabis Establishment agents shall be required to display current work permits issued by the Department on their person in plain view while at the cannabis testing facility.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.20.5 The cannabis testing facility shall develop and implement an employee training program to ensure competency of cannabis testing facility employees for their assigned functions.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.20.6 The cannabis testing facility shall ensure and document that each cannabis testing facility employee meets the employee qualifications.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 21 Denial of Application for or Renewal of a Cannabis Testing Facility License or Registration

Rule 1.21.1 The Department may deny an application for or renewal of a license or registration for any of the following reasons:

1. Failure to provide the information required in this Chapter;
2. Failure to meet the requirements set forth in this Chapter;
3. Provision of misleading, incorrect, false or fraudulent information;
4. Failure to pay all applicable fees as required; or,
5. Any other ground that serves the purposes of this Chapter.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.21.2 If the Department denies an application for or renewal of a license or registration, the Department shall notify the applicant in writing of the Department's decision, including the reason for denial.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.21.3 Denial of an application or renewal is considered a final Department action, is subject to judicial review as provided in Section 31 of the Mississippi Medical Cannabis Act.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Subchapter 22 Fines, Suspensions and Revocations

Rule 1.22.1 The Department may fine, suspend or revoke the license or registration of a cannabis testing for a violation of this Chapter or any rules and regulations under this Chapter by the cannabis testing facility or any of its employees or agents.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.22.2 If a cannabis testing facility wishes to appeal the Department's decision, the cannabis testing facility shall file its administrative appeal in writing to the Department within twenty (20) days of receipt of the initial notice. If a cannabis testing facility fails to appeal the initial notice within twenty (20) days, the Departments decision becomes final. Any person or entity aggrieved by a final decision of the Department under the provisions of this Chapter may petition for judicial review of the decision or order as provided in Section 31 of the Mississippi Medical Cannabis Act.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Rule 1.22.3 A cannabis testing facility may continue to possess cannabis under its license during a suspension but shall not receive, transfer or test cannabis during the suspension period.

Source: Miss. Code Ann. §§ 41-137-1 – 41-137-67

Appendix A

Key to this Appendix:

- CAS Number = Chemical Abstract Services Registry number.
- CFU = Colony-forming unit, a method to estimate the number of viable bacteria or fungal cells in a sample.

A. Microbial Contaminants		
Analyte	**Maximum Allowable Contaminants**	**Required Action**
Total Escherichia coli	100 CFU/g	Remediate and retest, or Destroy
Shiga toxin-producing Escherichia coli	Detectable in 1 gram	Remediate and retest, or Destroy
Salmonella spp.	Detectable in 1 gram	Destroy
Aspergillus flavus, Aspergillus fumigatus, Aspergillus niger, and *Aspergillus terreus*	Inhalable: Detectable in 1 gram	Remediate and retest, Remediate and use for preparing an extract or a concentrate, or destroy

Mycotoxins: Aflatoxin B1, B2, G1, and G2 Ochratoxin A	Marijuana product, except a marijuana product intended for topical application, prepared from an extract or concentrate of medical marijuana:		Destroy
B. Heavy Metals			
Analyte	**Maximum Allowable Concentration**		**Required Action**
Arsenic	0.4 ppm		Remediate and retest, or Destroy
Cadmium	0.4 ppm		
Lead	1.0 ppm		
Mercury	1.2 ppm		
C. Residual Solvents			
Analyte	**CAS Number**	**Maximum Allowable Concentration**	**Required Action**
Acetone	67-64-1	1,000 ppm	Remediate and retest, or Destroy
Acetonitrile	75-05-8	410 ppm	
Benzene	71-43-2	2 ppm	
Butanes (measured as the cumulative residue of n-butane and iso-butane)	106-97-8 and 75-28-5, respectively	5,000 ppm	
Chloroform	67-66-3	60 ppm	
Dichloromethane	75-09-2	600 ppm	
Ethanol	64-17-5	5,000 ppm	
Ethyl Acetate	141-78-6	5,000 ppm	
Ethyl Ether	60-29-7	5,000 ppm	
Heptane	142-82-5	5,000 ppm	
Hexanes (measured as the cumulative residue of n-hexane, 2-	110-54-3, 107-83-5, and 79-29-8	290 ppm	

methylpentane, 3-methylpentane, 2,2-dimethylbutane, and 2,3-dimethylbutane)			Remediate and retest, or Destroy
Isopropyl Acetate	108-21-4	5,000 ppm	
Methanol	67-56-1	3,000 ppm	
Pentanes (measured as the cumulative residue of n-pentane, iso-pentane, and neo-pentane)	109-66-0, 78-78-4, and 463-82-1	5,000 ppm	
2-Propanol (IPA)	67-63-0	5,000 ppm	
Propane	74-98-6	5,000 ppm	
Toluene	108-88-3	890 ppm	
Xylenes (measured as the cumulative residue of 1,2-dimethylbenzene, 1,3-dimethylbenzene, and 1,4-dimethylbenzene, and the non-xylene, ethyl benzene)	1330-20-7 (95-47-6,108-38-3, and 106-42-3, and 100-41-4)	2,170 ppm	
dimethylbenzene, and 1,4-dimethylbenzene, and the non-xylene, ethyl benzene)			

D. Pesticides, Fungicides, Growth Regulators			
Analyte	**CAS Number**	**Maximum Allowable Concentration**	**Required Action**
Abamectin	71751-41-2	0.5 ppm	Destroy
Acephate	30560-19-1	0.4 ppm	
Acequinocyl	57960-19-7	2.0 ppm	
Acetamiprid	135410-20-7	0.2 ppm	

Aldicarb	116-06-3	0.4 ppm	
Azoxystrobin	131860-33-8	0.2 ppm	
Bifenazate	149877-41-8	0.2 ppm	
Bifenthrin	82657-04-3	0.2 ppm	
Boscalid	188425-85-6	0.4 ppm	
Carbaryl	63-25-2	0.2 ppm	
Carbofuran	1563-66-2	0.2 ppm	
Chlorantraniliprole	500008-45-7	0.2 ppm	
Chlorfenapyr	122453-73-0	1.0 ppm	
Chlormequat chloride	7003-89-6	0.2 ppm	
Chlorpyrifos	2921-88-2	0.2 ppm	
Clofentezine	74115-24-5	0.2 ppm	
Cyfluthrin	68359-37-5	1.0 ppm	
Cypermethrin	52315-07-8	1.0 ppm	
Daminozide	1596-84-5	1.0 ppm	
DDVP (Dichlorvos)	62-73-7	0.1 ppm	
Diazinon	333-41-5	0.2 ppm	
Dimethoate	60-51-5	0.2 ppm	
Ethoprophos	13194-48-4	0.2 ppm	
Etofenprox	80844-07-1	0.4 ppm	
Etoxazole	153233-91-1	0.2 ppm	
Fenoxycarb	72490-01-8	0.2 ppm	
Fenpyroximate	134098-61-6	0.4 ppm	
Fipronil	120068-37-3	0.4 ppm	
Flonicamid	158062-67-0	1.0 ppm	
Fludioxonil	131341-86-1	0.4 ppm	
Hexythiazox	78587-05-0	1.0 ppm	
Imazalil	35554-44-0	0.2 ppm	
Imidacloprid	138261-41-3	0.4 ppm	Destroy
Kresoxim-methyl	143390-89-0	0.4 ppm	
Malathion	121-75-5	0.2 ppm	
Metalaxyl	57837-19-1	0.2 ppm	
Methiocarb	2032-65-7	0.2 ppm	
Methomyl	16752-77-5	0.4 ppm	
Methyl parathion	298 -00 - 0	0.2 ppm	
Myclobutanil	88671-89-0	0.2 ppm	
Naled	300-76-5	0.5 ppm	
Oxamyl	23135-22-0	1.0 ppm	
Paclobutrazol	76738-62-0	0.4 ppm	

Permethrins (measured as the cumulative residue of cis- and trans-isomers)	52645-53-1(54774-45-7 and 51877-74-8)	0.2 ppm	Destroy
Phosmet	732-11-6	0.2 ppm	
Piperonyl_butoxide	51-03-6	2.0 ppm	
Prallethrin	23031-36-9	0.2 ppm	
Propiconazole	60207-90-1	0.4 ppm	
Propoxur	114-26-1	0.2 ppm	
Pyrethrins (measured as the cumulative residue of pyrethrin 1, cinerin 1 and jasmolin 1)	8003-34-7(121-21-1, 25402-06-6, and 4466-14-2)	1.0 ppm	
Pyridaben	96489-71-3	0.2 ppm	
Spinosad	168316-95-8	0.2 ppm	
Spiromesifen	283594-90-1	0.2 ppm	
Spirotetramat	203313-25-1	0.2 ppm	
Spiroxamine	118134-30-8	0.4 ppm	
Tebuconazole	107534-96-3	0.4 ppm	
Thiacloprid	111988-49-9	0.2 ppm	
Thiamethoxam	153719-23-4	0.2 ppm	
Trifloxystrobin	141517-21-7	0.2 ppm	

E. Potency

Analyte	Labelling	Required Action
Tetrahydrocannabinolic acid (THC-A)	Label claim is not within +/- 20 % of tested value	Revise label as necessary
Delta-9-tetrahydrocannabinol (Δ9-THC)		
Cannabidiolic acid (CBD-A)		
Cannabidiol (CBD)		
Terpenoids (primary and secondary)	Label claim is not within +/- 10 % of tested value	Revise label as necessary

F. Moisture Content and Water Activity Testing		
Measurement	**Allowable Measurement**	**Required Action**
Water activity	> 0.65 Aw	Remediate and retest
Moisture content	> than 15%	Remediate and retest

Title 15: Mississippi State Department of Health

Part 22: Medical Cannabis Program

Subpart 1: Cannabis Testing Facilities

Chapter 1 REGULATIONS FOR CANNABIS TESTING FACILITY

Subchapter 1 General Provisions:

Rule 1.1.1. Legal Authority: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Source: ~~*Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21*~~ *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.1.2 Definitions.

1. **"Accreditation"** means being currently deemed as technically competent under ISO/IEC 17025:2017 by an international mutual recognition arrangement signatory that has been found to meet ISO/IEC 17011, Conformity Assessment-Requirements for accreditation bodies accrediting conformity assessment bodies.
2. **"Accreditation body"** means an impartial non-profit organization that operates in conformance with the International Organization for Standardization (ISO) / International Electrotechnical Commission (IEC) standard 17011 and is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for Testing.
3. **"Analytical Batch"** means a set of no more than twenty samples that are prepared together for the same type of analysis, are sequentially analyzed using the same instrument calibration curve, and have common analytical quality control requirements. The batch shall include testing samples as well as all applicable quality control samples, to include one method blank, duplicate laboratory fortified blanks, and duplicate matrix spikes, as required by the analytical method.
4. **" Batch"** means, with regard to usable medical cannabis, a homogenous, identified quantity of usable medical cannabis, no greater than ~~ten (10)~~ twenty-five (25) pounds, that is harvested during a specified time period from a specified cultivation area, and with regard to oils vapors and waxes derived from usable medical cannabis, means an identified quantity that is uniform, that is intended to meet specifications for identity, strength, and composition, and that is manufactured, packaged and labeled during a specified time period according to a single manufacturing, packaging and labeling protocol.

5. **"Cannabis"** means all parts of the plant of the genus cannabis, the flower, the seeds thereof, the resin extracted from any part of the plant and every compound, manufacture, salt, derivative, mixture or preparation of the plant, its seeds or its resin, including whole plant extracts. Such term shall not mean cannabis-derived drug products approved by the federal Food and Drug Administration under Section 505 of the Federal Food, Drug, and Cosmetic Act.

6. **"Cannabis products"** means cannabis flower, concentrated cannabis, cannabis extracts and products that are infused with cannabis or an extract thereof and are intended for use or consumption by humans. The term includes, without limitation, edible cannabis products, beverages, topical products, ointments, oils, tinctures and suppositories that contain tetrahydrocannabinol (THC) and/or cannabidiol (CBD) except those products excluded from control under Sections 41-29-113 and 41-29-136, Mississippi Code of 1972, as amended.

7. **"Cannabinoid extract"** means a substance obtained by separating cannabinoids from ~~marijuana~~ cannabis by any of the following methods:

   A. A chemical extraction process using a hydrocarbon-based solvent; or

   B. A chemical extraction process using the hydrocarbon-based solvent carbon dioxide, if the process uses high heat or pressure.

8. **"Cannabis testing facility"** or "testing facility" means an independent entity licensed and registered by the Mississippi Department of Health that analyzes the safety and potency of cannabis.

9. **"Concentrate"** means a substance obtained by separating cannabinoids from cannabis by any of the following methods:

   A. A mechanical extraction process;

   B. A chemical extraction process using a nonhydrocarbon-based or other solvent, such as water, vegetable glycerin, vegetable oils, animal fats, food-grade ethanol or steam distillation; or

   C. A chemical extraction process using the hydrocarbon-based solvent carbon dioxide, provided that the process does not involve the use of high heat or pressure.

10. **"Department"** means the Mississippi State Department of Health.

11. **"Disqualifying felony offense"** means:

A. A conviction for a crime of violence, as defined in Section 97-3-2; 335, Mississippi Code of 1972, as amended

B. A conviction for a crime that was defined as a violent crime in the law of the jurisdiction in which the offense was committed, and that was classified as a felony in the jurisdiction where the person was convicted; or

C. A conviction for a violation of a state or federal controlled substances law that was classified as a felony in the jurisdiction

where the person was convicted, including the service of any term of probation, incarceration or supervised release within the previous five (5) years and the offender has not committed another similar offense since the conviction. Under this subparagraph (iii), a disqualifying felony offense shall not include a conviction that consisted of conduct for which this chapter would likely have prevented the conviction but for the fact that the conduct occurred before the effective date of this act.

10. **"Edible cannabis products"** means products that:

A. Contain or are infused with cannabis or an extract thereof;

B. Are intended for human consumption by oral ingestion; and

C. Are presented in the form of foodstuffs, beverages, extracts, oils, tinctures, lozenges and other similar products.

11. **“Laboratory Control Sample” (LCS)** means a blank matrix to which known concentrations of each of the target method analytes are added. The spiked concentration must be at a mid-range concentration of the calibration curve for the target analytes. The LCS is analyzed in the same manner as the representative sample.

12. **“Laboratory replicate sample”** means a sub-sample taken of the representative sample used for laboratory quality control purposes to demonstrate reproducibility. It is prepared and analyzed in the identical manner as the representative sample. The results from replicate analyses are used to evaluate analytical precision.

13. **“Limit of detection” (LOD)** means the lowest quantity of a substance or analyte that can be distinguished from the absence of that substance within a stated confidence limit.

14. **“Limit of quantitation” (LOQ)** means the minimum concentration of an analyte in a specific matrix that can be reliably quantified while also meeting predefined goals for bias and imprecision.

15. **“Linear regression”** means the determination, in analytical chemistry, of the best linear equation for calibration data to generate a calibration curve. The concentrate of an analyte in a sample can then be determined by comparing a measurement of the unknown to the calibration curve. A linear regression uses the following equation: $y = mx + b$; where m = slope, b = intercept.

16. **“Matrix”** means the substances that are present in a sample except for the analyte(s) of interest.

17. **“Matrix spike sample”** means a sample prepared by adding a known quantity of each of the target analyte to a sample matrix or to a matrix that is as closely representative of the matrix being analyzed as possible. The spiked concentration must be at a mid-range concentration of the calibration curve for the target analytes.

18. "Medical cannabis establishment" means a cannabis cultivation facility, cannabis processing facility, cannabis testing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or

cannabis research facility licensed and registered by the appropriate agency.

19. **"Medical cannabis establishment agent"** means an owner, officer, board member, employee, volunteer or agent of a medical cannabis establishment.

20. **"Method Blank"** means an analyte free matrix to which all reagents are added in the same volumes or proportions as used in the sample preparation and is processed in exactly the same manner as the samples.

21. **"Moisture content"** means the percentage of water in a sample, by weight.

"Percent recovery" means the percentage of a measured concentration relative to the added (spiked) concentration in a reference material or matrix spike sample. A laboratory shall calculate the percent recovery by dividing the sample result by the expected result then multiplying the quotient by 100.

22. **"Practitioner"** means a physician, certified nurse practitioner, physician assistant or optometrist who is licensed to prescribe medicine under the licensing requirements of their respective occupational boards and the laws of this state.

23. **"Principal Officer"** means persons who have ultimate responsibility for implementing the decisions of the cannabis testing facility and, include but are not limited to, the Chief Executive Officer, Chief Administrative Officer, - Chief Financial Officer as applicable.

24. **"School"** means an institution for the teaching of children, consisting of a physical location, whether owned or leased, including instructional staff members and students, and which is in session each school year. This definition shall include, but not be limited to, public, private, church and parochial programs for kindergarten, elementary, junior high and high schools. Such term shall not mean a home instruction program.

25. **"Seed-to-Sale System"** means the specialized inventory management system utilized throughout the medical cannabis program that allows for the tracking of cannabis from early life cycle until final sale.

26. **"THC"** or "Tetrahydrocannabinol" means any and all forms of tetrahydrocannabinol that are contained naturally in the cannabis plant, as well as synthesized forms of THC and derived variations, derivatives, isomers and allotropes that have similar molecular and physiological characteristics of tetrahydrocannabinol, including, but not limited to, THCA, THC Delta 9, THC Delta 8, THC Delta 10 and THC Delta 6.

27. **"Usable medical cannabis"** means any medical cannabis product that has completed all required growing/processing steps, is in final form and is intended for sale or distribution and intended for use or consumption by qualifying patients as defined in the Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.3 All cannabis testing facility laboratory operations must be physically located within the State of Mississippi.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.4 All cannabis testing facilities must be currently licensed and registered by the Department and adhere to all regulations set forth by the Department.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.5 No cannabis testing facilities shall be within one thousand (1,000) feet of the nearest property boundary line of a school, church or child care facility which exists or has acquired necessary real property for the operation of such facility before the date of the cannabis testing facilities' application unless the cannabis testing facility has received approval from the school, church or child care facility and received a waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.6 A cannabis testing facility may be located in any area in a municipality or county that is zoned as commercial or for which commercial use is otherwise authorized or not prohibited.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.7 A cannabis testing facility shall not employ an agent or employee who also is employed or has ownership at any other medical cannabis establishment.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.8 To be licensed and registered by the Department, Cannabis testing facilities must be accredited as defined in this Chapter.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.9 To be licensed and registered by the Department, Cannabis testing facilities must test at least one analyte required by the Department.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.10 Cannabis testing facilities shall test for cannabis-related analytes for which they are licensed and registered by the Department.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.11 Cannabis testing facilities shall only employ persons who are at least 21 years of age and possess a current work permit issued by the Department.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.12 Cannabis testing facilities shall develop and implement an employee training program to ensure competency of cannabis testing facility employees for their assigned function.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.13 Cannabis testing facilities shall conduct a fingerprint-based background check of the Mississippi Central Criminal Database and the Federal Bureau of Investigation Criminal History Database on every person seeking to become a principal officer, board member, agent, volunteer, or employee before the person begins working at the Cannabis testing facility.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.14 Cannabis testing facilities shall not employ a medical cannabis establishment agent, as defined in this Chapter, who has been convicted of a disqualifying felony offense.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.15 Cannabis testing facilities shall ensure, document, and provide to the Department upon request, documentation that each medical cannabis establishment agent, as defined by this Chapter, meets the requirements of the Mississippi Medical Cannabis Act, and Department regulations.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.16 Cannabis testing facilities shall employ a full-time supervisor or management employee who must be responsible for the following:

1. Overseeing and directing the scientific methods of the cannabis testing facility;
2. Ensuring that the cannabis testing facility achieves and maintains a cannabis testing facility quality assurance program; and
3. Providing ongoing and appropriate training to cannabis testing facility employees.
4. To be considered qualified, the supervisor or management employee must have at minimum:
    A. A doctoral degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university;
    B. A master's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 2 years of full-time practical experience;
    C. A bachelor's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 4 years of full-time practical experience; or
    D. A bachelor's degree in any field from an accredited college or university, plus at least 8 years of full-time practical experience, 4 years of which must have been in a supervisory or management position.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.17 Cannabis testing facilities shall employ a full-time analyst who, at minimum must have either of the following:

1. Earned a master's degree or a bachelor's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university; or
2. Completed 2 years of college or university education that included coursework in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 3 years of full-time practical experience.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.18 Cannabis testing facilities shall maintain operating documents that must include procedures for the oversight of the Cannabis testing facility and procedures to ensure accurate record keeping and adequate security measures.

Source: *Miss. Code Ann. §§ 41-137-3 – 41-137-67~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~*

Rule 1.1.19 Cannabis testing facilities shall implement appropriate security measures designed to deter and prevent the theft of medical cannabis and unauthorized entrance into the areas containing medical cannabis.

Source: *~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.1.20 Cannabis testing facilities shall notify the Department within one (1) business day of any theft or loss of medical cannabis.

Source: *~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.1.21 Cannabis testing facilities shall not share office space with or refer patients to a practitioner.

Source: *~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.1.22 Cannabis testing facilities are subject to inspection by the Department during business hours, including but not limited to, inspection of the physical cannabis testing facility, interviews of personnel, review, inspection, and audit of records and documents related to the analyses of dispensary samples to verify compliance with this Chapter.

Source: *~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.1.23 Cannabis testing facilities shall use the statewide seed-to-sale tracking system certified by the Department and provide reports as required by the Department.

Source: *~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.1.24 Cannabis testing facilities shall notify the Department within one (1) business day if there is a change of ownership or closure of the entity.

Source: *~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.1.25 Cannabis testing facilities shall not allow an individual who is younger than twenty-one (21) years old to enter the premises of the cannabis testing facility.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.26 Cannabis testing facilities shall create and require the display of an identification badge for each medical cannabis establishment agent.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.27 Cannabis testing facilities shall notify local law enforcement and the Department of any theft, robbery, break-in, or security breach that occurs on the laboratory's premises, no later than 10 calendar days after the facilities first become aware of the event. The description shall include a description of any property that was stolen or destroyed, and the quantity of any usable cannabis that was stolen.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 2 Documentation Requirements for Applicants

Rule 1.2.1 All applicants for a cannabis testing facility registration certificate and cannabis testing facility license must complete the application document required by the Department and include the documentation outlined in this Subchapter, pay the appropriate nonrefundable application fees to the Department, and be registered and licensed by the Department prior to initiating any testing related to medical cannabis. Cannabis testing facilities may be licensed as full or provisional by the Department.

1. A license will be granted by the Department to a cannabis testing facility that can demonstrate that it has applied for and received acceptable accreditation and that it meets all other requirements outlined in this Subchapter.
2. A provisional license may be granted by the Department to a new cannabis testing facility that has applied for accreditation but has not yet received nor been denied accreditation and that meets all other requirements of this Subchapter. A provisional license may be issued only if the Department is satisfied that preparations are being made to qualify for a regular license and that the health and safety of patients will not be endangered. The license issued under this condition shall be valid until the issuance of a regular license but shall not exceed twelve months following date of issuance whichever may be sooner.
3. Licensing, full or provision, may be denied when an applicant has deficiencies, and the Department determines that the applicant cannot consistently produce valid data.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.2.2 All information and documents required by the Department, including but not limited to, the following must accompany an application for cannabis testing facility registration and licensing:

1. The legal name of the prospective cannabis testing facility;
2. The physical address of the prospective cannabis testing facility, which shall not be within one thousand (1,000) feet of the nearest property boundary line of a school, church, or child care facility which exists or has acquired necessary real property for the operation of such facility before the date of the cannabis testing facility application unless the proposed entity has received approval from the school, church or child care facility and received the applicable waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility;
3. The name of each owner, principal officer, board member, and lab director of the proposed cannabis testing facility;
4. An attestation that the information provided to the Department to apply for a cannabis testing facility registration and license is true and correct;
5. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;
6. For each owner:
    A. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;
    B. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a cannabis dispensary, cannabis cultivation facility, cannabis processing facility, cannabis transportation entity, cannabis disposal entity or cannabis research facility.
    C. An attestation signed and dated by the owner pledging not to divert cannabis to any individual who or entity that is not allowed to possess cannabis.
7. Verification for each principal officer or board member that they are at least 21 years of age;
8. A valid certificate of accreditation, issued by an accreditation body, as defined in this Chapter, that attests to the laboratory's competence to perform testing, including all the required analytes for the relevant test methods:
    A. Cannabinoids;
    B. Heavy metals;
    C. Microbial impurities;
    D. Mycotoxins;
    E. Residual pesticides;
    F. Residual solvents and processing chemicals;
    G. Terpenoids;

H. Foreign Material

9. A copy of the cannabis testing facility's most recent assessment by the laboratory's accreditation body, the laboratory's responses to any findings of non-compliance with standards or recommendations, and the corrective actions taken by the laboratory to address the findings or recommendations;

10. Laboratory standard operating procedures for all testing methods;.

11. Laboratory test method verification and validation documentation for all testing methods, including final data reports approved by the laboratory director, validation material package inserts and all supporting data including instrument raw data and calculation tools;

12. Laboratory standard operating procedures for security measures;

13. Laboratory standard operating procedures for the sampling of cannabis or cannabis products;

14. Laboratory standard operating procedures for the transportation of cannabis or cannabis products;

15. Laboratory standard operating procedures for the reporting of test results for cannabis or cannabis products;

16. Laboratory standard operating procedures for the disposal of samples, digestates, leachates and extracts or other sample preparation products;

17. Copy of an approved waste disposal license issued under this Chapter or an executed contract with an approved waste disposal licensee issued under this Chapter;

18. Testing staff initial demonstration of capability for all applicable tests.

Source: ~~*Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21*~~ *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.2.3 All information and documents required by the Department, including but not limited to, the following must accompany an application for cannabis testing facility registration and provisional licensing:

1. The legal name of the prospective cannabis testing facility;

2. The physical address of the prospective cannabis testing facility, which shall not be within one thousand (1,000) feet of the nearest property boundary line of a school, church, or child care facility which exists or has acquired necessary real property for the operation of such facility before the date of the cannabis testing facility application unless the proposed entity has received approval from the school, church or child care facility and received the applicable waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility;

3. The name of each owner, principal officer, board member, and lab director of the proposed cannabis testing facility;

4. An attestation that the information provided to the Department by the cannabis testing facility to demonstrate an active application for accreditation is true and correct;
5. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;
6. For each owner:
    A. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;
    B. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a cannabis dispensary, cannabis cultivation facility, cannabis processing facility, cannabis transportation entity, cannabis disposal entity or cannabis research facility.
    C. An attestation signed and dated by the owner pledging not to divert cannabis to any individual who or entity that is not allowed to possess cannabis.
7. Verification for each principal officer or board member that they are at least 21 years of age;
8. Documentation issued by an accreditation body, as defined in this Chapter, that confirms that the laboratory has applied for ISO/IEC 17025 accreditation and is awaiting an inspection for all the required analytes for the relevant test methods:
    A. Cannabinoids;
    B. Heavy metals;
    C. Microbial impurities;
    D. Mycotoxins;
    E. Residual pesticides;
    F. Residual solvents and processing chemicals;
    G. Foreign Material.
9. Terpenoids, Laboratory standard operating procedures for all testing methods;.
10. Laboratory test method verification and validation documentation for all testing methods, including final data reports approved by the laboratory director, validation material package inserts and all supporting data including instrument raw data and calculation tools;
11. Laboratory standard operating procedures for security measures;
12. Laboratory standard operating procedures for the sampling of cannabis or cannabis products;
13. Laboratory standard operating procedures for the transportation of cannabis or cannabis products
14. Laboratory standard operating procedures for the reporting of test results for cannabis or cannabis products:
15. Laboratory standard operating procedures for the disposal of samples, digestates, leachates and extracts or other sample preparation products;

16. Copy of an approved waste disposal license issued under this Chapter or an executed contract with an approved waste disposal licensee issued under this Chapter;

17. Testing staff initial demonstration of capability for all applicable tests.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.2.4 Application and Licensing Fees:

1. One-time nonrefundable license application fee - $10,000
2. Annual licensing fee - $15,000
3. All payments must be made through the Department's electronic payment system.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 3 Cannabis Testing Facility License Renewal

Rule 1.3.1 Each Cannabis testing facilities must submit a completed renewal license application and appropriate renewal fee thirty (30) days prior to its current license expiration date.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.3.2 All information and documents required by the Department, including but not limited to, the following must accompany a renewal application for cannabis testing facility registration and licensing:

1. The legal name of the cannabis testing facility;
2. The name of each principal officer and board member of the cannabis testing facility;
3. An attestation that the information provided to the Department to apply for a cannabis testing facility renewal license is true and correct;
4. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;
5. For each owner:
   A. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;
   B. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a dispensary, cannabis cultivation facility, cannabis processing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility; and

C. An attestation signed and dated by the owner pledging not to divert cannabis to any individual or entity that is not allowed to possess cannabis.

6. Verification for each principal officer or board member that they are at least 21 years of age;

7. A valid certificate of accreditation, issued by an accreditation organization, as defined in this Chapter, that attests to the laboratory's competence to perform testing, including all the required analytes for the relevant test methods:

A. Cannabinoids;
B. Heavy metals;
C. Microbial impurities;
D. Mycotoxins;
E. Residual pesticides;
F. Residual solvents and processing chemicals;
G. Terpenoids;
H. Foreign materials.

8. Laboratory standard operating procedures for all testing methods;.

9. Laboratory test method verification or validation documentation for all testing methods, including final reports signed by the laboratory director, validation material package inserts and all supporting instrument raw data and calculation tools;

10. Laboratory standard operating procedures for security measures;

11. Laboratory standard operating procedures for the sampling of cannabis or cannabis products;

12. Laboratory standard operating procedures for the transportation of cannabis or cannabis products

13. Laboratory standard operating procedures for the reporting of test results for cannabis or cannabis products;

14. Laboratory standard operating procedures for the disposal of samples, digestates, leachates and extracts or other sample preparation products;

15. Copy of an approved waste disposal license issued under this Chapter or an executed contract with an approved waste disposal licensee issued under this Chapter;

16. Testing staff ongoing demonstration of competency documentation.

Source: ~~*Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21*~~ *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.3.3 Renewal Fee:

1. Annual renewal fee - $15,000

2. All payments must be made through the Department's electronic payment system.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.3.4 To maintain an active license and registration certificate, cannabis testing facilities must maintain accreditation, as defined in this Chapter.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.3.5 Any loss of accreditation status by a cannabis testing facility will result in immediate revocation of the license and registration of the cannabis testing facility.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.3.6 Any cannabis testing facility that has a license and registration revoked for failure to maintain accreditation, as defined in this Chapter, may file a written petition to the Department to reinstate the cannabis testing facilities' registration and license once the cannabis testing facility submits proof of accreditation, as defined in the Chapter. A reinstatement of registration or license is required prior to the cannabis testing facility resuming cannabis testing operations.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 4 Cannabis Testing Facility Change of Ownership

Rule 1.4.1 Cannabis testing facilities must submit a completed change of ownership license application within one (1) day if there is a change of ownership.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.4.2 All information and documents required by the Department, including but not limited to, the following must accompany a change of ownership application for cannabis testing facility registration and licensing:

1. The legal name of the cannabis testing facility;
2. The name of each principal officer and board member of the cannabis testing facility;
3. An attestation that the information provided to the Department regarding the change of ownership for a cannabis testing facility is true and correct;
4. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;
5. For each owner:

D. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;

E. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a dispensary, cannabis cultivation facility, cannabis processing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility; and

F. An attestation signed and dated by the owner pledging not to divert cannabis to any individual or entity that is not allowed to possess cannabis;

6. Verification for each principal officer or board member that they are at least 21 years of age.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 5: Batch Requirements

Rule 1.5.1 A medical cannabis establishment must separate each harvest lot of usable medical cannabis into no larger than ~~10 pound~~ twenty-five (25) lb. batches~~.~~

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.5.2 Notwithstanding Rule 1.5.1 of this section, medical cannabis establishment may combine batches for purposes of having a batch sampled if each batch is intended for use by a medical cannabis establishment to make a cannabinoid concentrate or extract and each harvest lot was:

1. Cultivated utilizing the same growing practices and grown in close proximity on the licensed or registered premises;

2. Harvested at the same time; and

3. If cured prior to sampling, cured under uniform conditions.

Rule 1.5.3 A medical cannabis establishment may not combine harvest lots into a batch for purposes of sampling and testing for THC or CBD.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.5.4 If harvest lots are combined in accordance with Rule 1.5.2, the batch must be labeled so that it identifies the different harvest lots that were combined.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.5.5 For all concentrates and extracts, a process lot is considered a batch.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.5.6 A medical cannabis establishment must assign each batch a unique batch number and that unique batch number must be:

1. Documented and maintained in the cannabis cultivation facility or cannabis dispensary records for at least two years and available to the Department upon request;

2. Provided to the individual responsible for taking samples; and

3. Included on the batch label.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 6: Sample size, handling, storage and disposal

Rule 1.6.1 Usable medical cannabis may only be sampled after it is cured, unless the usable medical cannabis is intended for sale or transfer to a medical cannabis establishment to make a cannabinoid concentrate or extract.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.6.2 Samples taken must in total represent a minimum of 0.5 percent of the batch and consist of minimally 22 unique increments of 1gram each, with at least 95% of the sample taken homogenized for testing in compliance with the laboratory's sampling policies and procedures.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Source: *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.6.3 For cannabinoid concentrates extracts and products, samples must in total represent a minimum of 0.3 percent of the batch and consist of enough samples from a batch must be taken to ensure that the required attributes in the batch to be tested are homogenous and consistent with the laboratory's accredited sampling policies and procedures.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.6.4 Only individuals employed by a laboratory sampling under these rules may take samples and must follow the laboratory's accredited sampling policies and procedure.

1. A laboratory must prepare medical cannabis sampling policies and procedures that contain all of the information necessary for collecting and transporting samples from usable medical cannabis in a manner that does not endanger the integrity of the sample for any analysis required by this rule. These policies and procedures must be appropriate to the matrix being sampled.

2. Care must be to avoid contamination of the non-sampled material. Sample containers must be free of analytes of interest and appropriate for the analyses requested.

3. A sufficient sample size must be taken for analysis of all requested tests and the quality control performed by the testing laboratory for these tests.

4. A laboratory must comply with any recording requirements for samples and subsamples in the policies and procedures and at a minimum:

A. Record the location of each sample and subsample taken.

B. Subsamples collected from the same batch must be combined into a single sample by a laboratory prior to testing.

C. Subsamples and samples collected from different batches may not be combined.

D. Field duplicates may not be combined with the primary samples

E. Assign a field identification number for each sample, subsample and field duplicate that have an unequivocal link to the laboratory identification number.

F. Assign a unique identification number for each test batch.

G. Have a documented system for uniquely identifying the samples to be tested to ensure there can be no confusion regarding the identity of such samples at any time. This system must include identification for all samples, subsamples, preservations, sample containers, tests, and subsequent extracts or digestates.

H. Place the laboratory identification code as a durable mark on each sample container.

I. Enter a unique sample identification number into the laboratory records. This number must be the link that associates the sample with related laboratory activities such as sample preparation. In cases where the sample collector and analyst are the same individual, or the laboratory pre-assigns numbers to sample containers, the unique identification number may be the same as the field identification code.

Source: ~~*Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21*~~ *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.6.5 An approved laboratory shall store each test sample under the appropriate conditions to protect the physical and chemical integrity of the sample.

1. Analyzed test samples consisting of cannabis or cannabis-derived product shall be appropriately segregated, controlled, and held in a controlled access area pending destruction or other disposal.

2. Any portion of a cannabis or cannabis-derived test sample that is not destroyed during analysis shall be:

A. returned to the licensed producer who provided the sample under chain of custody; or

B. destroyed in accordance with the wastage requirements of this rule.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21

Rule 1.6.6 Sampling must be conducted at a cannabis cultivation facility or dispensary's premises.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.6.7 A laboratory must maintain the documentation required in these rules for at least five years and must provide that information to the Department upon request.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 7: Testing Requirements and Standards

Rule 1.7.1 Testing Requirements for Usable Medical Cannabis

1. A cultivation facility or processing facility shall test every batch of usable marijuana, in its final form, intended for sale or distribution to a qualified patient or caregiver, prior to selling or transferring the usable medical cannabis for the following:

A. Pesticides in accordance with Rule 1.~~5~~7.4 of this Chapter;
B. Water activity and moisture content in accordance with Rule 1.~~5~~7.6 of this Chapter;
C. THC and CBD concentration in accordance with Rule 1.~~7~~5.7 of this Chapter;
D. Heavy Metals in accordance with Rule 1.~~5~~7.8 of this Chapter;
E. Mycotoxins in accordance with Rule 1.~~5~~7.9 of this Chapter;
F. Microbiological contaminants in accordance with Rule 1.~~5~~7.3 of this Chapter;
G. Terpenes in accordance with Rule 1.~~5~~7.10 of this Chapter;
H. Foreign material in accordance with Rule 1.~~5~~7.11 of this Chapter.

2. A cultivation facility or processing facility shall test every batch of usable medical cannabis intended for sale or distribution to a qualified patient or caregiver for water activity and moisture content in accordance with Rule 1.5.6 of this Chapter, unless the cultivation facility or processing facility uses a method of processing that results in effective sterilization.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.2 Testing Requirements for Concentrates, Extracts, and Edibles

1. A cultivation facility or processing facility shall test every process lot of cannabinoid concentrate, extract or edible for sale or distribution to a qualified patient prior to selling or transferring the cannabinoid concentrate, extract or edible for the following:

A. Microbial impurities in accordance with Rule 1.~~5~~7.3 of this Chapter;
B. Pesticides in accordance with Rule 1.~~5~~7.4 of this Chapter;
C. Solvents in accordance with Rule 1.~~5~~7.5 of this Chapter;
D. THC and CBD concentration in accordance with Rule 1.~~5~~7.7 of this Chapter;
E. Heavy Metals in accordance with Rule 1.~~5~~7.8 of this Chapter;
F. Mycotoxins in accordance with Rule 1.~~5~~7.9 of this Chapter;
G. Terpenes in accordance with Rule 1.~~5~~7.10 of this Chapter;
H. Foreign material in accordance with Rule 1.~~5~~7.11 of this Chapter.

2. A cultivation facility or processing facility is exempt from testing for solvents under this rule if the cultivation facility or processing facility:
A. Did not use any solvent listed in Appendix A, Table 2; and
B. Used a mechanical extraction process to separate cannabinoids from the marijuana; or
C. Used only water, animal fat or vegetable oil as a solvent to separate the cannabinoids from the marijuana.

3. A cultivation facility or processing facility shall test a process lot of a cannabinoid concentrate or extract for microbiological contaminants in accordance with Rule 1.~~5~~7.3 of this Chapter, or upon written request by the Department.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.3 Standards for Testing Microbiological Contaminants

1. Usable medical cannabis required to be tested for microbiological contaminants shall be sampled using appropriate aseptic technique and tested by a Mississippi licensed and registered cannabis testing facility for microbial impurities.
2. The cannabis testing facility shall report the result of the microbial impurities testing by indicating “pass” or “fail” on the Certificate of Analysis.
3. The sample of inhalable cannabis and cannabis products shall be deemed to have passed the microbial impurities testing if all of the following conditions are met:

A. Total *Escherichia coli* is not detected above 100 colony forming units/gram.

B. Shiga toxin–producing Escherichia coli is not detected in 1 gram;

C. Salmonella spp. is not detected in 1 gram; and

D. Pathogenic Aspergillus species *A. fumigatus*, *A. flavus*, *A. niger*, and *A. terreus* are not detected in 1 gram.

4. The sample of non-inhalable cannabis and cannabis products shall be deemed to have passed the microbial impurities testing if both the following conditions are met:

A. Total *Escherichia coli* is not detected above 100 colony forming units/gram.

B. Shiga toxin–producing Escherichia coli is not detected in 1 gram, and

C. Salmonella spp. is not detected in 1 gram.

5. If the sample fails microbial impurities testing, the batch from which the sample was collected fails microbial impurities testing and shall not be released for retail sale.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.4 Standards for Testing Pesticides

1. Usable medical cannabis required to be tested for pesticides shall be tested by a Mississippi licensed, and registered cannabis testing facility approved for the analytes listed in Appendix A, Table 1.

2. The cannabis testing facility shall report whether any Residual Pesticides are detected above the limit of detection (LOD) and shall report the result of the testing in ppms on the Certificate of Analysis. The cannabis testing facility shall indicate "pass" or "fail" on the Certificate of Analysis.

3. A batch fails pesticide testing if a cannabis testing facility detects the presence of a pesticide above the action levels listed in Appendix A, Table 1 in a sample:

A. During an initial test where no reanalysis is requested; or

B. Upon reanalysis as described in Rule 1.6.7 of this Chapter.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.5 Standards for Testing Solvents

1. Usable medical cannabis required to be tested for solvents shall be tested by a Mississippi licensed, and registered cannabis testing facility approved for the analytes listed in Appendix A, Table 2.

2. The cannabis testing facility shall report the result of the residual solvents testing in ppm on the Certificate of Analysis and indicate "pass" or "fail" on the Certificate of Analysis.

3. A batch fails solvent testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter:

A. Detects the presence of a solvent above the action level listed in Appendix A, Table 2; or
B. Calculates a RPD of more than 20 percent between the field primary result of the sample and the field duplicate result.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.6 Standards for Testing Water Activity and Moisture Content

1. Usable medical cannabis shall be tested by a currently Mississippi licensed and registered cannabis testing facility for:

A. Water activity; and
B. Moisture content.

2. If a sample has a water activity rate of more than 0.65 Aw the sample fails. The cannabis testing facility shall report the result of the water activity test on the COA and indicate "pass" or "fail" on the COA.

3. If a sample has a moisture content of more than 15 percent, the sample fails. The cannabis testing facility shall report the result of the moisture content on the COA and indicate "pass" or "fail" on the COA.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.7 Standards for THC and CBD Testing

1. A Mississippi licensed and registered cannabis testing facility shall test for the following when testing usable medical cannabis for potency:

A. THC;
B. THCA;
C. CBD;
D. CBDA.

2. A cannabis testing facility shall establish a limit of quantitation of 1.0 mg/g or lower for all cannabinoids analyzed and reported.

3. A cannabis testing facility shall report the result of the cannabinoid testing on the Certificate of Analysis, including, at minimum:

A. A percentage for THC, THCA, CBD, and CBDA. The dry-weight percent shall be calculated using the below equation: Dry-weight percent cannabinoid = wet-weight percent cannabinoid / (1 − percent moisture / 100) (2);

B. A percentage for Total THC and Total CBD, if applicable;

C. Milligrams per gram (mg/g) if by dry-weight or milligrams per milliliter (mg/mL) if by volume for THC, THCA, CBD, and CBDA;

D. Milligrams per gram (mg/g) if by dry-weight or milligrams per milliliter (mg/mL) if by volume for Total THC and Total CBD, if applicable;

E. Total cannabinoid concentration shall be calculated for concentration expressed in weight: Total cannabinoid concentration (mg/g) = (cannabinoid acid form concentration (mg/g) x 0.877) + cannabinoid concentration (mg/g);

F. Milligrams per package for THC and CBD;

G. Milligrams per package for Total THC and Total CBD, if applicable;

H. Milligrams per serving for THC and CBD, if any;

I. Milligrams per serving for Total THC and Total CBD, if any and if applicable;

J. The results of all other cannabinoids analyzed on the COA both as a percentage and in either milligrams per gram (mg/g) if by weight or milligrams per milliliter (mg/mL) if by volume.

4. The sample shall be deemed to have passed the cannabinoid testing if the amount of THC does not exceed the limits below:

A. Cannabis flower or trim potency ≤ 30% total THC.

B. Cannabis tinctures, oils or concentrates ≤ 60% total THC

5. A cannabis testing facility shall report the test results and indicate an overall "pass" or "fail" for the cannabinoid testing on the Certificate of Analysis.

6. A process lot of a cannabinoid concentrate, or extract fails potency testing if, based on an initial test where no reanalysis is requested or upon reanalysis, the amount of THC, as calculated pursuant to Rule 1.5.9 of this chapter, between samples taken from the batch exceeds 30 percent RSD.

Source: ~~*Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21*~~ *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.7.8 Standards for Testing for Heavy Metals

1. Usable medical cannabis shall be tested by a current Mississippi licensed and registered cannabis testing facility for the metals listed in Appendix A.

2. A cannabis testing facility shall report the result of the heavy metals test on the Certificate of Analysis and indicate "pass" or "fail" on the COA.

3. A batch fails metals testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter detects the presence of metals above the action level listed in Appendix A, Table 3.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.9 Standards for Mycotoxin Testing

1. Usable medical cannabis shall be tested by a Mississippi licensed and registered cannabis testing facility for the following mycotoxins: Aflatoxin B1, B2, G1, and G2 Ochratoxin A listed

2. A batch shall be deemed to have passed mycotoxin testing if both the following conditions are met:

A. Total of aflatoxin B1, B2, G1, and G2 does not exceed 20 µg/kg of substance, and

B. Ochratoxin A does not exceed 20 µg/kg of substance.

3. A cannabis testing facility shall report the result of the mycotoxin testing on the Certificate of Analysis and indicate "pass" or "fail" on the COA.

4. A batch fails mycotoxin testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter detects the presence of mycotoxins above the action level listed in Appendix A.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.10 Standards for Terpenoid Testing

1. Usable medical cannabis shall be tested by a Mississippi licensed and registered cannabis testing facility to determine the terpenoid profile of the sample.

2. A cannabis testing facility shall report the result of the terpenoid testing on the COA both as a percentage and in either milligrams per gram (mg/g) if by weight or milligrams per milliliter (mg/mL) if by volume.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.11 Standards for Foreign Material Testing

1. Usable medical cannabis shall be tested by a Mississippi licensed and registered cannabis testing facility to determine whether foreign material is present.

2. A cannabis testing facility shall report the result of the foreign material test by indicating "pass" or "fail" on the COA.

3. A cannabis testing facility shall perform foreign material testing on the total representative sample prior to sample homogenization.

4. When the licensed laboratory performs foreign material testing, at minimum, the laboratory shall do all of the following:

A. Examine both the exterior and interior of the dried flower sample, and;

B. Examine the exterior of the cannabis product sample.

5. The sample shall be deemed to have passed the foreign material testing if the presence of foreign material does not exceed:

A. 1/4 of the total sample area covered by sand, soil, cinders, or dirt;

B. 1/4 of the total sample area covered by mold;

C. 1 insect fragment, 1 hair, or 1 count mammalian excreta per 3.0 grams; or

D. 1/4 of the total sample area covered by an imbedded foreign material.

6. If the sample fails foreign material testing, the batch from which the sample was collected fails foreign material testing and shall not be released for retail sale.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.12 If a testing facility is not accredited for the full scope of state-required tests, the testing facility will need to subcontract with another Department-licensed testing facility for the relevant tests needed. All subcontracted testing must be documented in the seed-to-sale system and be transferred using appropriate transport processes and chain of custody.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 8: Failed Test Samples

Rule 1.8.1 If a sample fails any initial test, the cannabis testing facility that did the testing may reanalyze the sample. If the sample passes, another cannabis testing facility must resample the batch and confirm that result in order for the batch to pass testing.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.2 If a sample fails a test or a reanalysis under Rule 1.6.1 of this Chapter, the batch:

1. May be remediated or sterilized in accordance with this subchapter; or

2. If it is not or cannot be remediated or sterilized under this rule, it must be destroyed in a manner specified by the Department.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.3 If a Cultivation facility or dispensary is permitted under this subchapter to sell or transfer a batch that has failed a test, the Cultivation facility or dispensary must notify the Cultivation facility or dispensary to whom the batch is sold or transferred of the failed test within 24 hours of receipt of the COA.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.4 Failed microbiological contaminant testing.

1. If a sample from a batch of usable medical cannabis fails microbiological contaminant testing, the batch may be used to make a cannabinoid concentrate or extract if the processing method effectively sterilizes the batch, such as a method using a hydrocarbon-based solvent, or a CO2 closed loop system.
2. If a sample from a batch of a cannabinoid concentrate or extract fails microbiological contaminant testing, the batch may be further processed, if the processing method effectively sterilizes the batch, such as a method using a hydrocarbon-based solvent, or a CO2 closed loop system.
3. A batch that is sterilized in accordance with subsection (1) or (2) of this rule must be sampled and tested in accordance with this Chapter and must be tested, if not otherwise required for that product, for microbiological contaminants, solvents and pesticides.
4. A batch that fails microbiological contaminant testing after undergoing a sterilization process in accordance with subsection (1) or (2) of this rule must be destroyed in a manner specified by the Department.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.5 Failed solvent testing.

1. If a sample from a batch fails solvent testing, the batch may be remediated using procedures that would reduce the concentration of solvents to less than the action level.
2. A batch that is remediated in accordance with subsection (1) of this rule must be sampled and tested in accordance with this Chapter and must be tested if not otherwise required for that product under this Chapter, for solvents and pesticides.
3. A batch that fails solvent testing that is not remediated or that if remediated fails testing must be destroyed in a manner specified by the Department.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.6 Failed water activity testing and moisture testing.

1. If a sample from a batch of usable medical cannabis fails for water activity or moisture activity, the batch from which the sample was taken may:
   A. Be used to make a cannabinoid concentrate or extract; or
   B. Continue to dry or cure.
2. A batch that undergoes additional drying or curing as described in subsection (1) of this rule must be sampled and tested in accordance with this Chapter.

Source: ~~*Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21*~~ *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.8.7 Failed pesticide testing.

1. If a sample from a batch fails pesticide testing, the batch may not be remediated and must be destroyed in a manner approved by the Department and identified on the Department's website.

Source: ~~*Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21*~~ *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.8.8 Failed potency testing.

1. Usable medical cannabis that fails potency testing under Rule 1.5.7 of this Chapter may be repackaged in a manner that enables the item to meet the standard in Rule 1.5.7 of this Chapter.
2. Usable medical cannabis that is repackaged in accordance with this section must be sampled and tested in accordance with these rules.

Source: ~~*Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21*~~ *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.8.9 Failed remediation

1. If a sample fails a test after undergoing remediation or sterilization as permitted under this rule, the batch must be destroyed in a manner approved by the Department.
2. A cultivation facility or processing facility must inform a cannabis testing facility prior to samples being taken that the batch has failed a test and is being retested after undergoing remediation or sterilization.
3. A cultivation facility or processing facility must, as applicable:

A. Have detailed procedures for sterilization processes to remove microbiological contaminants and for reducing the concentration of solvents.

B. Document all sampling, testing, sterilization, remediation and destruction that are a result of failing a test under these rules.

4. A cannabis or cannabis product batch may only be remediated twice. If the batch fails after a second remediation attempt and the second retesting, the entire batch shall be destroyed in a manner approved by the Department.
5. Within one business day of completing the required analyses of a representative sample obtained from a remediated cannabis or cannabis product batch, the cannabis testing facility shall upload the COA information into the seed-to-sale system.

Source: ~~*Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21*~~ *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Subchapter 9: Tentative Identification of Compounds

Rule 1.9.1 Tentatively Identified Compounds (TICs) are compounds detected in a sample using gas chromatography mass spectrometry that are not among the target analytes for the residual solvent analysis.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.9.2 The Department may initiate an investigation of a cultivation facility or processing facility upon receipt of a TICs report from a cannabis testing facility and may require a cultivation facility or processing facility to submit samples for additional testing, including testing for analytes that are not required by these rules, at the cultivation facility or processing facility's expense.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 10: Certificate of Analysis ("COA")

Rule 1.10.1 The cannabis testing facility shall generate a Certificate of Analysis for each representative sample that the cannabis testing facility analyzes.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.2 The cannabis testing facility shall ensure that the COA contains the results of all required analyses performed for the representative sample.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.3 The cannabis testing facility shall, within 1 business day of completing all analyses of a sample, upload the COA into the seed-to-sale system. Passed test results must be in the Department's Seed-to-Sale system for a batch to be released for immediate processing, packaging, and labeling for transfer or sale in accordance with these rules.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.4 The cannabis testing facility shall not release to any person any cumulative or individual test results prior to completing all analyses and providing the COA to the Department.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.5 The COA shall contain, at minimum, the following information:

1. The term "Regulatory Compliance Testing" in font no smaller than 14-point, which shall appear in the upper-right corner of each page of the COA. No text or images shall appear above the term "Regulatory Compliance Testing" on any page of the COA.
2. The cannabis testing facility's name, premises address, and license number; dispensary's authorized to engage in distribution's name, premises address, and license number; cultivator's, or processor's name, premises address, and license number;

3. Batch number of the batch from which the sample was obtained. For cannabis and cannabis products that are already packaged at the time of sampling, the labeled batch number on the packaged cannabis and cannabis products shall match the batch number on the COA;

4. Sample identifying information, including matrix type and unique sample identifiers;

5. Sample history, including the date collected, the date received by the cannabis testing facility, and the date(s) of sample analyses and corresponding testing results;

6. A picture of the sample of cannabis and cannabis products. If the sample is pre-packaged, the picture must include an unobstructed image of the packaging;

7. For dried flower samples, the total weight of the batch, in grams or pounds, and the total weight, of the representative sample in grams;

8. For cannabis product or pre-rolls samples, the total unit count of both the representative sample and the total batch size;

A. Measured density of the cannabis and cannabis products;

9. The analytical methods, analytical instrumentation used, and corresponding Limits of Detection ("LOD)" and Limits of Quantitation ("LOQ");

10. An attestation on the COA from the cannabis testing facility supervisory or management employee that all LQC samples required by this Chapter were performed and met the acceptance criteria; and

11. Analytes detected during the analyses of the sample that are unknown, unidentified, or injurious to human health if consumed, if any.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67-

Rule 1.10.6 The cannabis testing facility shall report test results for each representative sample on the COA as follows: Indicate an overall "pass" or "fail" for the entire batch;

1. When reporting qualitative results for each analyte, the cannabis testing facility shall indicate "pass" or "fail";

2. When reporting quantitative results for each analyte, the cannabis testing facility shall use the appropriate units of measurement as required under this chapter;

3. When reporting results for each test method, the cannabis testing facility shall indicate "pass" or "fail";

4. When reporting results for any analytes that were detected below the analytical method LOQ, indicate "<LOQ", notwithstanding cannabinoid results;

5. When reporting results for any analytes that were not detected or detected below the LOD, indicate "ND"; and

6. Indicate "NT" for any test that the cannabis testing facility did not perform.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.7 The cannabis testing facility supervisory or management employee shall validate the accuracy of the information contained on the COA and sign and date the COA.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.8 The cannabis testing facility supervisory or management employee may request to amend a COA to correct minor errors and upload into the seed to sale system.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 11: Post Testing Sample Requirements

Rule 1.11.1 The cannabis testing facility shall retain the reserve sample, consisting of any portion of a sample that was not used in the testing process. The reserve sample shall be kept at minimum, for 45 business days after the analyses, after which time it may be destroyed and denatured to the point the material is rendered unrecognizable and unusable.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.11.2 The cannabis testing facility shall securely store the reserve sample in a manner that prohibits sample degradation, contamination, and tampering.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67-

Rule 1.11.3 The cannabis testing facility shall provide the reserve sample to the Department upon request.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 12: Transportation of Samples

Rule 1.12.1 Employees/agents of the cannabis testing facility are responsible for the collection and transportation of testing samples.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.12.2 Employees/agents of the cannabis testing facility must utilize an electronic inventory management system to create and maintain transportation manifests documenting all transport of medical marijuana and medical marijuana products throughout the State of Mississippi.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67-

Rule 1.12.3 When transporting medical cannabis or medical cannabis products, all cannabis testing facilities and their employees/agents shall provide copies of the inventory manifests to each originating and receiving medical cannabis establishment at the time the product changes possession.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.12.4 The copy of the inventory manifest to be left with the originating medical cannabis establishment shall include, at a minimum:

1. The license number, business name, address, and contact information of the originating medical cannabis establishment;
2. A complete inventory of the medical cannabis and medical cannabis products to be transported, including the quantities by weight or unit of each type of medical cannabis and medical cannabis products and the batch number(s);
3. The date of transportation and the approximate time of departure;
4. Printed names, signatures, and identification card numbers of personnel accompanying the transport;
5. The license number(s), business name(s), address(es), and contact information for all end point recipients.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.12.5 The copy of the inventory manifest to be left with the receiving medical cannabis establishment shall include, at a minimum:

1. The license number, business name, address, and contact information for the receiving medical cannabis establishment;
2. The license number, business name, address, and contact information of the originating medical cannabis establishment;
3. A complete inventory of the medical cannabis and medical cannabis products delivered to the receiving medical cannabis establishment, including the quantities by weight or unit of each type of medical cannabis and medical cannabis products and the batch number(s);
4. The date and estimated time of arrival;
5. The printed names, signatures, and identification card numbers of the personnel accompanying the transport; and
6. The printed names, titles, and signatures of any personnel accepting delivery on behalf of the receiving medical cannabis establishment.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67-

Rule 1.12.6 Transportation manifests should reflect a complete chain of custody of all medical cannabis and medical cannabis products being transported, including all instances in which the medical cannabis and medical cannabis products are stored.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67~~–~~

Rule 1.12.7 Originating and receiving licensed entities shall maintain copies of transportation manifests and inventory records logging the quantity of medical cannabis or medical cannabis products received for at least three (3) years from the date of receipt.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.12.8 A transportation manifest must not be altered after departing from the originating medical cannabis establishment's premises, except for the addition of the printed names, titles, and signatures of any personnel accepting delivery on behalf of the receiving cannabis testing facility.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 13: Cannabis Testing Facility Quality Assurance

Rule 1.13.1 The cannabis testing facility shall develop and implement a Quality Assurance (QA) program to assure the reliability and validity of the analytical data produced by the cannabis testing facility. The QA program shall, at minimum, include a written QA manual that addresses the following:

1. Quality control procedures;
2. Cannabis testing facility organization and employee training and responsibilities, including good laboratory practice (GLP);
3. QA objectives for measurement data;
4. Traceability of data and analytical results;
5. Instrument maintenance, calibration procedures, and frequency;
6. Performance and system audits;
7. Corrective action procedures;
8. Steps to change processes when necessary;
9. Record retention and document control;
10. Test procedure standardization; and
11. Method validation;
12. Chain of custody protocols;
13. Premise and sample security;
14. Sample handling, including sample receipt, identification, rejection, storage and destruction;
15. Contingency plans for data that is not within control limits, or is otherwise unacceptable for analysis; and

16. Disposal of marijuana and laboratory waste.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21

Rule 1.13.2 The supervisory or management cannabis testing facility employee shall annually review, amend if necessary, and approve the QA program and manual both when they are created and when there is a change in methods, testing facility equipment, or the supervisory or management testing facility employee.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21

Rule 1.13.3 The cannabis testing facilities standard operating procedures for testing methods shall include the following:

1. The name of the testing method;
2. A list of all analytes used in the testing method;
3. The applicable matrix or matrices;
4. Sample receipt and acceptance;
5. Method sensitivity;
6. Potential interferences;
7. Analytical instrument and equipment used;
8. Consumable supplies, reagents, and standards;
9. Sample preservation and hold time;
10. Type, frequency, and acceptable criteria for quality control samples;
11. Type, frequency, and acceptable criteria for calibration standards;
12. Procedures for analyzing batch samples;
13. Data quality assessment and acceptance criteria;
14. Calibration of results; and
15. Reagent solution and reference material preparation.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 14: Cannabis Testing Facility Quality Control Samples

Rule 1.14.1 The cannabis testing facility shall use Quality Control samples (QC) and adhere to good, approved laboratory practice ("GLP") in the performance of each analysis according to the specifications of this Chapter.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.2 The cannabis testing facility shall analyze QC samples in the same manner as the cannabis testing facility analyzes cannabis and cannabis products samples.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.3 The cannabis testing facility shall use at least one negative control, one positive control, and one cannabis testing facility replicate sample in each analytical batch

for each target organism during microbial testing. If one of the controls produces unexpected results, the samples shall be re- prepped and reanalyzed with a new set of controls.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.4 If the result of the microbial analyses is outside the specified acceptance criteria in the following table, the cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

Testing facility Quality Control Sample	**Acceptance Criteria**	**Corrective Action**
Positive control	Produces expected result, positive result	Re-prep and reanalyze the entire analytical batch, once. If problem persists, locate and remedy the source of unexpected result, then re-prep samples and reanalyze with a new set of controls.
Negative control	Produces expected result, negative result	Re-prep and reanalyze the entire analytical batch, once. If problem persists, locate and remedy the source of unexpected result, then re-prep samples and reanalyze with a new set of controls.
laboratory replicate sample	Sample results must concur	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.5 The cannabis testing facility shall prepare and analyze at least one of each of the following QC samples for each analytical batch:

1. Method Blank;
2. Laboratory control sample (LCS); and
3. Duplicate laboratory control sample; and
4. Matrix spike sample; and
5. Duplicate matrix spike sample

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.6 The cannabis testing facility shall analyze, at minimum, a continuing calibration verification ("CCV") sample at the beginning of each analytical sequence and every 10 samples thereafter.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.7 If the result of the chemical analyses is outside the specified minimum acceptance criteria in the following table, the cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

Quality Control Sample	**Acceptance Criteria**	**Corrective Action**
Method Blank sample	Not to exceed LOQ	Reanalyze entire analytical batch once. If method blank is still greater than the LOQ for any analyte, locate the source of contamination then re-prep samples and reanalyze.
Laboratory Control Sample	Percent recovery 70% to 130%	Reanalyze the entire analytical batch, once. If problem persists, re-prep samples and reanalyze or re-run the initial calibration curve.
Duplicate Laboratory Control Sample	RPD ≤30%	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.
Matrix spike sample	Percent recovery between 70% to 130%	Reanalyze sample and associated matrix spike sample once. If problem persists, re-prep samples and reanalyze.
Duplicate Matrix Spike Sample	RPD ≤30%	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.
CCV	Percent recovery between 70% to 130%	Reanalyze all samples that followed the last CCV that met the acceptance criteria. If CCV still fails, re-run the initial calibration curve and all samples in the analytical sequence.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.8 A cannabis testing facility shall use the following calculation for determining Relative Percentage Difference (RPD):

$$RPD = \frac{(\text{sample result} - \text{duplicate result})}{(\text{sample result} - \text{duplicate result})/2}$$

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.9 A cannabis testing facility shall use the following calculation for determining Relative Standard Deviation (RSD):

$$\%RSD = \frac{s}{x} \times 100\%$$

$$s = \sqrt{\sum_{i=0}^{n} \frac{(x_i - \tilde{x})^2}{(n-1)}}$$

For purposes of this rule:
s = standard deviation.
n = total number of values.
x_i = each individual value used to calculate mean.
x = mean of n values.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.10 For calculating both RPD and RSD if any results are less than the LOQ, the absolute value of the LOQ is used in the equation.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.11 If any analyte is detected above any action level, as described in this chapter, the sample shall be re-prepped and reanalyzed in replicate within another analytical batch.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.12 For quantitative analyses, the re-prepped sample and its associated replicate shall meet the acceptance criteria of RPD ≤30%.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.13 For qualitative analyses, the re-prepped sample and its associated replicate results must concur.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67-

Rule 1.14.14 If any quality control sample produces a result outside of the acceptance criteria, the cannabis testing facility cannot report the result and the entire batch cannot be released for retail sale. The cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.15 If the cannabis testing facility determines that the result is a false-positive or a false- negative, the Department may ask for the cannabis testing facility to re-sample or re-test.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.16 The cannabis testing facility shall compile and generate one LQC sample report for each analytical batch that includes LQC acceptance criteria, measurements, analysis date, and matrix.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 15: Limits of Detection (LOD) and Limits of Quantitation (LOQ) for Quantitative Analyses

Rule 1.15.1 The cannabis testing facility shall calculate the LOD for chemical method analyses according to any of the following methods:

1. Signal-to-noise ratio of between 3:1 and 2:1;
2. Standard deviation of the response and the slope of calibration curve using a minimum of 7 spiked blank samples calculated as follows; *LOD = (3.3 x standard deviation of the response) / slope of the calibration curve; or*

3. A method published by the United States Food and Drug Administration (USFDA) or the United States Environmental Protection Agency (USEPA).

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.15.2 The cannabis testing facility shall calculate the LOQ for chemical method analyses according to any of the following methods:

1. Signal-to-noise ratio of 10:1, at minimum;
2. Standard deviation of the response and the slope using a minimum of 7 spiked Blank samples calculated as follows: *LOQ = (10 × standard deviation of the response) / slope of the calibration curve*; or
3. A method published by the USFDA or the USEPA.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 16: Cannabis Testing Facility Data Package

Rule 1.1~~6~~.1 The cannabis testing facility shall compile and generate one data package for each representative sample that the cannabis testing facility analyzes.

1. All data generated during the testing of a test sample, except data generated by automated data collection systems, is recorded directly, promptly, and legibly in ink. All data shall be annotated with the date of entry and signed or initialed by the person recording the data. Any change in entries shall be made so as not to obscure the original entry, shall indicate the reason for such change, and shall be dated and signed or initialed at the time of the change
2. In automated data collection systems, the individual responsible for direct data input shall be identified at the time of data input. Any change in an entry shall be made so as not to obscure the original entry, shall indicate the reason for such change, and shall be dated and signed or initialed at the time of the change. A corrective action report shall accompany such change and shall be made available to the department, a non-profit producer, and a manufacturer upon their request for up to two years after the analysis is completed.
3. For each final result reported, an approved laboratory shall verify that:
   A. Any calculations or other data processing steps were performed correctly;
   B. The data meet any data quality requirements such as for accuracy, precision, linearity, etc.;
   C. Any reference standards used were of the appropriate purity and within their expiration or requalification dates;
   D. Any volumetric solutions were properly standardized before use; and
   E. Any test or measuring equipment used has been properly tested, verified, and calibrated, and is within its verification or calibration period.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.16.2 The cannabis testing facility shall provide requested data packages to the Department immediately upon request.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 17: Required Proficiency Testing

Rule 1.17.1 The cannabis testing facility shall participate in a proficiency testing program provided by an organization that operates in conformance with the requirements of ISO/IEC 17043, at least once every six months.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.17.2 The cannabis testing facility shall annually, successfully participate in a proficiency testing program for each of the following test methods:

1. Cannabinoids;
2. Heavy metals;
3. Microbial impurities;
4. Mycotoxins;
5. Residual pesticides;
6. Residual solvents and processing chemicals;
7. Terpenoids; and,
8. Foreign Material

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.17.3 The cannabis testing facility shall report all analytes available by the proficiency testing program provider and for which the licensee is required to test as required under this chapter.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.17.4 The cannabis testing facility shall participate in the proficiency testing program by following the cannabis testing facility's existing SOPs for testing cannabis and cannabis products.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67-

Rule 1.17.5 The cannabis testing facility shall rotate the proficiency testing program among the cannabis testing facility employees who perform the test methods.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67-

Rule 1.17.6 Cannabis testing facility employees who participate in a proficiency testing program shall sign the corresponding analytical reports or attestation statements to certify that the proficiency testing program was conducted in the same manner as the cannabis testing facility tests of cannabis and cannabis products.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.17.7 A supervisory or management cannabis testing facility employee shall review and verify the accuracy of results reported for all proficiency testing program samples analyzed.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.17.8 The cannabis testing facility shall request the proficiency testing program provider to send results concurrently to the Department, if available, or the cannabis testing facility shall provide the proficiency testing program results to the Department within 3 business days after the cannabis testing facility receives notification of their test results from the proficiency testing program provider.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 18: Proficiency Testing Performance

Rule 1.18.1 The cannabis testing facility shall be deemed to have successfully participated in a proficiency testing program for an analyte tested in a specific method if the test results demonstrate a "satisfactory" or otherwise proficient performance determination by the proficiency testing program provider.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.18.2 The cannabis testing facility may not report test results for analytes that are deemed by the proficiency testing program provider as "unacceptable," "questionable," "unsatisfactory", or otherwise deficient.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.18.3 The cannabis testing facility may resume reporting test results for analytes that were deemed "unacceptable," "questionable," "unsatisfactory", or otherwise deficient, only if both of the following conditions are met:

1. The cannabis testing facility satisfactorily remedies the cause of the failure for each analyte; and

2. The cannabis testing facility submits, to the Department, a written corrective action report demonstrating how the cannabis testing facility has fixed the cause of the failure.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 19: Cannabis Testing Facility Audits

Rule 1.19.1 The cannabis testing facility shall conduct an internal audit at least once per year or in accordance with the ISO/IEC 17025 accrediting body's requirement, whichever is more frequent.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.19.2 The internal audit shall include all the components required by the ISO/IEC 17025 internal-audit standards.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.19.3 Within three (3) business days of completing the internal audit, the cannabis testing facility shall submit the results of the internal audit to the Department.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.19.4 A cannabis testing facility shall contract with an independent, third-party auditor certified to conduct on-site audits at least annually or in accordance with ISO/IEC 17025 accrediting body's requirements standards.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.19.5 Within three (3) business days of receiving the accrediting body on-site audit findings, the cannabis testing facility shall submit the report to the Department.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.19.6 The Department reserves the rights to perform additional audits as needed and without advance notice.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 20: Cannabis Testing Facility Employee Qualifications

Rule 1.20.1 The cannabis testing facility may only employ persons who are at least 21 years of age and possess a current Department issued Medical Cannabis Establishment Agent Work Permit.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.20.2 Medical Cannabis Establishment agents of all cannabis testing facilities shall apply for and receive a valid Medical Cannabis Establishment Agent Work Permit from the Department before beginning employment with any cannabis testing facility.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.20.3 Work permits are not transferable to other employees or individuals.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.20.4 Medical Cannabis Establishment agents shall be required to display current work permits issued by the Department on their person in plain view while at the cannabis testing facility.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.20.5 The cannabis testing facility shall develop and implement an employee training program to ensure competency of cannabis testing facility employees for their assigned functions.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.20.6 The cannabis testing facility shall ensure and document that each cannabis testing facility employee meets the employee qualifications.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 21: Denial of Application for or Renewal of a Cannabis Testing Facility License or Registration

Rule 1.21.1 The Department may deny an application for or renewal of a license or registration for any of the following reasons:

1. Failure to provide the information required in this Chapter;
2. Failure to meet the requirements set forth in this Chapter;
3. Provision of misleading, incorrect, false or fraudulent information;
4. Failure to pay all applicable fees as required;
5. Any other ground that serves the purposes of this Chapter.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.21.2 If the Department denies an application for or renewal of a license or registration, the Department shall notify the applicant in writing of the Department's decision, including the reason for denial.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.21.3 Denial of an application or renewal is considered a final Department action, is subject to judicial review as provided in Section 31 of the Mississippi Medical Cannabis Act.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 22: Fines, Suspensions and Revocations

Rule 1.22.1 The Department may fine, suspend or revoke the license or registration of a cannabis testing for a violation of this Chapter or any rules and regulations under this Chapter by the cannabis testing facility or any of its employees or agents.

Source: ~~Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21~~ Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.22.2 If a cannabis testing facility wishes to appeal the Department's decision, the cannabis testing facility shall file its administrative appeal in writing to the Department within twenty (20) days of receipt of the initial notice. If a cannabis testing facility fails to appeal the initial notice within twenty (20) days, the Departments decision becomes final. Any person or entity aggrieved by a final decision of the Department under the provisions of this Chapter may petition for judicial review of the decision or order as provided in Section 31 of the Mississippi Medical Cannabis Act.

Source: ~~*Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21*~~ *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.22.3 A cannabis testing facility may continue to possess cannabis under its license during a suspension but shall not receive, transfer or test cannabis during the suspension period.

Source: ~~*Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21*~~ *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Appendix A

Key to this Appendix:

- CAS Number = Chemical Abstract Services Registry number
- CFU = Colony-forming unit, a method to estimate the number of viable bacteria or fungal cells in a sample.

A. Microbial Contaminants		
Analyte	**Maximum Allowable Contaminants**	**Required Action**
Total Escherichia coli	100 CFU/g	Remediate and retest, or Destroy
Shiga toxin-producing Escherichia coli	Detectable in 1 gram	Remediate and retest, or Destroy
Salmonella spp.	Detectable in 1 gram	Destroy
Aspergillus flavus, Aspergillus fumigatus, Aspergillus niger, and *Aspergillus terreus*	Inhalable: Detectable in 1 gram	Remediate and retest, Remediate and use for preparing an extract or a concentrate, or destroy
Mycotoxins: Aflatoxin B1, B2, G1, and G2 Ochratoxin A	Marijuana product, except a marijuana product intended for topical application, prepared from an extract or concentrate of medical marijuana:	Destroy
B. Heavy Metals		
Analyte	**Maximum Allowable Concentration**	**Required Action**
Arsenic	0.4 ppm	

Cadmium	0.4 ppm	Remediate and retest, or Destroy
Lead	1.0 ppm	
Mercury	1.2 ppm	

C. Residual Solvents		
Analyte	**Maximum Allowable Concentration**	**Required Action**
Arsenic	0.4 ppm	Remediate and retest, or Destroy
Cadmium	0.4 ppm	
Lead	1.0 ppm	
Mercury	1.2 ppm	

C. Residual Solvents			
Analyte	**CAS Number**	**Maximum Allowable Concentration**	**Required Action**
Acetone	67-64-1	1,000 ppm	Remediate and retest, or Destroy
Acetonitrile	75-05-8	410 ppm	
Benzene	71-43-2	2 ppm	
Butanes (measured as the cumulative residue of n-butane and iso-butane)	106-97-8 and 75-28-5, respectively	5,000 ppm	
Chloroform	67-66-3	60 ppm	
Dichloromethane	75-09-2	600 ppm	
Ethanol	64-17-5	5,000 ppm	
Ethyl Acetate	141-78-6	5,000 ppm	
Ethyl Ether	60-29-7	5,000 ppm	
Heptane	142-82-5	5,000 ppm	
Hexanes (measured as the cumulative residue of n-hexane, 2-methylpentane, 3-methylpentane, 2,2-dimethylbutane, and 2,3-dimethylbutane)	110-54-3, 107-83-5, and 79-29-8	290 ppm	
Isopropyl Acetate	108-21-4	5,000 ppm	

Methanol	67-56-1	3,000 ppm	Remediate and retest, or Destroy
Pentanes (measured as the cumulative residue of n-pentane, iso-pentane, and neo-pentane)	109-66-0, 78-78-4, and 463-82-1	5,000 ppm	
2-Propanol (IPA)	67-63-0	5,000 ppm	
Propane	74-98-6	5,000 ppm	
Toluene	108-88-3	890 ppm	
Xylenes (measured as the cumulative residue of 1,2-dimethylbenzene, 1,3-dimethylbenzene, and 1,4- dimethylbenzene, and the non- xylene, ethyl benzene)	1330-20-7 (95-47-6,108-38-3, and 106-42-3, and 100-41-4)	2,170 ppm	
Dimethylbenzene, and 1,4- dimethylbenzene, and the non- xylene, ethyl benzene)			
D. Pesticides, Fungicides, Growth Regulators			
Analyte	**CAS Number**	**Maximum Allowable Concentration**	**Required Action**
Abamectin	71751-41-2	0.5 ppm	Destroy
Acephate	30560-19-1	0.4 ppm	
Acequinocyl	57960-19-7	2.0 ppm	
Acetamiprid	135410-20-7	0.2 ppm	
Aldicarb	116-06-3	0.4 ppm	
Azoxystrobin	131860-33-8	0.2 ppm	
Bifenazate	149877-41-8	0.2 ppm	
Bifenthrin	82657-04-3	0.2 ppm	
Boscalid	188425-85-6	0.4 ppm	
Carbaryl	63-25-2	0.2 ppm	
Carbofuran	1563-66-2	0.2 ppm	
Chlorantraniliprole	500008-45-7	0.2 ppm	
Chlorfenapyr	122453-73-0	1.0 ppm	
Chlormequat chloride	7003-89-6	0.2 ppm	
Chlorpyrifos	2921-88-2	0.2 ppm	
Clofentezine	74115-24-5	0.2 ppm	
Cyfluthrin	68359-37-5	1.0 ppm	
Cypermethrin	52315-07-8	1.0 ppm	
Daminozide	1596-84-5	1.0 ppm	

DDVP (Dichlorvos)	62-73-7	0.1 ppm	
Diazinon	333-41-5	0.2 ppm	
Dimethoate	60-51-5	0.2 ppm	
Ethoprophos	13194-48-4	0.2 ppm	
Etofenprox	80844-07-1	0.4 ppm	
Etoxazole	153233-91-1	0.2 ppm	
Fenoxycarb	72490-01-8	0.2 ppm	
Fenpyroximate	134098-61-6	0.4 ppm	
Fipronil	120068-37-3	0.4 ppm	
Flonicamid	158062-67-0	1.0 ppm	
Fludioxonil	131341-86-1	0.4 ppm	
Hexythiazox	78587-05-0	1.0 ppm	
Imazalil	35554-44-0	0.2 ppm	
Imidacloprid	138261-41-3	0.4 ppm	Destroy
Kresoxim-methyl	143390-89-0	0.4 ppm	
Malathion	121-75-5	0.2 ppm	
Metalaxyl	57837-19-1	0.2 ppm	
Methiocarb	2032-65-7	0.2 ppm	
Methomyl	16752-77-5	0.4 ppm	
Methyl parathion	298 -00 - 0	0.2 ppm	
Myclobutanil	88671-89-0	0.2 ppm	
Naled	300-76-5	0.5 ppm	
Oxamyl	23135-22-0	1.0 ppm	
Paclobutrazol	76738-62-0	0.4 ppm	
Permethrins (measured as the cumulative residue of cis- and trans- isomers)	52645-53-1(54774-45-7 and 51877-74-8)	0.2 ppm	
Phosmet	732-11-6	0.2 ppm	
Piperonyl_butoxide	51-03-6	2.0 ppm	
Prallethrin	23031-36-9	0.2 ppm	
Propiconazole	60207-90-1	0.4 ppm	
Propoxur	114-26-1	0.2 ppm	
Pyrethrins (measured as the cumulative residue of pyrethrin 1, cinerin 1 and jasmolin 1)	8003-34-7(121-21-1, 25402-06-6, and 4466-14-2)	1.0 ppm	
Pyridaben	96489-71-3	0.2 ppm	

Spinosad	168316-95-8	0.2 ppm	
Spiromesifen	283594-90-1	0.2 ppm	
Spirotetramat	203313-25-1	0.2 ppm	
Spiroxamine	118134-30-8	0.4 ppm	
Tebuconazole	107534-96-3	0.4 ppm	
Thiacloprid	111988-49-9	0.2 ppm	
Thiamethoxam	153719-23-4	0.2 ppm	
Trifloxystrobin	141517-21-7	0.2 ppm	

E. Potency		
Analyte	**Labelling**	**Required Action**
Tetrahydrocannabinolic acid (THC-A)	Label claim is not within +/- 20 % of tested value	Revise label as necessary
Delta-9-tetrahydrocannabinol (Δ9-THC)		
Cannabidiolic acid (CBD-A)		
Cannabidiol (CBD)		
Terpenoids (primary and secondary)	Label claim is not within +/- 10 % of tested value	Revise label as necessary

F. Moisture Content and Water Activity Testing		
Measurement	**Allowable Measurement**	**Required Action**
Water activity	> 0.65 Aw	Destroy
Moisture content	> than 15%	Remediate and retest

Title 15: Mississippi State Department of Health

Part 22: Medical Cannabis Program

Subpart 1: Cannabis Testing Facilities

Chapter 1 REGULATIONS FOR CANNABIS TESTING FACILITY

Subchapter 1 General Provisions:

Rule 1.1.1. Legal Authority: *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.2 Definitions.

1. **"Accreditation"** means being currently deemed as technically competent under ISO/IEC 17025:2017 by an international mutual recognition arrangement signatory that has been found to meet ISO/IEC 17011, Conformity Assessment-Requirements for accreditation bodies accrediting conformity assessment bodies.

2. **"Accreditation body"** means an impartial non-profit organization that operates in conformance with the International Organization for Standardization (ISO) / International Electrotechnical Commission (IEC) standard 17011 and is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for Testing.

3. **"Analytical Batch"** means a set of no more than twenty samples that are prepared together for the same type of analysis, are sequentially analyzed using the same instrument calibration curve, and have common analytical quality control requirements. The batch shall include testing samples as well as all applicable quality control samples, to include one method blank, duplicate laboratory fortified blanks, and duplicate matrix spikes, as required by the analytical method.

4. **" Batch"** means, with regard to usable medical cannabis, a homogenous, identified quantity of usable medical cannabis, no greater than twenty-five (25) pounds, that is harvested during a specified time period from a specified cultivation area, and with regard to oils vapors and waxes derived from usable medical cannabis, means an identified quantity that is uniform, that is intended to meet specifications for identity, strength, and composition, and that is manufactured, packaged and labeled during a specified time period according to a single manufacturing, packaging and labeling protocol.

5. **"Cannabis"** means all parts of the plant of the genus cannabis, the flower, the seeds thereof, the resin extracted from any part of the plant and every compound, manufacture, salt, derivative, mixture or preparation of the plant, its seeds or its resin, including whole plant extracts. Such term shall not mean cannabis-derived drug products approved by the federal Food and Drug Administration under Section 505 of the Federal Food, Drug, and Cosmetic Act.

6. **"Cannabis products"** means cannabis flower, concentrated cannabis, cannabis extracts and products that are infused with cannabis or an extract thereof and are intended for use or consumption by humans. The term includes, without limitation, edible cannabis products, beverages, topical products, ointments, oils, tinctures and suppositories that contain tetrahydrocannabinol (THC) and/or cannabidiol (CBD) except those products excluded from control under Sections 41-29-113 and 41-29-136, Mississippi Code of 1972, as amended.

7. **"Cannabinoid extract"** means a substance obtained by separating cannabinoids from cannabis by any of the following methods:

   a. A chemical extraction process using a hydrocarbon-based solvent; or

   b. A chemical extraction process using the hydrocarbon-based solvent carbon dioxide, if the process uses high heat or pressure.

8. **"Cannabis testing facility"** or "testing facility" means an independent entity licensed and registered by the Mississippi Department of Health that analyzes the safety and potency of cannabis.

9. **"Concentrate"** means a substance obtained by separating cannabinoids from cannabis by any of the following methods:

   a. A mechanical extraction process;

   b. A chemical extraction process using a nonhydrocarbon-based or other solvent, such as water, vegetable glycerin, vegetable oils, animal fats, food-grade ethanol or steam distillation; or

   c. A chemical extraction process using the hydrocarbon-based solvent carbon dioxide, provided that the process does not involve the use of high heat or pressure.

10. **"Department"** means the Mississippi State Department of Health.

11. **"Demonstration of capability"** means an examination, provided by a medical cannabis testing facility, undertaken by an analyst to determine whether he or she is able to correctly, accurately, and repeatedly perform a specific analysis or analyze a specific measurement.

12. **"Disqualifying felony offense"** means:

    a. A conviction for a crime of violence, as defined in Section 97-3-2; 335, Mississippi Code of 1972, as amended

    b. A conviction for a crime that was defined as a violent crime in the law of the jurisdiction in which the offense was committed, and that was classified as a felony in the jurisdiction where the person was convicted; or

    c. A conviction for a violation of a state or federal controlled substances law that was classified as a felony in the jurisdiction where the person was convicted, including the service of any term of probation, incarceration or supervised release within the previous five (5) years and the offender has not committed another similar offense since the conviction. Under this subparagraph (iii), a disqualifying felony offense shall not include a conviction that consisted of conduct for which this chapter would likely have prevented the conviction but for the fact that the conduct occurred before the effective date of this act.

13. **"Edible cannabis products"** means products that:

    a. Contain or are infused with cannabis or an extract thereof;

    b. Are intended for human consumption by oral ingestion; and

    c. Are presented in the form of foodstuffs, beverages, extracts, oils, tinctures, lozenges and other similar products.

14. "Inclusivity" means, related to microbiological method validation, the sensitivity of the test method. It evaluates the ability of the test method to detect a wide range of target organisms by a defined relatedness.

15. "Infused cannabis products" means products are:

    a. Any oil, wax, ointment, salve, tincture, capsule, suppository, dermal patch, cartridge or other product containing a medical cannabis concentrate or usable cannabis that has been processed so that the dried leaves and flowers are integrated into other material.

    b. Does not include an edible cannabis product.

16. "Initial display of competency" means an examination, provided by a cannabis testing facility, undertaken by an analyst to determine whether he or she is able to correctly, accurately, and repeatedly perform a specific analysis or analyze a specific measurement.

17. **“Laboratory Control Sample” (LCS)** means a blank matrix to which known concentrations of each of the target method analytes are added. The spiked concentration must be within the calibration range of the method. The LCS must be carried through the entire sample preparation process and must be analyzed in the same manner as a representative sample. The LCS must be made from a standard that is not from the same vendor, or from the same lot if only one vendor is available, that is used for the calibration curve..

18. **“Laboratory replicate sample”** means a sub-sample taken of the representative sample used for laboratory quality control purposes to demonstrate reproducibility. It is prepared and analyzed in the identical manner as the representative sample. The results from replicate analyses are used to evaluate analytical precision.

19. **“Limit of detection” (LOD)** means the lowest quantity of a substance or analyte that can be distinguished from the absence of that substance within a stated confidence limit.

20. **“Limit of quantitation” (LOQ)** means the minimum concentration of an analyte in a specific matrix that can be reliably quantified while also meeting predefined goals for bias and imprecision. The LOQ can be no lower than the lowest calibration standard used in the analysis.

21. **“Linear regression”** means the determination, in analytical chemistry, of the best linear equation for calibration data to generate a calibration curve. The concentrate of an analyte in a sample can then be determined by comparing a measurement of the unknown to the calibration curve. A linear regression uses the following equation: $y = mx + b$; where m = slope, b = intercept.

22. **“Matrix”** means the substances that are present in a sample except for the analyte(s) of interest.

23. **“Matrix spike sample”** means second portion of actual sample used to prepare the MS that is spiked and processed in the same manner as the MS. The MS and MSD are used together to measure the precision of methodology. .

24. "Medical cannabis establishment" means a cannabis cultivation facility, cannabis processing facility, cannabis testing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility licensed and registered by the appropriate agency.

25. **"Medical cannabis establishment agent"** means an owner, officer, board member, employee, volunteer or agent of a medical cannabis establishment.

26. **“Method Blank”** means an analyte free matrix to which all reagents are added in the same volumes or proportions as used in the sample preparation and is processed in exactly the same manner as the samples.

27. **“Moisture content”** means the percentage of water in a sample, by weight.

28. **“Percent recovery”** means the percentage of a measured concentration relative to the added (spiked) concentration in a reference material or matrix spike sample. A laboratory shall calculate the percent recovery by dividing the sample result by the expected result then multiplying the quotient by 100.

29. **"Practitioner"** means a physician, certified nurse practitioner, physician assistant or optometrist who is licensed to prescribe medicine under the licensing requirements of their respective occupational boards and the laws of this state.

30. **“Principal Officer”** means persons who have ultimate responsibility for implementing the decisions of the cannabis testing facility and, include but are not limited to, the Chief Executive Officer, Chief Administrative Officer, - Chief Financial Officer as applicable.

31. **“Proficiency test”** means an evaluation of a laboratory’s performance against pre-established criteria by means of interlaboratory comparisons of test measurements.

32. **“Proficiency test sample”** means a sample that is prepared by a party independent of the testing laboratory with the ISO/IEC 17043 accreditation, where the concentration and identity of an analyte is known to the independent party, but is unknown to the testing laboratory and testing laboratory employees.

33. **"Process lot"** means any amount of cannabinoid concentrate or extract of the same type and processed at the same time using the same extraction methods, standard operating procedures and from the same batch of batches harvested medical cannabis.

34. **"School"** means an institution for the teaching of children, consisting of a physical location, whether owned or leased, including instructional staff members and students, and which is in session each school year. This definition shall include, but not be limited to, public, private, church and parochial programs for kindergarten, elementary, junior high and high schools. Such term shall not mean a home instruction program.

35. **“Seed-to-Sale System”** means the specialized inventory management system utilized throughout the medical cannabis program that allows for the tracking of cannabis from early life cycle until final sale.

36. **"THC"** or "Tetrahydrocannabinol" means any and all forms of tetrahydrocannabinol that are contained naturally in the cannabis plant, as well as synthesized forms of THC and derived variations, derivatives, isomers and allotropes that have similar molecular and physiological characteristics of tetrahydrocannabinol, including, but not limited to, THCA, THC Delta 9, THC Delta 8, THC Delta 10 and THC Delta 6.

37. **"Usable medical cannabis"** means any medical cannabis product that has completed all required growing/processing steps, is in final form and is intended for sale or distribution and intended for use or consumption by qualifying patients as defined in the Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022.

38. **"Validation"** means the confirmation by examination and objective evidence that the requirements for a specific intended use or analytical method are fulfilled.

39. **"Water activity**" means the measure of the quantity of water in a product that is available and therefore capable of supporting bacteria, yeasts, and fungi and which is reported in units Aw.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.3 All cannabis testing facility laboratory operations must be physically located within the State of Mississippi.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.4 All cannabis testing facilities must be currently licensed and registered by the Department and adhere to all regulations and guidance set forth by the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.5 No cannabis testing facilities shall be within one thousand (1,000) feet of the nearest property boundary line of a school, church or child care facility which exists or has acquired necessary real property for the operation of such facility before the date of the cannabis testing facilities' application unless the cannabis testing facility has received approval from the school, church or child care facility and received a waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.6 A cannabis testing facility may be located in any area in a municipality or county that is zoned as commercial or for which commercial use is otherwise authorized or not prohibited.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.7 A cannabis testing facility shall not employ an agent or employee who also is employed or has ownership at any other medical cannabis establishment.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.8 To be licensed and registered by the Department, Cannabis testing facilities must be accredited as defined in this Chapter.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.9 To be licensed and registered by the Department, Cannabis testing facilities must test at least one analyte required by the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.10 Cannabis testing facilities shall test for cannabis-related analytes for which they are licensed and registered by the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.11 Cannabis testing facilities shall only employ persons who are at least 21 years of age and possess a current work permit issued by the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.12 Cannabis testing facilities shall develop and implement an employee training program to ensure competency of cannabis testing facility employees for their assigned function.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.13 Cannabis testing facilities shall conduct a fingerprint-based background check of the Mississippi Central Criminal Database and the Federal Bureau of Investigation Criminal History Database on every person seeking to become a principal officer, board member, agent, volunteer, or employee before the person begins working at the Cannabis testing facility.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.14 Cannabis testing facilities shall not employ a medical cannabis establishment agent, as defined in this Chapter, who has been convicted of a disqualifying felony offense.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.15 Cannabis testing facilities shall ensure, document, and provide to the Department upon request, documentation that each medical cannabis establishment agent, as defined by this Chapter, meets the requirements of the Mississippi Medical Cannabis Act, and Department regulations.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.16 Cannabis testing facilities shall employ a full-time supervisor or management employee who must be responsible for the following:

1. Overseeing and directing the scientific methods of the cannabis testing facility;

2. Ensuring that the cannabis testing facility achieves and maintains a cannabis testing facility quality assurance program; and

3. Providing ongoing and appropriate training to cannabis testing facility employees.

4. To be considered qualified, the supervisor or management employee must have at minimum:

   A. A doctoral degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university;

   B. A master's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 2 years of full-time practical experience;

   C. A bachelor's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 4 years of full-time practical experience; or

   D. A bachelor's degree in any field from an accredited college or university, plus at least 8 years of full-time practical experience, 4 years of which must have been in a supervisory or management position.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.17 Cannabis testing facilities shall employ a full-time analyst who, at minimum must have either of the following:

1. Earned a master's degree or a bachelor's degree in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university; or

2. Completed 2 years of college or university education that included coursework in biological, chemical, agricultural, environmental, or related sciences from an accredited college or university, plus at least 3 years of full-time practical experience.

3. Demonstrated an initial display of competency prior to analyzing any sample. An initial display of competency for a method includes:

   A. Obtaining quality control samples from an outside source or preparing the samples using stock standards that are prepared independently from those used in instrument calibration.

   B. Preparing four (4) aliquots at the concentration specified, or if unspecified, to a concentration of one (1) to four (4) times the LOQ for low concentration analytes either concurrently or over a period of days. For higher concentration analytes (such as potency), the concentration may be greater than four (4) times the LOQ.

   C. Analyzing the aliquots either concurrently or over a period of days.

   D. Using all results, assess the results against established and documented method acceptance criteria.

4. Complete a continuing demonstration of competency annually thereafter for all methods performed. One of the following options must be performed and documented:

   A. Another initial Demonstration of competency (as described above), or

   B. Participation in a proficiency test study offered by an ISO/IEC 17043 proficiency test provider (if available); or

   C. Analysis of one (1) sample of clean matrix that is fortified with a known quantity of the target analyte, with the result compared to method acceptance criteria.

5. If an analyst has not run a specific analysis within one calendar year, he or she must successfully complete an initial display of competency for this analysis and shall not run such analysis until competency has been demonstrated.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.18 Cannabis testing facilities shall maintain operating documents that must include procedures for the oversight of the Cannabis testing facility and procedures to ensure accurate record keeping and adequate security measures.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.19 Cannabis testing facilities shall implement appropriate security measures designed to deter and prevent the theft of medical cannabis and unauthorized entrance into the areas containing medical cannabis.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.20 Cannabis testing facilities shall notify the Department within one (1) business day of any theft or loss of medical cannabis.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.21 Cannabis testing facilities shall not share office space with or refer patients to a practitioner.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.22 Cannabis testing facilities are subject to inspection by the Department during business hours, including but not limited to, inspection of the physical cannabis testing facility, interviews of personnel, review, inspection, and audit of records and documents related to the analyses of dispensary samples to verify compliance with this Chapter.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.23 Cannabis testing facilities shall use the statewide seed-to-sale tracking system certified by the Department and provide reports as required by the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.24 Cannabis testing facilities shall notify the Department within one (1) business day if there is a change of ownership or closure of the entity.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.25 Cannabis testing facilities shall not allow an individual who is younger than twenty-one (21) years old to enter the premises of the cannabis testing facility.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.26 Cannabis testing facilities shall create and require the display of an identification badge for each medical cannabis establishment agent.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.1.27 Cannabis testing facilities shall notify local law enforcement and the Department of any theft, robbery, break-in, or security breach that occurs on the laboratory's premises, no later than 10 calendar days after the facilities first become aware of the event. The description shall include a description of any property that was stolen or destroyed, and the quantity of any usable cannabis that was stolen.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 2 Documentation Requirements for Applicants

Rule 1.2.1 All applicants for a cannabis testing facility registration certificate and cannabis testing facility license must complete the application document required by the Department and include the documentation outlined in this Subchapter, pay the appropriate nonrefundable application fees to the Department, and be registered and licensed by the Department prior to initiating any testing related to medical cannabis. Cannabis testing facilities may be licensed as full or provisional by the Department.

4. A license will be granted by the Department to a cannabis testing facility that can demonstrate that it has applied for and received acceptable accreditation and that it meets all other requirements outlined in this Subchapter.

5. A provisional license may be granted by the Department to a new cannabis testing facility that has applied for accreditation but has not yet received nor been denied accreditation and that meets all other requirements of this Subchapter. A provisional license may be issued only if the Department is satisfied that preparations are being made to qualify for a regular license and that the health and safety of patients will not be endangered. The license issued under this condition shall be valid until the issuance of a regular license but shall not exceed twelve months following date of issuance whichever may be sooner.

6. Licensing, full or provision, may be denied when an applicant has deficiencies, and the Department determines that the applicant cannot consistently produce valid data.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.2.2 All information and documents required by the Department, including but not limited to, the following must accompany an application for cannabis testing facility registration and licensing:

1. The legal name of the prospective cannabis testing facility;

2. The physical address of the prospective cannabis testing facility, which shall not be within one thousand (1,000) feet of the nearest property boundary line of a school, church, or child care facility which exists or has acquired necessary

real property for the operation of such facility before the date of the cannabis testing facility application unless the proposed entity has received approval from the school, church or child care facility and received the applicable waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility;

3. The name of each owner, principal officer, board member, and lab director of the proposed cannabis testing facility;

4. An attestation that the information provided to the Department to apply for a cannabis testing facility registration and license is true and correct;

5. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;

6. For each owner:

   A. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;

   B. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a cannabis dispensary, cannabis cultivation facility, cannabis processing facility, cannabis transportation entity, cannabis disposal entity or cannabis research facility.

   C. An attestation signed and dated by the owner pledging not to divert cannabis to any individual who or entity that is not allowed to possess cannabis.

7. Verification for each principal officer or board member that they are at least 21 years of age;

8. A valid certificate of accreditation, issued by an accreditation body, as defined in this Chapter, that attests to the laboratory's competence to perform testing, including all the required analytes for the relevant test methods:

   A. Cannabinoids;

   B. Heavy metals;

   C. Microbial impurities;

   D. Mycotoxins;

   E. Residual pesticides;

F. Residual solvents and processing chemicals;

G. Terpenoids (if performed); and,

H. Foreign Material.

9. A copy of the cannabis testing facility's most recent assessment by the laboratory's accreditation body, the laboratory's responses to any findings of non-compliance with standards or recommendations, and the corrective actions taken by the laboratory to address the findings or recommendations;

10. Laboratory standard operating procedures for all testing methods;.

11. Laboratory test method verification and validation documentation for all testing methods, including final data reports approved by the laboratory director, validation material package inserts and all supporting data including instrument raw data and calculation tools;

12. Laboratory standard operating procedures for security measures;

13. Laboratory standard operating procedures for the sampling of cannabis or cannabis products;

14. Laboratory standard operating procedures for the transportation of cannabis or cannabis products;

15. Laboratory standard operating procedures for the reporting of test results for cannabis or cannabis products;

16. Laboratory standard operating procedures for the disposal of samples, digestates, leachates and extracts or other sample preparation products;

17. Copy of an approved waste disposal license issued under this Chapter or an executed contract with an approved waste disposal licensee issued under this Chapter;

18. Testing staff initial demonstration of capability for all applicable tests.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.2.3 All information and documents required by the Department, including but not limited to, the following must accompany an application for cannabis testing facility registration and provisional licensing:

1. The legal name of the prospective cannabis testing facility;

2. The physical address of the prospective cannabis testing facility, which shall not be within one thousand (1,000) feet of the nearest property boundary line of a school, church, or child care facility which exists or has acquired necessary real property for the operation of such facility before the date of the cannabis testing facility application unless the proposed entity has received approval from the school, church or child care facility and received the applicable waiver from the entity that licenses or accredits any such school or child care facility, provided that the main point of entry of the cannabis testing facility is not located within five hundred (500) feet of the nearest property boundary line of any school, church or child care facility;

3. The name of each owner, principal officer, board member, and lab director of the proposed cannabis testing facility;

4. An attestation that the information provided to the Department by the cannabis testing facility to demonstrate an active application for accreditation is true and correct;

5. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;

6. For each owner:

   A. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;

   B. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a cannabis dispensary, cannabis cultivation facility, cannabis processing facility, cannabis transportation entity, cannabis disposal entity or cannabis research facility.

   C. An attestation signed and dated by the owner pledging not to divert cannabis to any individual who or entity that is not allowed to possess cannabis.

7. Verification for each principal officer or board member that they are at least 21 years of age;

8. Documentation issued by an accreditation body, as defined in this Chapter, that confirms that the laboratory has applied for ISO/IEC 17025 accreditation and is awaiting an inspection for all the required analytes for the relevant test methods:

   A. Cannabinoids;

   B. Heavy metals;

C. Microbial impurities;

D. Mycotoxins;

E. Residual pesticides;

F. Residual solvents and processing chemicals;

G. Foreign Material;

H. Terpenoids, if performed.

9. Laboratory standard operating procedures for all testing methods;.

10. Laboratory test method verification and validation documentation for all testing methods, including final data reports approved by the laboratory director, validation material package inserts and all supporting data including instrument raw data and calculation tools;

11. Laboratory standard operating procedures for security measures;

12. Laboratory standard operating procedures for the sampling of cannabis or cannabis products;

13. Laboratory standard operating procedures for the transportation of cannabis or cannabis products

14. Laboratory standard operating procedures for the reporting of test results for cannabis or cannabis products:

15. Laboratory standard operating procedures for the disposal of samples, digestates, leachates and extracts or other sample preparation products;

16. Copy of an approved waste disposal license issued under this Chapter or an executed contract with an approved waste disposal licensee issued under this Chapter;

17. Testing staff initial demonstration of capability for all applicable tests.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.2.4 Application and Licensing Fees:

1. One-time nonrefundable license application fee - $10,000

2. Annual licensing fee - $15,000

3. All payments must be made through the Department's electronic payment system.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 3 Cannabis Testing Facility License Renewal

Rule 1.3.1 Each Cannabis testing facilities must submit a completed renewal license application and appropriate renewal fee thirty (30) days prior to its current license expiration date.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.3.2 All information and documents required by the Department, including but not limited to, the following must accompany a renewal application for cannabis testing facility registration and licensing:

1. The legal name of the cannabis testing facility;

2. The name of each principal officer and board member of the cannabis testing facility;

3. An attestation that the information provided to the Department to apply for a cannabis testing facility renewal license is true and correct;

4. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;

5. For each owner:

   A. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;

   B. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a dispensary, cannabis cultivation facility, cannabis processing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility; and

   C. An attestation signed and dated by the owner pledging not to divert cannabis to any individual or entity that is not allowed to possess cannabis.

6. Verification for each principal officer or board member that they are at least 21 years of age;

7. A valid certificate of accreditation, issued by an accreditation organization, as defined in this Chapter, that attests to the laboratory's competence to perform testing, including all the required analytes for the relevant test methods:

   A. Cannabinoids;

B. Heavy metals;

C. Microbial impurities;

D. Mycotoxins;

E. Residual pesticides;

F. Residual solvents and processing chemicals;

G. Terpenoids;

H. Foreign materials.

8. Laboratory standard operating procedures for all testing methods;.

9. Laboratory test method verification or validation documentation for all testing methods, including final reports signed by the laboratory director, validation material package inserts and all supporting instrument raw data and calculation tools;

10. Laboratory standard operating procedures for security measures;

11. Laboratory standard operating procedures for the sampling of cannabis or cannabis products;

12. Laboratory standard operating procedures for the transportation of cannabis or cannabis products

13. Laboratory standard operating procedures for the reporting of test results for cannabis or cannabis products;

14. Laboratory standard operating procedures for the disposal of samples, digestates, leachates and extracts or other sample preparation products;

15. Copy of an approved waste disposal license issued under this Chapter or an executed contract with an approved waste disposal licensee issued under this Chapter;

16. Testing staff ongoing demonstration of competency documentation.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.3.3 Renewal Fee:

1. Annual renewal fee - $15,000

2. All payments must be made through the Department's electronic payment system.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.3.4 To maintain an active license and registration certificate, cannabis testing facilities must maintain accreditation, as defined in this Chapter.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.3.5 Any loss of accreditation status by a cannabis testing facility will result in immediate revocation of the license and registration of the cannabis testing facility.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.3.6 Any cannabis testing facility that has a license and registration revoked for failure to maintain accreditation, as defined in this Chapter, may file a written petition to the Department to reinstate the cannabis testing facilities' registration and license once the cannabis testing facility submits proof of accreditation, as defined in the Chapter. A reinstatement of registration or license is required prior to the cannabis testing facility resuming cannabis testing operations.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 4 Cannabis Testing Facility Change of Ownership

Rule 1.4.1 Cannabis testing facilities must submit a completed change of ownership license application within one (1) day if there is a change of ownership.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.4.2 All information and documents required by the Department, including but not limited to, the following must accompany a change of ownership application for cannabis testing facility registration and licensing:

1. The legal name of the cannabis testing facility;

2. The name of each principal officer and board member of the cannabis testing facility;

3. An attestation that the information provided to the Department regarding the change of ownership for a cannabis testing facility is true and correct;

4. The signatures of the owners of the cannabis testing facility and the technical laboratory director and the date each signed;

5. For each owner:

A. An attestation signed and dated by the owner that the owner has not been convicted of an excluded felony offense;

B. An attestation signed and dated by the owner that the owner does not have a direct or indirect familial or financial relationship with or interest in a dispensary, cannabis cultivation facility, cannabis processing facility, cannabis dispensary, cannabis transportation entity, cannabis disposal entity or cannabis research facility; and

C. An attestation signed and dated by the owner pledging not to divert cannabis to any individual or entity that is not allowed to possess cannabis;

6. Verification for each principal officer or board member that they are at least 21 years of age.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 5: Batch Requirements

Rule 1.5.1 A medical cannabis establishment must separate each harvest lot of usable medical cannabis into no larger than twenty-five pound batches.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.5.2 Notwithstanding Rule 1.5.1 of this section, medical cannabis establishment may combine batches for purposes of having a batch sampled if each batch is intended for use by a medical cannabis establishment to make a cannabinoid concentrate or extract and each harvest lot was:

1. Cultivated utilizing the same growing practices and grown in close proximity on the licensed or registered premises;

2. Harvested at the same time; and

3. If cured prior to sampling, cured under uniform conditions.

Rule 1.5.3 A medical cannabis establishment may not combine harvest lots into a batch for purposes of sampling and testing for THC or CBD.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.5.4 If harvest lots are combined in accordance with Rule 1.5.2, the batch must be labeled so that it identifies the different harvest lots that were combined.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.5.5 For all concentrates and extracts, a process lot is considered a batch.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.5.6 A medical cannabis establishment must assign each batch a unique batch number and that unique batch number must be:

1. Documented and maintained in the cannabis cultivation facility or cannabis dispensary records for at least two years and available to the Department upon request;

2. Provided to the individual responsible for taking samples; and

3. Included on the batch label.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 6: Sample size, handling, storage and disposal

Rule 1.6.1 Usable medical cannabis may only be sampled after it is cured, unless the usable medical cannabis is intended for sale or transfer to a medical cannabis establishment to make a cannabinoid concentrate or extract.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.6.2 Samples taken must in total represent a minimum of 0.5 percent of the batch and consist of minimally 12 unique increments of 1gram each, with at least 50% of the sample taken homogenized for testing in compliance with the laboratory's sampling policies and procedures. The primary sample, the duplicate sample and any required replicate samples must be prepared and analyzed separately.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.6.3 For cannabis-infused products, a laboratory must take the following number of units based upon the production batch size:

1. Two (2) units for a production batch of up to 100 units.
2. Four (4) units for a production batch of 101 to 500 units.
3. Six (6) units for a production batch of 501 to 1000 units.
4. 8 units for a production batch of 1001 to 5000 units.
5. 10 units for a production batch of 5001 to 10,000 units.
6. 12 units for a production batch greater than 10,001 units.

Source: *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.6.4 For cannabinoid concentrates extracts and products, samples must in total represent a minimum of 0.3 percent of the batch and consist of enough samples from a batch must be taken to ensure that the required attributes in the batch to be tested are homogenous and consistent with the laboratory's accredited sampling policies and procedures.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.6.5 Only individuals employed by a laboratory sampling under these rules may take samples and must follow the laboratory's accredited sampling policies and procedure.

1. A laboratory must prepare medical cannabis sampling policies and procedures that contain all of the information necessary for collecting and transporting samples from usable medical cannabis in a manner that does not endanger the integrity of the sample for any analysis required by this rule. These policies and procedures must be appropriate to the matrix being sampled.

2. Care must be to avoid contamination of the non-sampled material. Sample containers must be free of analytes of interest and appropriate for the analyses requested.

3. A sufficient sample size must be taken for analysis of all requested tests and the quality control performed by the testing laboratory for these tests.

4. A laboratory must comply with any recording requirements for samples and subsamples in the policies and procedures and at a minimum:

    A. Record the location of each sample and subsample taken.

    B. Subsamples collected from the same batch must be combined into a single sample by a laboratory prior to testing.

    C. Subsamples and samples collected from different batches may not be combined.

    D. Field duplicates may not be combined with the primary samples

    E. Assign a field identification number for each sample, subsample and field duplicate that have an unequivocal link to the laboratory identification number.

F. Assign a unique identification number for each test batch.

G. Have a documented system for uniquely identifying the samples to be tested to ensure there can be no confusion regarding the identity of such samples at any time. This system must include identification for all samples, subsamples, preservations, sample containers, tests, and subsequent extracts or digestates.

H. Place the laboratory identification code as a durable mark on each sample container.

I. Enter a unique sample identification number into the laboratory records. This number must be the link that associates the sample with related laboratory activities such as sample preparation. In cases where the sample collector and analyst are the same individual, or the laboratory pre-assigns numbers to sample containers, the unique identification number may be the same as the field identification code.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.6.6 An approved laboratory shall store each test sample under the appropriate conditions to protect the physical and chemical integrity of the sample.

1. Analyzed test samples consisting of cannabis or cannabis-derived product shall be appropriately segregated, controlled, and held in a controlled access area pending destruction or other disposal.

2. Any portion of a cannabis or cannabis-derived test sample that is not destroyed during analysis shall be:

A. returned to the licensed producer who provided the sample under chain of custody; or
B. destroyed in accordance with the wastage requirements of this rule.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.6.7 Sampling must be conducted at a cannabis cultivation facility or dispensary's premises. The testing facility shall have access to the entire batch for the purposes of sampling.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.6.8 A laboratory must maintain the documentation required in these rules for at least

five years and must provide that information to the Department upon request.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 7: Testing Requirements and Standards

Rule 1.7.1 Testing Requirements for Usable Medical Cannabis

1. A cultivation facility or processing facility shall test every batch of usable marijuana, in its final form, intended for sale or distribution to a qualified patient or caregiver, prior to selling or transferring the usable medical cannabis for the following:

    A. Pesticides in accordance with Rule 1.7.4 of this Chapter;

    B. Water activity and moisture content in accordance with Rule 1.7.6 of this Chapter;

    C. THC and CBD concentration in accordance with Rule 1.7.7 of this Chapter;

    D. Heavy Metals in accordance with Rule 1.7.8 of this Chapter;

    E. Mycotoxins in accordance with Rule 1.7.9 of this Chapter;

    F. Microbiological contaminants in accordance with Rule 1.7.3 of this Chapter;

    G. Terpenes in accordance with Rule 1.7.10 of this Chapter;

    H. Foreign material in accordance with Rule 1.7.11 of this Chapter.

2. A cultivation facility or processing facility shall test every batch of usable medical cannabis intended for sale or distribution to a qualified patient or caregiver for water activity and moisture content in accordance with Rule 1.5.6 of this Chapter, unless the cultivation facility or processing facility uses a method of processing that results in effective sterilization.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.2 Testing Requirements for Concentrates, Extracts, and Edibles

1. A cultivation facility or processing facility shall test every process lot of cannabinoid concentrate, extract or edible for sale or distribution to a qualified patient prior to selling or transferring the cannabinoid concentrate, extract or edible for the following:

    A. Microbial impurities in accordance with Rule 1.7.3 of this Chapter;

    B. Pesticides in accordance with Rule 1.7.4 of this Chapter;

C. Solvents in accordance with Rule 1.7.5 of this Chapter;

D. THC and CBD concentration in accordance with Rule 1.7.7 of this Chapter;

E. Heavy Metals in accordance with Rule 1.7.8 of this Chapter;

F. Mycotoxins in accordance with Rule 1.7.9 of this Chapter;

G. Terpenes in accordance with Rule 1.7.10 of this Chapter;

H. Foreign material in accordance with Rule 1.7.11 of this Chapter.

2. A cultivation facility or processing facility is exempt from testing for solvents under this rule if the cultivation facility or processing facility:

A. Did not use any solvent listed in Appendix A, Table 2; and

B. Used a mechanical extraction process to separate cannabinoids from the marijuana; or

C. Used only water, animal fat or vegetable oil as a solvent to separate the cannabinoids from the marijuana.

3. A cultivation facility or processing facility shall test a process lot of a cannabinoid concentrate or extract for microbiological contaminants in accordance with Rule 1.7.3 of this Chapter, or upon written request by the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.3 Standards for Testing Microbiological Contaminants

6. Usable medical cannabis required to be tested for microbiological contaminants shall be sampled using appropriate aseptic technique and tested by a Mississippi licensed and registered cannabis testing facility for microbial impurities.

7. The cannabis testing facility shall report the result of the microbial impurities testing by indicating “pass” or “fail” on the Certificate of Analysis.

8. The sample of inhalable cannabis and cannabis products shall be deemed to have passed the microbial impurities testing if all of the following conditions are met:

E. Total *Escherichia coli* is not detected above 100 colony forming units/gram.

F. Shiga toxin–producing Escherichia coli is not detected in 1 gram;

G. Salmonella spp. is not detected in 1 gram; and

H. Pathogenic Aspergillus species *A. fumigatus*, *A. flavus*, *A. niger*, and *A. terreus* are not detected in 1 gram.

9. The sample of non-inhalable cannabis and cannabis products shall be deemed to have passed the microbial impurities testing if both the following conditions are met:

D. Total *Escherichia coli* is not detected above 100 colony forming units/gram.

E. Shiga toxin–producing Escherichia coli is not detected in 1 gram, and

F. Salmonella spp. is not detected in 1 gram.

10. If the sample fails microbial impurities testing, the batch from which the sample was collected fails microbial impurities testing and shall not be released for retail sale.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.4 Standards for Testing Pesticides

4. Usable medical cannabis required to be tested for pesticides shall be tested by a Mississippi licensed, and registered cannabis testing facility approved for the analytes listed in Appendix A, Table 1.

5. The cannabis testing facility shall report whether any Residual Pesticides are detected above the limit of detection (LOD) and shall report the result of the testing in ppms on the Certificate of Analysis. The cannabis testing facility shall indicate "pass" or "fail" on the Certificate of Analysis.

6. A batch fails pesticide testing if a cannabis testing facility detects the presence of a pesticide above the action levels listed in Appendix A, Table 1 in a sample:

C. During an initial test where no reanalysis is requested; or

D. Upon reanalysis as described in Rule 1.6.7 of this Chapter.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.5 Standards for Testing Solvents

4. Usable medical cannabis required to be tested for solvents shall be tested by a Mississippi licensed, and registered cannabis testing facility approved for the analytes listed in Appendix A, Table 2.

5. The cannabis testing facility shall report the result of the residual solvents testing in ppm on the Certificate of Analysis and indicate "pass" or "fail" on the Certificate of Analysis.

6. A batch fails solvent testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter:

C. Detects the presence of a solvent above the action level listed in Appendix A, Table 2; or

D. Calculates a RPD of more than 20 percent between the field primary result of the sample and the field duplicate result.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.6 Standards for Testing Water Activity and Moisture Content

4. Usable medical cannabis shall be tested by a currently Mississippi licensed and registered cannabis testing facility for:

C. Water activity; and

D. Moisture content.

5. If a sample has a water activity rate of more than 0.65 Aw the sample fails. The cannabis testing facility shall report the result of the water activity test on the COA and indicate "pass" or "fail" on the COA.

6. If a sample has a moisture content of more than 15 percent, the sample fails. The cannabis testing facility shall report the result of the moisture content on the COA and indicate "pass" or "fail" on the COA.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.7 Standards for THC and CBD Testing

4. A Mississippi licensed and registered cannabis testing facility shall test for the following when testing usable medical cannabis for potency, at a minimum:

J. Delta-8-tetrahydrocannabinol;

K. Delta-8-tetrahydrocannabinol acid;

L. Delta-9- tetrahydrocannabinol;

M. Delta-9-tetrahydrocannabinol acid;

N. Cannabidiol (CBD);

O. Cannabidiolic acid (CBDA);

P. THC content;

Q. Cannabinol (CBN); and,

R. Any other cannabinoid determined by the Department.

5. A cannabis testing facility shall establish a limit of quantitation of 1.0 mg/g or lower for all cannabinoids analyzed and reported.

6. A cannabis testing facility shall report the result of the cannabinoid testing on the Certificate of Analysis, including, at minimum:

K. A percentage for THC, THCA, CBD, and CBDA. The dry-weight percent shall be calculated using the below equation: Dry-weight percent cannabinoid = wet-weight percent cannabinoid / (1 − percent moisture / 100) (2);

L. A percentage for Total THC and Total CBD, if applicable;

M. Milligrams per gram (mg/g) if by dry-weight or milligrams per milliliter (mg/mL) if by volume for THC, THCA, CBD, and CBDA;

N. Milligrams per gram (mg/g) if by dry-weight or milligrams per milliliter (mg/mL) if by volume for Total THC and Total CBD, if applicable;

O. Total cannabinoid concentration shall be calculated for concentration expressed in weight: Total cannabinoid concentration (mg/g) = (cannabinoid acid form concentration (mg/g) x 0.877) + cannabinoid concentration (mg/g);

P. Milligrams per package for THC and CBD;

Q. Milligrams per package for Total THC and Total CBD, if applicable;

R. Milligrams per serving for THC and CBD, if any;

S. Milligrams per serving for Total THC and Total CBD, if any and if applicable;

T. The results of all other cannabinoids analyzed on the COA both as a percentage and in either milligrams per gram (mg/g) if by weight or milligrams per milliliter (mg/mL) if by volume.

8. The sample shall be deemed to have passed the cannabinoid testing if the amount of THC does not exceed the limits below:

C. Cannabis flower or trim potency ≤ 30% total THC.

D. Cannabis tinctures, oils or concentrates ≤ 60% total THC

9. A cannabis testing facility shall report the test results and indicate an overall “pass” or “fail” for the cannabinoid testing on the Certificate of Analysis.

10. A process lot of a cannabinoid concentrate, or extract fails potency testing if, based on an initial test where no reanalysis is requested or upon reanalysis, the amount of THC, as calculated pursuant to Rule 1.5.9 of this chapter, between samples taken from the batch exceeds 30 percent RSD.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.8 Standards for Testing for Heavy Metals

4. Usable medical cannabis shall be tested by a current Mississippi licensed and registered cannabis testing facility for the metals listed in Appendix A.

5. A cannabis testing facility shall report the result of the heavy metals test on the Certificate of Analysis and indicate "pass" or "fail" on the COA.

6. A batch fails metals testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter detects the presence of metals above the action level listed in Appendix A, Table 3.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.9 Standards for Mycotoxin Testing

5. Usable medical cannabis shall be tested by a Mississippi licensed and registered cannabis testing facility for the following mycotoxins: Aflatoxin B1, B2, G1, and G2 Ochratoxin A listed

6. A batch shall be deemed to have passed mycotoxin testing if both the following conditions are met:

   C. Total of aflatoxin B1, B2, G1, and G2 does not exceed 20 µg/kg of substance, and

   D. Ochratoxin A does not exceed 20 µg/kg of substance.

7. A cannabis testing facility shall report the result of the mycotoxin testing on the Certificate of Analysis and indicate "pass" or "fail" on the COA.

8. A batch fails mycotoxin testing if a cannabis testing facility, during an initial test where no reanalysis is requested or upon reanalysis as described in subchapter 6 of this Chapter detects the presence of mycotoxins above the action level listed in Appendix A.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.10 Standards for Terpenoid Testing

3. Terpene analysis is not required. However, if terpene content is listed on product packaging and labeling, a terpene analysis from a MS licensed and

registered cannabis testing facility must be performed to confirm the product label.

4. 2. A cannabis testing facility shall report the result of the terpenoid testing on the COA both as a percentage and in either milligrams per gram (mg/g) if by weight or milligrams by milliliter (mg/mL) if by volume.

3. The terpenoid testing results on the label of any one terpenoid claimed to be present shall not be considered inaccurate if the difference in percentage on the COA is plus or minus 10.0%.*Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Rule 1.7.11 Standards for Foreign Material Testing

5. Usable medical cannabis shall be tested by a Mississippi licensed and registered cannabis testing facility to determine whether foreign material is present.

6. A cannabis testing facility shall report the result of the foreign material test by indicating "pass" or "fail" on the COA.

7. A cannabis testing facility shall perform foreign material testing on the total representative sample prior to sample homogenization.

8. When the licensed laboratory performs foreign material testing, at minimum, the laboratory shall do all of the following:

C. Examine both the exterior and interior of the dried flower sample, and;

D. Examine the exterior of the cannabis product sample.

7. The sample shall be deemed to have passed the foreign material testing if the presence of foreign material does not exceed:

E. 1/4 of the total sample area covered by sand, soil, cinders, or dirt;

F. 1/4 of the total sample area covered by mold;

G. 1 insect fragment, 1 hair, or 1 count mammalian excreta per 3.0 grams; or

H. 1/4 of the total sample area covered by an imbedded foreign material.

8. If the sample fails foreign material testing, the batch from which the sample was collected fails foreign material testing and shall not be released for retail sale.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.7.12 If a testing facility is not accredited for the full scope of state-required tests, the testing facility will need to subcontract with another Department-licensed testing facility for the relevant tests needed. All subcontracted testing must be documented in the seed-to-sale system and be transferred using appropriate transport processes and chain of custody.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 8: Failed Test Samples

Rule 1.8.1 If a sample fails any initial test, the cannabis testing facility that did the testing may reanalyze the sample. If the sample passes, another cannabis testing facility must resample the batch and confirm that result in order for the batch to pass testing.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.2 If a sample fails a test or a reanalysis under Rule 1.6.1 of this Chapter, the batch:

3. May be remediated or sterilized in accordance with this subchapter; or

4. If it is not or cannot be remediated or sterilized under this rule, it must be destroyed in a manner specified by the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.3 If a Cultivation facility or dispensary is permitted under this subchapter to sell or transfer a batch that has failed a test, the Cultivation facility or dispensary must notify the Cultivation facility or dispensary to whom the batch is sold or transferred of the failed test within 24 hours of receipt of the COA.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.4 Failed microbiological contaminant testing.

5. If a sample from a batch of usable medical cannabis fails microbiological contaminant testing, the batch may be used to make a cannabinoid concentrate or extract if the processing method effectively sterilizes the batch, such as a method using a hydrocarbon-based solvent, or a CO2 closed loop system.

6. If a sample from a batch of a cannabinoid concentrate or extract fails microbiological contaminant testing, the batch may be further processed, if the processing method effectively sterilizes the batch, such as a method using a hydrocarbon-based solvent, or a CO2 closed loop system.

7. A batch that is sterilized in accordance with subsection (1) or (2) of this rule must be sampled and tested in accordance with this Chapter and must be tested, if not otherwise required for that product, for microbiological contaminants, solvents and pesticides.

8. A batch that fails microbiological contaminant testing after undergoing a sterilization process in accordance with subsection (1) or (2) of this rule must be destroyed in a manner specified by the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.5 Failed solvent testing.

4. If a sample from a batch fails solvent testing, the batch may be remediated using procedures that would reduce the concentration of solvents to less than the action level.

5. A batch that is remediated in accordance with subsection (1) of this rule must be sampled and tested in accordance with this Chapter and must be tested if not otherwise required for that product under this Chapter, for solvents and pesticides.

6. A batch that fails solvent testing that is not remediated or that if remediated fails testing must be destroyed in a manner specified by the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.6 Failed water activity testing and moisture testing.

3. If a sample from a batch of usable medical cannabis fails for water activity or moisture activity, the batch from which the sample was taken may:

C. Be used to make a cannabinoid concentrate or extract; or

D. Continue to dry or cure.

4. A batch that undergoes additional drying or curing as described in subsection (1) of this rule must be sampled and tested in accordance with this Chapter.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.7 Failed pesticide testing.

2. If a sample from a batch fails pesticide testing, the batch may not be remediated and must be destroyed in a manner approved by the Department and identified on the Department's website.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.8 Failed potency testing.

3. Usable medical cannabis that fails potency testing under Rule 1.5.7 of this Chapter may be repackaged in a manner that enables the item to meet the standard in Rule 1.5.7 of this Chapter.

4. Usable medical cannabis that is repackaged in accordance with this section must be sampled and tested in accordance with these rules.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.8.9 Failed remediation

6. If a sample fails a test after undergoing remediation or sterilization as permitted under this rule, the batch must be destroyed in a manner approved by the Department.

7. A cultivation facility or processing facility must inform a cannabis testing facility prior to samples being taken that the batch has failed a test and is being retested after undergoing remediation or sterilization.

8. A cultivation facility or processing facility must, as applicable:

   C. Have detailed procedures for sterilization processes to remove microbiological contaminants and for reducing the concentration of solvents.

   D. Document all sampling, testing, sterilization, remediation and destruction that are a result of failing a test under these rules.

9. A cannabis or cannabis product batch may only be remediated twice. If the batch fails after a second remediation attempt and the second retesting, the entire batch shall be destroyed in a manner approved by the Department.

10. Within one business day of completing the required analyses of a representative sample obtained from a remediated cannabis or cannabis product batch, the cannabis testing facility shall upload the COA information into the seed-to-sale system.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 9: Tentative Identification of Compounds

Rule 1.9.1 Tentatively Identified Compounds (TICs) are compounds detected in a sample using gas chromatography mass spectrometry that are not among the target analytes for the residual solvent analysis.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.9.2 The Department may initiate an investigation of a cultivation facility or processing facility upon receipt of a TICs report from a cannabis testing facility and may require a cultivation facility or processing facility to submit samples for additional testing, including testing for analytes that are not required by these rules, at the cultivation facility or processing facility's expense.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 10: Certificate of Analysis ("COA")

Rule 1.10.1 The cannabis testing facility shall generate a Certificate of Analysis for each representative sample that the cannabis testing facility analyzes.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.2 The cannabis testing facility shall ensure that the COA contains the results of all required analyses performed for the representative sample.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.3 The cannabis testing facility shall, within 1 business day of completing all analyses of a sample, upload the COA into the seed-to-sale system. Passed test results must be in the Department's Seed-to-Sale system for a batch to be released for immediate processing, packaging, and labeling for transfer or sale in accordance with these rules.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.4 The cannabis testing facility shall not release to any person any cumulative or individual test results prior to completing all analyses and providing the COA to the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.5 The COA shall contain, at minimum, the following information:

12. The term "Regulatory Compliance Testing" in font no smaller than 14-point, which shall appear in the upper-right corner of each page of the COA. No text or images shall appear above the term "Regulatory Compliance Testing" on any page of the COA.

13. The cannabis testing facility's name, premises address, and license number; dispensary's authorized to engage in distribution's name, premises address, and license number; cultivator's, or processor's name, premises address, and license number;

14. Batch number of the batch from which the sample was obtained. For cannabis and cannabis products that are already packaged at the time of sampling, the labeled batch number on the packaged cannabis and cannabis products shall match the batch number on the COA;

15. Sample identifying information, including matrix type and unique sample identifiers;

16. Sample history, including the date collected, the date received by the cannabis testing facility, and the date(s) of sample analyses and corresponding testing results;

17. A picture of the sample of cannabis and cannabis products. If the sample is pre-packaged, the picture must include an unobstructed image of the packaging;

18. For dried flower samples, the total weight of the batch, in grams or pounds, and the total weight, of the representative sample in grams;

19. For cannabis product or pre-rolls samples, the total unit count of both the representative sample and the total batch size;

A. Measured density of the cannabis and cannabis products;

20. The analytical methods, analytical instrumentation used, and corresponding Limits of Detection ("LOD)" and Limits of Quantitation ("LOQ");

21. An attestation on the COA from the cannabis testing facility supervisory or management employee that all LQC samples required by this Chapter were performed and met the acceptance criteria; and

22. Analytes detected during the analyses of the sample that are unknown, unidentified, or injurious to human health if consumed, if any.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.6 The cannabis testing facility shall report test results for each representative sample on the COA as follows: Indicate an overall "pass" or "fail" for the entire batch;

7. When reporting qualitative results for each analyte, the cannabis testing facility shall indicate "pass" or "fail";

8. When reporting quantitative results for each analyte, the cannabis testing facility shall use the appropriate units of measurement as required under this chapter;

9. When reporting results for each test method, the cannabis testing facility shall indicate "pass" or "fail";

10. When reporting results for any analytes that were detected below the analytical method LOQ, indicate "<LOQ", notwithstanding cannabinoid results;

11. When reporting results for any analytes that were not detected or detected below the LOD, indicate "ND"; and

12. Indicate "NT" for any test that the cannabis testing facility did not perform.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.7 The cannabis testing facility supervisory or management employee shall validate the accuracy of the information contained on the COA and sign and date the COA.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.10.8 The cannabis testing facility supervisory or management employee may request to amend a COA to correct minor errors and upload into the seed to sale system.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 11: Post Testing Sample Requirements

Rule 1.11.1 The cannabis testing facility shall retain the reserve sample, consisting of any portion of a sample that was not used in the testing process. The reserve sample shall be kept at minimum, for 45 business days after the analyses, after which time it may be destroyed and denatured to the point the material is rendered unrecognizable and unusable.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.11.2 The cannabis testing facility shall securely store the reserve sample in a manner that prohibits sample degradation, contamination, and tampering.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.11.3 The cannabis testing facility shall provide the reserve sample to the Department upon request.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 12: Transportation of Samples

Rule 1.12.1 Employees/agents of the cannabis testing facility are responsible for the collection and transportation of testing samples.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.12.2 Employees/agents of the cannabis testing facility must utilize an electronic inventory management system to create and maintain transportation manifests documenting all transport of medical marijuana and medical marijuana products throughout the State of Mississippi.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.12.3 When transporting medical cannabis or medical cannabis products, all cannabis testing facilities and their employees/agents shall provide copies of the inventory manifests to each originating and receiving medical cannabis establishment at the time the product changes possession.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.12.4 The copy of the inventory manifest to be left with the originating medical cannabis establishment shall include, at a minimum:

6. The license number, business name, address, and contact information of the originating medical cannabis establishment;

7. A complete inventory of the medical cannabis and medical cannabis products to be transported, including the quantities by weight or unit of each type of medical cannabis and medical cannabis products and the batch number(s);

8. The date of transportation and the approximate time of departure;

9. Printed names, signatures, and identification card numbers of personnel accompanying the transport;

10. The license number(s), business name(s), address(es), and contact information for all end point recipients.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.12.5 The copy of the inventory manifest to be left with the receiving medical cannabis establishment shall include, at a minimum:

7. The license number, business name, address, and contact information for the receiving medical cannabis establishment;

8. The license number, business name, address, and contact information of the originating medical cannabis establishment;

9. A complete inventory of the medical cannabis and medical cannabis products delivered to the receiving medical cannabis establishment, including the quantities by weight or unit of each type of medical cannabis and medical cannabis products and the batch number(s);

10. The date and estimated time of arrival;

11. The printed names, signatures, and identification card numbers of the personnel accompanying the transport; and

12. The printed names, titles, and signatures of any personnel accepting delivery on behalf of the receiving medical cannabis establishment.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.12.6 Transportation manifests should reflect a complete chain of custody of all medical cannabis and medical cannabis products being transported, including all instances in which the medical cannabis and medical cannabis products are stored.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.12.7 Originating and receiving licensed entities shall maintain copies of transportation manifests and inventory records logging the quantity of medical cannabis or medical cannabis products received for at least three (3) years from the date of receipt.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.12.8 A transportation manifest must not be altered after departing from the originating medical cannabis establishment's premises, except for the addition of the printed names, titles, and signatures of any personnel accepting delivery on behalf of the receiving cannabis testing facility.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 13: Cannabis Testing Facility Quality Assurance

Rule 1.13.1 The cannabis testing facility shall develop and implement a Quality Assurance (QA) program to assure the reliability and validity of the analytical data produced by the cannabis testing facility. The QA program shall, at minimum, include a written QA manual that addresses the following:

17. Quality control procedures;
18. Cannabis testing facility organization and employee training and responsibilities, including good laboratory practice (GLP);
19. QA objectives for measurement data;
20. Traceability of data and analytical results;
21. Instrument maintenance, calibration procedures, and frequency;
22. Performance and system audits;
23. Corrective action procedures;
24. Steps to change processes when necessary;
25. Record retention and document control;
26. Test procedure standardization; and
27. Method validation;
28. Chain of custody protocols;
29. Premise and sample security;
30. Sample handling, including sample receipt, identification, rejection, storage and destruction;
31. Contingency plans for data that is not within control limits, or is otherwise unacceptable for analysis; and
32. Disposal of marijuana and laboratory waste.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.13.2 The supervisory or management cannabis testing facility employee shall annually review, amend if necessary, and approve the QA program and manual both when they are created and when there is a change in methods, testing facility equipment, or the supervisory or management testing facility employee.

Source: Mississippi Medical Cannabis Act, S.B. 2095, Mississippi Legislature Regular Session 2022, Section 4(1) (3) and Section 21

Rule 1.13.3 The cannabis testing facilities standard operating procedures for testing methods shall include the following:

17. The name of the testing method;
18. A list of all analytes used in the testing method;
19. The applicable matrix or matrices;
20. Sample receipt and acceptance;
21. Method sensitivity;
22. Potential interferences;
23. Analytical instrument and equipment used;
24. Consumable supplies, reagents, and standards;
25. Sample preservation and hold time;
26. Type, frequency, and acceptable criteria for quality control samples;
27. Type, frequency, and acceptable criteria for calibration standards;
28. Procedures for analyzing batch samples;
29. Data quality assessment and acceptance criteria;
30. Calibration of results;
31. Reagent solution and reference material preparation.
32. Current step by step instructions with sufficient detail to perform the assay to include equipment operation and any abbreviated versions used by a testing analyst.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.13.4 The cannabis testing facilities shall develop, implement, and validate test methods for the analyses of samples as follows:

1. To the extend practicable, methods shall compart with the following guidelines:

    D. The Bacteriological Analytical Manual (BAM), 2019, which is incorporated by reference, includes no future editions or amendments, and is available at https://www.fda.gov/food/laboratory-methods-

food/bacteriological-analytical-manualbam;

E. AOAC Official Methods of Analysis, 21st Edition, 2019, which is incorporated by reference, includes no future editions or amendments, and is available at https://www.aoac.org/official-methods-of-analysis-21st-edition-2019; and

2. To the extend practicable, methods shall be validated in accordance with the following guidelines:

A. AOAC - Appendix J: Guidelines for Validation of Microbiological Methods for Food and Environmental Surfaces, 2012, which is incorporated by reference, includes no future editions or amendments, and is available at http://www.eoma.aoac.org/app_j.pdf;

B. AOAC - Appendix K: Guidelines for Dietary Supplements and Botanicals, 2013, which is incorporated by reference, includes no future editions or amendments, and is available at http://www.eoma.aoac.org/app_k.pdf;

C. ICH – Validation of Analytical Procedures: Text and Methodology Q2(R1) 2005, which is incorporated by reference, includes no future editions or amendments, and is available at https://database.ich.org/sites/default/files/Q2_R1__Guideline.pdf or Unofficial version of the Rules in 9 A.A.C. 17, effective September 8, 2022 Page 115 https://www.fda.gov/regulatory-information/search-fda-guidance-documents/q2-r1- validation-analytical-procedures-text-and-methodology.

3. Method validation should, at a minimum, verify accuracy, precision, analytical sensitivity, analytical specificity, limit of detection, limit of quantification, reportable range and the identification of interfering substances.

4. Methods adopted from a matrix specific standard method, inclusivity and exclusivity do not require a comprehensive reassessment, provided that there were no modifications to the methods, including, but not limited to, all of the following:

A. Referenced media.

B. Primers.

C. Probes.

D. Antibodies.

E. Critical chemistries that were not modified.

F. Microbial methods must include environmental monitoring

and quality control of all buffers, media, primers, and incubators.

5. The licensed laboratory shall generate a validation report for each test method. Each validation report shall include the following information:
   A. Instrument calibration data, if any;
   B. Raw data, including instrument raw data scanned as a PDF, for each test method, if any;
   C. Cannabis reference materials or certified reference material results;
   D. Data and calculations pertaining to LOD and LOQ determinations, if any;
   E. Quality Control Sample report;
   F. Worksheets, forms, pictures, or copies of laboratory notebook pages
6. The laboratory director shall review, approve, sign, and date the validation report for each test method.
7. Validations must be submitted to the agency for approval with an acceptable and graded external proficiency test by a third party, where all required analytes are shown to have passed.
8. Upon new test methods or altered test methods being used in the laboratory, the new validation report shall be submitted to the Department within 5 business days.

Source: *Miss. Code Ann. §§ 41-137-3 – 41-137-67*

Subchapter 14: Cannabis Testing Facility Quality Control Samples

Rule 1.14.1 The cannabis testing facility shall use Quality Control samples (QC) and adhere to good, approved laboratory practice ("GLP") in the performance of each analysis according to the specifications of this Chapter.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.2 The cannabis testing facility shall analyze QC samples in the same manner as the cannabis testing facility analyzes cannabis and cannabis products samples.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.3 The cannabis testing facility shall use at least one negative control, one positive control, and one cannabis testing facility replicate sample in each analytical batch for each target organism during microbial testing. If one of the controls produces unexpected results, the samples shall be re- prepped and reanalyzed with a new set of controls.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.4 If the result of the microbial analyses is outside the specified acceptance criteria in the following table, the cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

Testing facility Quality Control Sample	**Acceptance Criteria**	**Corrective Action**
Positive control	Produces expected result, positive result	Re-prep and reanalyze the entire analytical batch, once. If problem persists, locate and remedy the source of unexpected result, then re-prep samples and reanalyze with a new set of controls.
Negative control	Produces expected result, negative result	Re-prep and reanalyze the entire analytical batch, once. If problem persists, locate and remedy the source of unexpected result, then re-prep samples and reanalyze with a new set of controls.
laboratory replicate sample	Sample results must concur	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.5 The cannabis testing facility shall prepare and analyze at least one of each of the following QC samples for each analytical batch:

1. Method Blank;
2. Laboratory control sample (LCS); and
3. Duplicate laboratory control sample; and
4. Matrix spike sample; and
5. Duplicate matrix spike sample.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.6 The cannabis testing facility shall analyze, at minimum, a continuing calibration verification ("CCV") sample at the beginning of each analytical sequence and every 20 samplesand at the end of each run. The CCV must be a standard that is not from the same vendor/lot that is used for the calibration curve.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.7 If the result of the chemical analyses is outside the specified minimum acceptance criteria in the following table, the cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

Quality Control Sample	**Acceptance Criteria**	**Corrective Action**
Method Blank sample	Not to exceed LOQ	Reanalyze entire analytical batch once. If method blank is still greater than the LOQ for any analyte, locate the source of contamination then re-prep samples and reanalyze.
Laboratory Control Sample	Percent recovery 70% to 130%	Reanalyze the entire analytical batch, once. If problem persists, re-prep samples and reanalyze or re-run the initial calibration curve.
Duplicate Laboratory Control Sample	RPD ≤30%	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.
Matrix spike sample	Percent recovery between 70% to 130%	Reanalyze sample and associated matrix spike sample once. If problem persists, re-prep samples and reanalyze.
Duplicate Matrix Spike Sample	RPD ≤30%	Reanalyze sample and associated replicate sample once. If problem persists, re-prep samples and reanalyze.
CCV	Percent recovery between 70% to 130%	Reanalyze all samples that followed the last CCV that met the acceptance criteria. If CCV still fails, re-run the initial calibration curve and all samples in the analytical sequence.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.8 A cannabis testing facility shall use the following calculation for determining Relative Percentage Difference (RPD):

$$RPD = \frac{(\text{sample result} - \text{duplicate result})}{(\text{sample result} - \text{duplicate result})/2}$$

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.9 A cannabis testing facility shall use the following calculation for determining Relative Standard Deviation (RSD):

$$\%RSD = \frac{s}{x} \times 100\%$$

$$s = \sqrt{\sum_{i=0}^{n} \frac{(x_i - \tilde{x})^2}{(n-1)}}$$

For purposes of this rule:
s = standard deviation.
n = total number of values.
x_i = each individual value used to calculate mean.
x = mean of n values.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.10 For calculating both RPD and RSD if any results are less than the LOQ, the absolute value of the LOQ is used in the equation.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.11 If any analyte is detected above any action level, as described in this chapter, the sample shall be re-prepped and reanalyzed in replicate within another analytical batch.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.12 For quantitative analyses, the re-prepped sample and its associated replicate shall meet the acceptance criteria of RPD ≤30%.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.13 For qualitative analyses, the re-prepped sample and its associated replicate results must concur.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.14 If any quality control sample produces a result outside of the acceptance criteria, the cannabis testing facility cannot report the result and the entire batch cannot be released for retail sale. The cannabis testing facility shall determine the cause and take steps to remedy the problem until the result is within the specified acceptance criteria.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.15 If the cannabis testing facility determines that the result is a false-positive or a false- negative, the Department may ask for the cannabis testing facility to re-sample or re-test.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.14.16 The cannabis testing facility shall compile and generate one LQC sample report for each analytical batch that includes LQC acceptance criteria, measurements, analysis date, and matrix.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 15: Limits of Detection (LOD) and Limits of Quantitation (LOQ) for Quantitative Analyses

Rule 1.15.1 The cannabis testing facility shall calculate the LOD for chemical method analyses according to any of the following methods:

1. Signal-to-noise ratio of between 3:1 and 2:1;
2. Standard deviation of the response and the slope of calibration curve using a minimum of 7 spiked blank samples calculated as follows;

   LOD = (3.3 x standard deviation of the response) / slope of the calibration curve; or

3. A method published by the United States Food and Drug Administration (USFDA) or the United States Environmental Protection Agency (USEPA).

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.15.2 The cannabis testing facility shall calculate the LOQ for chemical method analyses according to any of the following methods:

1. Signal-to-noise ratio of 10:1, at minimum;
2. Standard deviation of the response and the slope using a minimum of 7 spiked Blank samples calculated as follows:

   LOQ = (10 × standard deviation of the response) / slope of the calibration curve; or

3. A method published by the USFDA or the USEPA.

Source Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 16: Cannabis Testing Facility Data Package

Rule 1.1~~6~~.1 The cannabis testing facility shall compile and generate one data package for each representative sample that the cannabis testing facility analyzes.

1. All data generated during the testing of a test sample, except data generated by automated data collection systems, is recorded directly, promptly, and legibly in ink. All data shall be annotated with the date of entry and signed or initialed by the person recording the data. Any change in entries shall be made so as not to obscure the original entry, shall indicate the reason for such change, and shall be dated and signed or initialed at the time of the change;

2. In automated data collection systems, the individual responsible for direct data input shall be identified at the time of data input. Any change in an entry shall be made so as not to obscure the original entry, shall indicate the reason for such change, and shall be dated and signed or initialed at the time of the change. A corrective action report shall accompany such change and shall be made available to the department, a non-profit producer, and a manufacturer upon their request for up to two years after the analysis is completed.

3. For each final result reported, an approved laboratory shall verify that:

   A. Any calculations or other data processing steps were performed correctly;

   B. The data meet any data quality requirements such as for accuracy, precision, linearity, etc.;

   C. Any reference standards used were of the appropriate purity and within their expiration or requalification dates;

   D. Any volumetric solutions were properly standardized before use; and

   E. Any test or measuring equipment used has been properly tested, verified, and calibrated, and is within its verification or calibration period.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.16.2 The cannabis testing facility shall provide requested data packages to the Department immediately upon request.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 17: Required Proficiency Testing

Rule 1.17.1 The cannabis testing facility shall participate in a proficiency testing program provided by an organization that operates in conformance with the requirements of ISO/IEC 17043, at least once every six months.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.17.2 The cannabis testing facility shall annually, successfully participate in a proficiency testing program for each of the following test methods:

1. Cannabinoids;
2. Heavy metals;
3. Microbial impurities;
4. Mycotoxins;
5. Residual pesticides;
6. Residual solvents and processing chemicals;
7. Terpenoids (if performed); and,
8. Foreign Material.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.17.3 The cannabis testing facility shall report all analytes available by the proficiency testing program provider and for which the licensee is required to test as required under this chapter.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.17.4 The cannabis testing facility shall participate in the proficiency testing program by following the cannabis testing facility's existing SOPs for testing cannabis and cannabis products.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.17.5 The cannabis testing facility shall rotate the proficiency testing program among the cannabis testing facility employees who perform the test methods.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.17.6 Cannabis testing facility employees who participate in a proficiency testing program shall sign the corresponding analytical reports or attestation statements to certify that the proficiency testing program was conducted in the same manner as the cannabis testing facility tests of cannabis and cannabis products.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.17.7 A supervisory or management cannabis testing facility employee shall review and verify the accuracy of results reported for all proficiency testing program samples analyzed.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.17.8 The cannabis testing facility shall request the proficiency testing program provider to send results concurrently to the Department, if available, or the cannabis testing facility shall provide the proficiency testing program results to the Department within 3 business days after the cannabis testing facility receives notification of their test results from the proficiency testing program provider.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 18: Proficiency Testing Performance

Rule 1.18.1 The cannabis testing facility shall be deemed to have successfully participated in a proficiency testing program for an analyte tested in a specific method if the test results demonstrate a "satisfactory" or otherwise proficient performance determination by the proficiency testing program provider.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.18.2 The cannabis testing facility may not report test results for analytes that are deemed by the proficiency testing program provider as "unacceptable," "questionable," "unsatisfactory", or otherwise deficient.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.18.3 The cannabis testing facility may resume reporting test results for analytes that were deemed "unacceptable," "questionable," "unsatisfactory", or otherwise deficient, only if both of the following conditions are met:

1. The cannabis testing facility satisfactorily remedies the cause of the failure for each analyte; and

2. The cannabis testing facility submits, to the Department, a written corrective action report demonstrating how the cannabis testing facility has fixed the cause of the failure.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 19: Cannabis Testing Facility Audits

Rule 1.19.1 The cannabis testing facility shall conduct an internal audit at least once per year or in accordance with the ISO/IEC 17025 accrediting body's requirement, whichever is more frequent.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.19.2 The internal audit shall include all the components required by the ISO/IEC 17025 internal-audit standards.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.19.3 Within three (3) business days of completing the internal audit, the cannabis testing facility shall submit the results of the internal audit to the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.19.4 A cannabis testing facility shall contract with an independent, third-party auditor certified to conduct on-site audits at least annually or in accordance with ISO/IEC 17025 accrediting body's requirements standards.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.19.5 Within three (3) business days of receiving the accrediting body on-site audit findings, the cannabis testing facility shall submit the report to the Department.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.19.6 The Department reserves the rights to perform additional audits as needed and without advance notice.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 20: Cannabis Testing Facility Employee Qualifications

Rule 1.20.1 The cannabis testing facility may only employ persons who are at least 21 years of age and possess a current Department issued Medical Cannabis Establishment Agent Work Permit.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.20.2 Medical Cannabis Establishment agents of all cannabis testing facilities shall apply for and receive a valid Medical Cannabis Establishment Agent Work Permit from the Department before beginning employment with any cannabis testing facility.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.20.3 Work permits are not transferable to other employees or individuals.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.20.4 Medical Cannabis Establishment agents shall be required to display current work permits issued by the Department on their person in plain view while at the cannabis testing facility.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.20.5 The cannabis testing facility shall develop and implement an employee training program to ensure competency of cannabis testing facility employees for their assigned functions.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.20.6 The cannabis testing facility shall ensure and document that each cannabis testing facility employee meets the employee qualifications.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 21: Denial of Application for or Renewal of a Cannabis Testing Facility License or Registration

Rule 1.21.1 The Department may deny an application for or renewal of a license or registration for any of the following reasons:

1. Failure to provide the information required in this Chapter;
2. Failure to meet the requirements set forth in this Chapter;
3. Provision of misleading, incorrect, false or fraudulent information;
4. Failure to pay all applicable fees as required;

5. Any other ground that serves the purposes of this Chapter.

Source: Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.21.2 If the Department denies an application for or renewal of a license or registration, the Department shall notify the applicant in writing of the Department's decision, including the reason for denial.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.21.3 Denial of an application or renewal is considered a final Department action, is subject to judicial review as provided in Section 31 of the Mississippi Medical Cannabis Act.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Subchapter 22: Fines, Suspensions and Revocations

Rule 1.22.1 The Department may fine, suspend or revoke the license or registration of a cannabis testing for a violation of this Chapter or any rules and regulations under this Chapter by the cannabis testing facility or any of its employees or agents.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.22.2 If a cannabis testing facility wishes to appeal the Department's decision, the cannabis testing facility shall file its administrative appeal in writing to the Department within twenty (20) days of receipt of the initial notice. If a cannabis testing facility fails to appeal the initial notice within twenty (20) days, the Departments decision becomes final. Any person or entity aggrieved by a final decision of the Department under the provisions of this Chapter may petition for judicial review of the decision or order as provided in Section 31 of the Mississippi Medical Cannabis Act.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Rule 1.22.3 A cannabis testing facility may continue to possess cannabis under its license during a suspension but shall not receive, transfer or test cannabis during the suspension period.

Source: Miss. Code Ann. §§ 41-137-3 – 41-137-67

Appendix A

Key to this Appendix:

- CAS Number = Chemical Abstract Services Registry number
- CFU = Colony-forming unit, a method to estimate the number of viable bacteria or fungal cells in a sample.

A. Microbial Contaminants		
Analyte	**Maximum Allowable Contaminants**	**Required Action**
Total Escherichia coli	100 CFU/g	Remediate and retest, or Destroy
Shiga toxin-producing Escherichia coli	Detectable in 1 gram	Remediate and retest, or Destroy
Salmonella spp.	Detectable in 1 gram	Destroy
Aspergillus flavus, Aspergillus fumigatus, Aspergillus niger, and *Aspergillus terreus*	Inhalable: Detectable in 1 gram	Remediate and retest, Remediate and use for preparing an extract or a concentrate, or destroy
Mycotoxins: Aflatoxin B1, B2, G1, and G2 Ochratoxin A	Marijuana product, except a marijuana product intended for topical application, prepared from an extract or concentrate of medical marijuana:	Destroy

B. Heavy Metals		
Analyte	**Maximum Allowable Concentration**	**Required Action**
Arsenic	0.4 ppm	Remediate and retest, or Destroy
Cadmium	0.4 ppm	
Lead	1.0 ppm	
Mercury	1.2 ppm	

C. Residual Solvents			
Analyte	**CAS Number**	**Maximum Allowable Concentration**	**Required Action**
Acetone	67-64-1	1,000 ppm	
Acetonitrile	75-05-8	410 ppm	
Benzene	71-43-2	2 ppm	
		5,000 ppm	

Butanes (measured as the cumulative residue of n-butane and iso-butane)	106-97-8 and 75-28-5, respectively		Remediate and retest, or Destroy
Chloroform	67-66-3	60 ppm	
Dichloromethane	75-09-2	600 ppm	
Ethanol	64-17-5	5,000 ppm	
Ethyl Acetate	141-78-6	5,000 ppm	
Ethyl Ether	60-29-7	5,000 ppm	
Heptane	142-82-5	5,000 ppm	
Hexanes (measured as the cumulative residue of n-hexane, 2-methylpentane, 3-methylpentane, 2,2-dimethylbutane, and 2,3-dimethylbutane)	110-54-3, 107-83-5, and 79-29-8	290 ppm	
Isopropyl Acetate	108-21-4	5,000 ppm	
Methanol	67-56-1	3,000 ppm	
Pentanes (measured as the cumulative residue of n-pentane, iso-pentane, and neo-pentane)	109-66-0, 78-78-4, and 463-82-1	5,000 ppm	
2-Propanol (IPA)	67-63-0	5,000 ppm	Remediate and retest, or Destroy
Propane	74-98-6	5,000 ppm	
Toluene	108-88-3	890 ppm	
Xylenes (measured as the cumulative residue of 1,2-dimethylbenzene, 1,3-dimethylbenzene, and 1,4-dimethylbenzene, and the non-	1330-20-7 (95-47-6,108-38-3, and 106-42-3, and 100-41-4)	2,170 ppm	

xylene, ethyl benzene)			
dimethylbenzene, and 1,4-dimethylbenzene, and the non-xylene, ethyl benzene)			
D. Pesticides, Fungicides, Growth Regulators			
Analyte	**CAS Number**	**Maximum Allowable Concentration**	**Required Action**
Abamectin	71751-41-2	0.5 ppm	Destroy
Acephate	30560-19-1	0.4 ppm	
Acequinocyl	57960-19-7	2.0 ppm	
Acetamiprid	135410-20-7	0.2 ppm	
Aldicarb	116-06-3	0.4 ppm	
Azoxystrobin	131860-33-8	0.2 ppm	
Bifenazate	149877-41-8	0.2 ppm	
Bifenthrin	82657-04-3	0.2 ppm	
Boscalid	188425-85-6	0.4 ppm	
Carbaryl	63-25-2	0.2 ppm	
Carbofuran	1563-66-2	0.2 ppm	
Chlorantraniliprole	500008-45-7	0.2 ppm	
Chlorfenapyr	122453-73-0	1.0 ppm	
Chlormequat chloride	7003-89-6	0.2 ppm	
Chlorpyrifos	2921-88-2	0.2 ppm	
Clofentezine	74115-24-5	0.2 ppm	
Cyfluthrin	68359-37-5	1.0 ppm	
Cypermethrin	52315-07-8	1.0 ppm	
Daminozide	1596-84-5	1.0 ppm	
DDVP (Dichlorvos)	62-73-7	0.1 ppm	
Diazinon	333-41-5	0.2 ppm	
Dimethoate	60-51-5	0.2 ppm	
Ethoprophos	13194-48-4	0.2 ppm	
Etofenprox	80844-07-1	0.4 ppm	
Etoxazole	153233-91-1	0.2 ppm	
Fenoxycarb	72490-01-8	0.2 ppm	
Fenpyroximate	134098-61-6	0.4 ppm	
Fipronil	120068-37-3	0.4 ppm	

Flonicamid	158062-67-0	1.0 ppm	
Fludioxonil	131341-86-1	0.4 ppm	
Hexythiazox	78587-05-0	1.0 ppm	
Imazalil	35554-44-0	0.2 ppm	
Imidacloprid	138261-41-3	0.4 ppm	
Kresoxim-methyl	143390-89-0	0.4 ppm	
Malathion	121-75-5	0.2 ppm	
Metalaxyl	57837-19-1	0.2 ppm	
Methiocarb	2032-65-7	0.2 ppm	
Methomyl	16752-77-5	0.4 ppm	
Methyl parathion	298 -00 - 0	0.2 ppm	
Myclobutanil	88671-89-0	0.2 ppm	
Naled	300-76-5	0.5 ppm	
Oxamyl	23135-22-0	1.0 ppm	
Paclobutrazol	76738-62-0	0.4 ppm	
Permethrins (measured as the cumulative residue of cis- and trans-isomers)	52645-53-1(54774-45-7 and 51877-74-8)	0.2 ppm	
Phosmet	732-11-6	0.2 ppm	
Piperonyl_butoxide	51-03-6	2.0 ppm	
Prallethrin	23031-36-9	0.2 ppm	
Propiconazole	60207-90-1	0.4 ppm	
Propoxur	114-26-1	0.2 ppm	
Pyrethrins (measured as the cumulative residue of pyrethrin 1, cinerin 1 and jasmolin 1)	8003-34-7(121-21-1, 25402-06-6, and 4466-14-2)	1.0 ppm	
Pyridaben	96489-71-3	0.2 ppm	
Spinosad	168316-95-8	0.2 ppm	
Spiromesifen	283594-90-1	0.2 ppm	
Spirotetramat	203313-25-1	0.2 ppm	
Spiroxamine	118134-30-8	0.4 ppm	
Tebuconazole	107534-96-3	0.4 ppm	
Thiacloprid	111988-49-9	0.2 ppm	
Thiamethoxam	153719-23-4	0.2 ppm	
Trifloxystrobin	141517-21-7	0.2 ppm	
E. Potency			

Analyte	Labelling	Required Action
Tetrahydrocannabinolic acid (THC-A)	Label claim is not within +/- 20 % of tested value	Revise label as necessary
Delta-9-tetrahydrocannabinol (Δ9-THC)		
Cannabidiolic acid (CBD-A)		
Cannabidiol (CBD)		
Terpenoids (primary and secondary)	Label claim is not within +/- 10 % of tested value	Revise label as necessary
F. Moisture Content and Water Activity Testing		
Measurement	**Allowable Measurement**	**Required Action**
Water activity	> 0.65 Aw	Destroy
Moisture content	> than 15%	Remediate and retest