


Green Haven Grow Tech Handbook

 Description	The Green Haven Grow Tech Handbook provides guidance on various aspects of cannabis cultivation, including irrigation, labeling, mother plant maintenance, nutrient documentation, packaging, transplanting, trimming, and the vegetative phase. Each section outlines the purpose, scope, prerequisites, responsibilities, procedures, references, and reporting requirements for the specific practice. The handbook emphasizes compliance with state and federal regulations and quality control measures to ensure the production of high-quality cannabis products.
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Green Haven Grow Tech Handbook

Introduction

1. Welcome to Green Haven

Welcome to Green Haven, Oklahoma's premier organic cannabis cultivation facility! As a grow tech joining our esteemed team, you're now part of a dedicated community that prioritizes quality, sustainability, and the holistic well-being of both our plants and our people. Whether you're a seasoned horticulturalist or just starting your journey in the world of cannabis, we're thrilled to have you with us. Green Haven is not just a grow facility—it's a family, and we're excited to cultivate success together.

2. Our Mission and Vision

Mission: At Green Haven, our mission is to produce the highest quality organic cannabis, free from harmful chemicals and pesticides. We believe in the power of nature and strive to harness it in its purest form for the benefit of our customers and the broader community.

Vision: We envision a future where cannabis is celebrated for its therapeutic properties and where consumers can trust that they are receiving a product that is both safe and

effective. Green Haven aims to lead the way in sustainable cannabis cultivation, setting industry benchmarks in quality, innovation, and environmental responsibility.

3. Overview of Green Haven's Cultivation Facility

Nestled in the heart of Oklahoma, Green Haven boasts a state-of-the-art cultivation facility, equipped with the latest in horticultural technology. Our indoor grow environment ensures that we have complete control over the elements, from temperature to humidity, ensuring our plants thrive in optimal conditions.

- **LED Lights:** Energy-efficient and spectrum-tailored to our plants' needs.
- **Trolmaster Controllers:** Automation that ensures our plants receive the right light and temperature at the right times.
- **Soil Growing Medium:** Our commitment to organic growing starts with the very soil our plants are rooted in.
- **Commercial Air Conditioner and Dehumidifier:** Maintaining the perfect environment for our plants.
- **Hand Watering with Organic Nutrients:** Meticulous care and attention to ensure our plants receive the best nourishment.

Further, our facility is segmented to cater to each phase of the cannabis life cycle, from nursery to cure room. As a grow tech, you'll become intimately familiar with each of these spaces, ensuring our plants receive the best care every step of the way.

House Rules and Grow Philosophy

1. Organic Cultivation at Green Haven

At Green Haven, we're more than just cultivators; we're stewards of the earth. Our commitment to organic cultivation is unwavering, and it's what sets us apart in the cannabis industry. Here's what organic cultivation means to us:

- **Soil-First Approach:** We choose soil not just as a medium, but as a living ecosystem teeming with beneficial microbes. Our soil is free from synthetic additives, ensuring our plants draw nutrients in their most natural form.
- **Natural Nutrients:** Every plant at Green Haven is nourished with a blend of organic nutrients, hand-mixed with precision. No chemical fertilizers here; only the

wholesome goodness of nature.

- **Pesticide-Free Promise:** Our plants are protected through natural means. From beneficial insects to organic repellents, we ensure our cannabis remains free from harmful chemicals.

2. Importance of House Rules

House rules aren't just guidelines; they're the backbone of our operations. By adhering to them:

- **We Maintain Consistency:** Consistency is key in cultivation. With everyone on the same page, we ensure that our plants receive uniform care, regardless of who's tending to them.
- **We Uphold Quality:** Our reputation rests on the quality of our cannabis. By following house rules, we guarantee that every batch meets the Green Haven standard.
- **We Foster a Safe Environment:** For the plants and for you. By adhering to our guidelines, we reduce risks and create a harmonious workspace.

3. The Green Haven Approach: Opinionated Guide

Every cultivation facility has its methods, but at Green Haven, we're proud to have an opinionated approach. Here's what that means:

- **Daily Cleaning is Non-Negotiable:** A clean grow is a successful grow. By ensuring our facility remains spotless, we preemptively tackle many potential issues.
- **Scouting is Key:** With our commitment to organic cultivation, early detection is our best defense against pests. Regular scouting is not just encouraged; it's expected.
- **Lean S 5 Practice in Action:** We don't just adopt the Lean S 5 Practice; we live it. From Seiri to Shitsuke, every step is integral to our operations.
- **Hand-Watering Over Automation:** While automation has its place, nothing beats the human touch. Our hand-watering approach ensures that every plant gets the individual attention it deserves.
- **Education and Evolution:** The world of cannabis is ever-evolving, and so are we. Continuous learning, experimentation, and adaptation are pillars of the Green Haven approach.

Facility Tour and Overview

1. The Nursery Room

The journey of every Green Haven plant starts in our nursery room. This space is specially designed to provide the ideal conditions for germination and the early growth of our cannabis plants. With controlled temperature, humidity, and gentle LED lighting, our seeds get the best start in life. As a grow tech, you'll be involved in monitoring seedlings, ensuring they're well-spaced, and providing them with their initial nutrients.

2. The Clone Mother Plant Room

Our commitment to consistency and quality is best seen in our clone mother plant room. Here, we house our 'mothers' – the plants chosen for their superior genetics and robust health. From these mothers, we take cuttings (clones) which will grow into the next generation of Green Haven plants. It's crucial to ensure that our mother plants are in peak health, as they are the genetic blueprint for much of our crop.

3. Veg to Flower Rooms

After the initial nursery phase, our plants move to the veg room, where they grow and mature under more intense lighting and are given more space to spread out. Once they reach the desired size and maturity, they're transitioned to the flower rooms. Here, lighting schedules mimic the natural transition from summer to fall, prompting the plants to start producing flowers. Your role will involve regular checks, nutrient adjustments, scouting for pests, and ensuring optimal growth conditions.

4. The Cure Room

After harvest, our cannabis undergoes a critical curing process in the cure room. This step is vital for the development of flavor, aroma, and the overall quality of the final product. In this room, temperature and humidity are closely monitored to ensure slow, even drying. Periodic checks for mold, turning of the buds, and ensuring even airflow are among the tasks you'll oversee.

5. The Processing Room

Once our cannabis is cured to perfection, it moves to the processing room. Here, buds are trimmed, weighed, and packaged. While Green Haven employs hand-trimmers for the delicate task of manicuring our buds, grow techs play an essential role in quality

control, ensuring only the best buds make it to the final packaging stage. Given our wholesale operations, ensuring that batches are correctly labeled, tracked, and prepared for distribution is paramount.

Equipment and Technology

1. Understanding LED Lights

LED (Light Emitting Diode) lights have revolutionized indoor cannabis cultivation, and at Green Haven, they're our lighting solution of choice. Here's why:

- **Spectrum Control:** LED lights can be tailored to emit specific light spectrums ideal for different growth stages of cannabis.
- **Energy Efficiency:** Consuming less power than traditional lighting solutions, LEDs are both cost-effective and environmentally friendly.
- **Heat Management:** LEDs emit less heat, reducing the risk of heat stress on plants and allowing for closer placement.

As a grow tech, it's crucial to understand the different light spectrums and their effects on cannabis. Ensuring that lights are at the correct height and intensity for each growth stage will be a part of your responsibilities.

2. Trolmaster Controllers: An Introduction

Automation plays a significant role in ensuring consistent conditions within our facility. Enter Trolmaster controllers. These systems allow us to:

- **Light Automation:** Set schedules and light spectrums based on the growth stage.
- **Climate Control:** Maintain the ideal temperature and humidity levels throughout the facility.
- **Remote Monitoring:** Stay informed and react swiftly to any changes, even from a distance.

Your role will involve setting up schedules, making seasonal adjustments, and keeping an eye on system alerts to ensure our plants always have the optimal environment.

3. Managing Commercial Air Conditioner and Dehumidifier

Maintaining the right temperature and humidity is paramount for cannabis cultivation. Our commercial air conditioner ensures our facility stays cool, especially during the intense light periods. Meanwhile, the dehumidifier plays a crucial role in preventing mold growth and maintaining plant health.

- **Temperature Management:** Cannabis plants thrive between 70-85°F during the light period and 58-70°F during the dark. Monitoring and adjustments will be part of your daily checks.
- **Humidity Levels:** Depending on the growth stage, cannabis requires different humidity levels, ranging from 40-70%. The dehumidifier helps ensure we're always in the right range.

Regular maintenance checks, filter replacements, and ensuring even airflow throughout the facility will be essential aspects of managing these equipment pieces.

Cultivation Practices

1. Soil as a Growth Medium

At Green Haven, our choice of soil isn't merely out of tradition but is rooted in our organic philosophy. Soil, rich with microorganisms, provides a natural and nourishing environment for our cannabis plants. Our soil mix is:

- **Organic:** Free from synthetic additives, ensuring our plants get the most natural nutrients.
- **Well-Draining:** This ensures roots get enough oxygen and prevents overwatering issues.
- **Nutrient-Rich:** Packed with essential minerals and organic matter for optimal growth.

As a grow tech, you'll be responsible for ensuring the soil remains at its best, which involves periodic checks, aeration, and replenishing it as needed.

2. Hand Watering: Mixing Organic Nutrients

While automation has its advantages, nothing beats the personal touch of hand-watering. This method ensures each plant gets individual attention and the precise amount of water it needs. At Green Haven:

- **Organic Nutrient Mixes:** We steer clear of synthetic fertilizers, opting for organic nutrient solutions that are hand-mixed to perfection.
- **pH Balancing:** Ensuring our water is at the right pH level ensures optimal nutrient absorption.

Your role will involve preparing the nutrient mix, checking pH levels, and watering plants, ensuring they're neither overwatered nor underwatered.

3. Pest Management and Scouting

In our commitment to organic cultivation, we prioritize natural methods for pest management. Regular scouting is our first line of defense against potential infestations.

- **Beneficial Insects:** Predatory insects like ladybugs act as natural defenders against pests.
- **Organic Repellents:** When needed, we opt for natural repellents over chemical pesticides.

Your keen eye will be essential in spotting early signs of pests or diseases, ensuring timely intervention and maintaining our organic standards.

4. Transitions: From Veg to Flower and Harvest Cycles

Each cannabis plant goes through distinct stages, from vegetative growth to flowering and, finally, harvest.

- **Veg to Flower:** Transitioning plants from the veg room to the flower room involves adjusting light schedules and nutrients to prompt flowering.
- **Harvest:** Determining the right time to harvest is crucial for optimal cannabinoid and terpene profiles.

Your expertise will be vital in overseeing these transitions, ensuring each plant reaches its full potential at every stage.

5. Working with Hand-Trimmers

After harvest, our cannabis buds go to the skilled hands of our trimmers. These experts meticulously manicure our buds, ensuring they're aesthetically pleasing and free from excess leaves.

- **Quality Control:** Overseeing the trimming process, ensuring consistency and quality.
- **Batch Organization:** Ensuring buds are organized, labeled, and ready for the curing process.

As a liaison between cultivation and processing, you'll work closely with our hand-trimmers, ensuring the final product reflects Green Haven's high standards.

Daily Responsibilities

1. The Importance of Daily Cleaning

At Green Haven, cleanliness isn't just next to godliness; it's central to successful cultivation. A clean facility minimizes the risk of pests and diseases, ensures equipment runs optimally, and provides a safe environment for both plants and staff. As a grow tech, you'll:

- **Conduct Daily Checks:** Inspect for any spills, plant debris, or tools left out.
- **Sanitize Tools and Equipment:** Regularly clean and disinfect tools to prevent the spread of pathogens.
- **Maintain Clean Airways:** Ensure air filters and vents are free from dust and debris for optimal airflow.

Remember, a little effort every day prevents larger issues down the road.

2. Embracing Lean S 5 Practice

The Lean S 5 Practice isn't just a methodology; it's a way of life at Green Haven. By embracing these principles, we ensure efficient operations and a harmonious work environment.

- **Seiri: Separation**
 - **Objective:** Distinguish between necessary and unnecessary items in the facility.
 - **Your Role:** Regularly review tools, equipment, and supplies. Remove or recycle what's not needed, ensuring the grow rooms remain clutter-free.
- **Seiton: Organization**

- **Objective:** Arrange items for easy access and efficient work.
- **Your Role:** Ensure every tool and piece of equipment has a designated place. Label storage areas for clarity.
- **Seiso: Cleanup**
 - **Objective:** Keep the facility spotless.
 - **Your Role:** Conduct daily cleaning routines, ensuring floors, surfaces, and equipment are free from dirt and residues.
- **Seiketsu: Routine Maintenance**
 - **Objective:** Implement regular checks and maintenance to prevent issues.
 - **Your Role:** Schedule and perform routine equipment checks. Ensure the facility remains in optimal condition day in, day out.
- **Shitsuke: Habitual Practice**
 - **Objective:** Make the first four S's a habit.
 - **Your Role:** Lead by example. Uphold the standards of Green Haven and encourage fellow staff to embrace the Lean S 5 Practice.

By incorporating these practices into your daily routine, you'll not only maintain the high standards of Green Haven but also optimize your efficiency and effectiveness as a grow tech.

Regulations and Compliance

1. Introduction to METRC

METRC (Marijuana Enforcement Tracking Reporting Compliance) is a state-mandated seed-to-sale tracking system used by cannabis businesses to ensure full compliance with local regulations. Here's what you need to know:

- **Comprehensive Tracking:** METRC tracks every cannabis plant from its earliest growth stages to final sale, ensuring full traceability.
- **RFID Tags:** Every plant and product batch has a unique Radio Frequency Identification (RFID) tag, allowing for real-time tracking.

- **Reporting:** Regular updates on plant counts, harvests, sales, and more are logged in METRC.

As a grow tech at Green Haven, you'll be interacting with METRC regularly. It's crucial to ensure accurate and timely entries, as this system plays a pivotal role in our regulatory compliance.

2. Oklahoma Medical Marijuana Authority: Rules and Regulations

The Oklahoma Medical Marijuana Authority (OMMA) oversees the state's medical marijuana program. Adhering to OMMA's regulations is not just a legal necessity but also aligns with Green Haven's commitment to transparency and safety. Key regulations include:

- **Testing Requirements:** All cannabis products must undergo rigorous testing for potency, contaminants, and more.
- **Packaging and Labeling:** All products must be correctly packaged and labeled, highlighting THC content, strain information, and safety warnings.

Staying informed about any updates or changes to OMMA regulations is crucial. Green Haven prioritizes ongoing education to ensure our entire team is always in the know.

3. Green Haven's Best Practices for Compliance

At Green Haven, we go above and beyond the basic requirements to ensure full compliance and set industry standards. Our best practices include:

- **Regular Audits:** Periodic internal reviews of our METRC entries, inventory, and sales data to ensure accuracy.
- **Ongoing Training:** All staff members undergo regular training sessions on compliance topics, ensuring everyone is up-to-date with the latest regulations.
- **Open Communication:** Encouraging a culture where questions about regulations are welcomed and addressed promptly.
- **Community Engagement:** Actively participating in industry forums, workshops, and regulatory discussions to stay ahead of the curve and shape the future of cannabis in Oklahoma.

As a grow tech, you play a vital role in upholding these best practices. Your meticulous attention to detail, combined with Green Haven's commitment to excellence, ensures we

remain at the forefront of the Oklahoma cannabis industry.

Wholesale Operations

1. Understanding Green Haven's Market

As a premium organic cannabis cultivator in Oklahoma, Green Haven has carved a niche for itself in the wholesale market. Our commitment to quality and consistency positions us as a trusted supplier for numerous dispensaries across the state. Here's what defines our market:

- **Target Audience:** Our primary clients are dispensaries seeking high-quality, organic cannabis for discerning customers.
- **Market Trends:** We focus on strains that are in demand, always staying attuned to market shifts and customer preferences.
- **Reputation:** Over the years, Green Haven has built a reputation for reliability, consistency, and excellence. As part of our team, you play a role in upholding and enhancing this reputation.

2. Working with Dispensaries

Our relationship with dispensaries goes beyond mere transactions. We view them as partners in our shared mission to deliver the best cannabis to consumers. As a grow tech, you'll be part of this collaboration:

- **Feedback Loop:** Dispensaries provide invaluable feedback on our products, which we use to refine our cultivation practices.
- **Education:** We actively educate our dispensary partners about our strains, cultivation methods, and the benefits of organic cannabis.
- **Reliability:** Timely deliveries, consistent product quality, and open communication are the pillars of our relationship with dispensaries.

3. Preparing and Packaging for Wholesale

Once our cannabis has been cultivated, cured, and trimmed, it's time for the final step before it reaches the dispensaries. Proper preparation and packaging are crucial for maintaining product integrity and ensuring compliance:

- **Batch Tracking:** Every batch is meticulously tracked using METRC, ensuring full traceability.
- **Quality Control:** Before packaging, a final quality check is conducted to ensure only the best buds are sent out.
- **Packaging Standards:** Our packaging is not only compliant with state regulations but is also designed to preserve freshness. We use airtight containers with clear labeling that includes strain information, THC content, and safety warnings.
- **Timely Deliveries:** Once packaged, products are scheduled for delivery. Ensuring timely and safe deliveries to our dispensary partners is paramount.

Conclusion

1. Continuous Learning at Green Haven

The world of cannabis cultivation is dynamic, with new techniques, strains, and technologies emerging regularly. At Green Haven, we embrace change and view it as an opportunity to refine our craft. We encourage all our grow techs to stay curious, invest in their education, and share their learnings with the team. Workshops, training sessions, and industry seminars are frequently organized to ensure that the entire Green Haven family stays at the cutting edge of cultivation practices.

2. Feedback and Suggestions

Open communication is a cornerstone of our operations at Green Haven. We value feedback, not just from our partners and customers but also from our dedicated team. If you have suggestions, ideas, or concerns, we want to hear them. Regular team meetings provide a platform to voice opinions, and our open-door policy ensures that every voice is heard and valued. Together, we iterate, innovate, and improve.

3. Growing Together at Green Haven

Your journey at Green Haven is not just about cultivating cannabis; it's about cultivating growth – personal, professional, and communal. We pride ourselves on our tight-knit community, where every individual plays a critical role in our collective success. As we expand our operations, discover new strains, and refine our techniques, we do it together, as one united team. Welcome to Green Haven, where our growth story is as much about plants as it is about people.

Grow Tech SOPs

Cleaning and Sanitizing

1. Purpose

The purpose of this SOP is to provide guidance on the proper procedures for cleaning and sanitizing all areas of the facility to maintain a safe and hygienic environment for staff and patients.

2. Scope

This document covers the cleaning and sanitizing of all areas of the facility, including cultivation, processing, and packaging areas, restrooms, break rooms, and common areas.

3. Prerequisites

- Knowledge of proper cleaning techniques and the appropriate cleaning materials for each area of the facility.

4. Responsibilities

- All staff are responsible for maintaining a clean and hygienic work environment.

5. Procedure

Daily Cleaning

1. All surfaces, including walls, floors, and work surfaces, must be wiped down with a clean, damp cloth and an appropriate cleaning solution at least once a day.
2. All sinks, toilets, and other restroom fixtures must be cleaned and sanitized daily.
3. All break rooms and common areas must be cleaned and sanitized daily.

Weekly Cleaning

1. All cultivation, processing, and packaging areas must be thoroughly cleaned and sanitized at least once a week.
2. All equipment, including tools, machinery, and other items used in the facility, must be thoroughly cleaned and sanitized at least once a week.

Monthly Cleaning

1. All areas of the facility, including cultivation, processing, and packaging areas, restrooms, break rooms, and common areas, must undergo a deep clean and sanitation at least once a month.
2. All equipment, including tools, machinery, and other items used in the facility, must be thoroughly cleaned and sanitized at least once a month.

6. References

- OSHA Standards for Cleaning and Sanitizing in the Workplace.

7. Reporting

All cleaning and sanitizing activities must be documented in the Cleaning and Sanitizing Log, including the date, time, and staff member responsible for the activity.

CO2 Augmentation

1. Purpose

The purpose of this SOP is to provide guidelines for the use of CO2 augmentation in the cultivation of cannabis to improve plant growth, quality, and yield.

2. Scope

This SOP applies to all employees involved in the cultivation of cannabis plants where CO2 augmentation is used.

3. Prerequisites

- Employees must be trained on the proper use and handling of CO2 augmentation equipment.
- CO2 equipment must be maintained and inspected regularly.
- Safety equipment, such as personal protective equipment (PPE), must be used as required.

4. Responsibilities

- Master Grower: Responsible for ensuring employees are properly trained and following procedures.
- Assistant Growers: Responsible for monitoring CO2 levels and equipment maintenance.
- Security Director: Responsible for ensuring that CO2 equipment is properly secured.
- IT Director: Responsible for ensuring data is recorded and maintained.

5. Procedure

1. Before beginning CO2 augmentation, ensure all employees involved in the process have been trained on the proper use of equipment and safety procedures.
2. Monitor CO2 levels in the growing area to ensure levels do not exceed the manufacturer's recommended levels.
3. Maintain and inspect CO2 equipment regularly to ensure proper functioning and to prevent leaks.
4. Ensure proper ventilation and air circulation in the growing area to prevent the buildup of excess CO2.

5. Use appropriate PPE, including gloves and goggles, when handling and servicing CO2 equipment.
6. Record CO2 levels and equipment maintenance in a designated log.
7. Ensure that CO2 equipment is properly secured to prevent unauthorized access.
8. Follow all local regulations and guidelines regarding the use of CO2 in cannabis cultivation.

6. References

- Local regulations and guidelines regarding the use of CO2 in cannabis cultivation
- CO2 equipment manufacturer instructions and guidelines

7. Reporting

All incidents related to the use of CO2 equipment or any deviation from this SOP must be reported to the Master Grower and documented in the CO2 augmentation log.

Daily Grow Room Checklist

1. Purpose

The purpose of this SOP is to establish a standard procedure for conducting daily checks of the grow room to ensure optimal growth conditions for plants and prevent potential hazards.

2. Scope

This SOP applies to all staff responsible for the cultivation and maintenance of plants within the grow room.

3. Prerequisites

- Access to the grow room

- Knowledge of standard operating procedures related to plant care and maintenance

4. Responsibilities

- Master Grower: Oversees the daily checks of the grow room and ensures compliance with this SOP.
- Assistant Growers: Conducts daily checks of the grow room and reports any discrepancies to the Master Grower.
- Quality Assurance: Provides oversight and guidance to ensure compliance with this SOP.

5. Procedure

1. Check Temperature and Humidity

- Ensure temperature and humidity levels are within the target range.
- Record the readings on the daily grow room checklist.

2. Inspect Lighting

- Check that all lights are functioning properly.
- Ensure that the light schedule is correct.
- Record any issues or discrepancies on the daily grow room checklist.

3. Check Irrigation

- Check that irrigation system is functioning correctly.
- Ensure that plants are receiving appropriate amount of water.
- Record any issues or discrepancies on the daily grow room checklist.

4. Inspect Plants

- Check for pests, disease, or other issues affecting plant health.
- Monitor plant growth and development.
- Record any issues or discrepancies on the daily grow room checklist.

5. Check Nutrient Solution

- Check the nutrient solution to ensure it is within acceptable levels.
- Adjust nutrient levels if needed.
- Record any changes or discrepancies on the daily grow room checklist.

6. Cleanliness

- Ensure that the grow room is clean and free of debris.
- Sanitize equipment and surfaces as necessary.
- Record any issues or discrepancies on the daily grow room checklist.

7. Record Keeping

- Record all findings on the daily grow room checklist.
- Notify the Master Grower of any issues or discrepancies immediately.

6. References

- Standard Operating Procedures for Plant Care and Maintenance

7. Reporting

- Daily grow room checklists must be completed and submitted to the Master Grower at the end of each day.
- Any issues or discrepancies must be reported to the Master Grower immediately.

Growing Practices

1. Purpose

The purpose of this SOP is to establish and communicate standardized growing practices to ensure consistent and safe production of cannabis products.

2. Scope

This SOP applies to all stages of the growing process including but not limited to propagation, vegetative phase, flowering phase, harvesting, drying, and curing.

3. Prerequisites

Before this SOP can be implemented, the following prerequisites must be completed:

- Completion of the "Inventory Controls" SOP to ensure proper tracking of all materials used in the growing process
- Availability of appropriate equipment and resources for all stages of the growing process
- Completion of the "Integrated Pest Management" SOP to ensure proper pest control measures are in place
- Completion of the "Nutrient Preparation" SOP to ensure proper mixing and application of nutrients

4. Responsibilities

Select roles that this SOP applies to:

- Master Grower
- Assistant Growers

Expected responsible actions of these roles:

- The Master Grower is responsible for overseeing and managing all aspects of the growing process and ensuring that all personnel involved in the growing process are properly trained and following this SOP.
- Assistant Growers are responsible for carrying out the tasks assigned to them by the Master Grower and ensuring that they are following this SOP.

5. Procedure

1. Propagation

- Cuttings should be taken only from healthy and vigorous "mother" plants
- Cuttings should be treated with a rooting hormone and placed in rooting medium under appropriate lighting and temperature conditions
- Once roots have formed, cuttings should be transplanted into the appropriate growing medium

2. Vegetative Phase

- Plants should be grown under appropriate lighting and temperature conditions
- Plants should be monitored regularly for signs of nutrient deficiencies or pest infestations
- As plants grow, they should be trained to maintain a uniform canopy
- Nutrients should be applied in appropriate amounts and at appropriate times

3. Flowering Phase

- Plants should be switched to a 12/12 light cycle to induce flowering
- Temperature and humidity should be carefully controlled to maximize yield and potency
- Plants should be monitored regularly for signs of nutrient deficiencies or pest infestations
- Nutrients should be applied in appropriate amounts and at appropriate times

4. Harvesting

- Plants should be harvested at the appropriate time to ensure maximum potency and yield
- All equipment and surfaces should be thoroughly cleaned and disinfected before harvesting to prevent contamination
- Plants should be handled gently to prevent damage to the buds

5. Drying

- Buds should be hung in a cool, dry, and dark place with appropriate ventilation to allow for proper drying

- Buds should be monitored regularly to ensure they are drying evenly and not developing mold or other contaminants

6. Curing

- Once buds are dry, they should be placed in sealed containers to allow for a slow and controlled curing process
- Buds should be monitored regularly for signs of mold or other contaminants
- Buds should be properly labeled and stored in a secure location

6. References

Links or directions to access additional materials to help complete this procedure:

- "Nutrient Preparation" SOP
- "Integrated Pest Management" SOP
- "Inventory Controls" SOP

7. Reporting

All personnel involved in the growing process are responsible for reporting any issues or concerns related to the growing process to the Master Grower. Any incidents or deviations from this SOP should be reported to the appropriate personnel and recorded in the incident report log.

Growing Practices - Clones

1. Purpose

The purpose of this SOP is to provide guidance for the production of consistent and healthy clones to ensure a consistent supply of high-quality plants.

2. Scope

This SOP applies to all personnel involved in the production of clones.

3. Prerequisites

- Knowledge of plant anatomy and physiology.
- Knowledge of nutrient requirements for plants.
- Knowledge of pest and disease management.

4. Responsibilities

- Master Grower is responsible for ensuring that the cloning process is carried out correctly.
- Assistant Growers are responsible for carrying out the cloning process according to this SOP.

5. Procedure

1. Cleaning and Disinfection:

- All equipment, including scissors, razor blades, and clippers, must be cleaned and disinfected before use.
- Work surfaces, including trays and containers, should be sanitized before use.
- Any previous plant material must be removed, and the surface must be disinfected with a cleaning solution.

2. Selection of Mother Plants:

- Select mother plants that are healthy and free from pests and diseases.
- Ensure that the mother plants are at least four weeks old and have multiple nodes.
- Label the mother plants with a unique identifier for tracking purposes.

3. Cutting:

- Use a sterile razor blade or scissors to take cuttings from the mother plant at a 45-degree angle.
- Take cuttings from the lower part of the mother plant, as these are more likely to root successfully.
- Cuttings should be 3 to 5 inches long and have at least two nodes.

4. Rooting:

- Dip the cuttings into rooting hormone.
- Plant the cuttings in a growing medium, such as rockwool cubes or peat pellets.
- Place the cuttings in a humidity dome to maintain a high level of humidity.
- Maintain a temperature of 72-75°F and a humidity level of 80-90%.
- Keep the growing medium moist but not waterlogged.
- Lightly mist the cuttings and the inside of the humidity dome several times a day to keep the humidity level high.

5. Transplanting:

- Once the roots have developed, transplant the clones into individual pots or a larger growing medium.
- Provide appropriate lighting and nutrient solutions to promote healthy growth.
- Monitor the plants for signs of stress, pests, or disease.

6. Tracking:

- Label each clone with a unique identifier and record its location.
- Keep track of the date the clones were cut and transplanted.
- Record any changes in the plants' health or growth.

6. References

- "Marijuana Horticulture: The Indoor/Outdoor Medical Grower's Bible" by Jorge Cervantes

7. Reporting

Any issues or concerns regarding the cloning process should be reported to the Master Grower. Any incidents involving pests or disease should be documented and reported to the appropriate authorities.

Growing Practices - Culling Procedures

1. Purpose

The purpose of this SOP is to provide guidance on the proper procedures for culling plants during the cultivation process to maintain quality and yield.

2. Scope

This document applies to all personnel involved in the cultivation process, including Master Grower, Assistant Growers, and Cultivation Technicians.

3. Prerequisites

Before culling any plants, the following prerequisites must be met:

- The plant must be clearly identified with the appropriate tag or label.
- The plant must have been properly inspected and assessed by the designated personnel.

4. Responsibilities

The following personnel are responsible for adhering to the procedures outlined in this SOP:

- Master Grower: Responsible for overseeing the cultivation process and ensuring that all plants are properly assessed for culling.

- Assistant Growers: Responsible for conducting routine inspections of plants to identify those that need to be culled.
- Cultivation Technicians: Responsible for culling plants according to the procedures outlined in this SOP.

5. Procedure

1. Identification: Plants that are identified for culling must be clearly marked with the appropriate tag or label indicating that they are to be removed.
2. Inspection: All plants must be routinely inspected to identify those that require culling. Inspections should be conducted in accordance with the established inspection schedule and must be thorough and consistent.
3. Assessment: After a plant has been identified as requiring culling, it must be assessed to determine the appropriate course of action. Assessment should take into account the reason for the culling and the stage of growth of the plant.
4. Culling: Once a plant has been identified and assessed for culling, it must be removed from the cultivation area and disposed of properly. Plants that are still in good condition and are suitable for use may be repurposed for other products.
5. Documentation: All culling activities must be properly documented, including the reason for the culling, the date and time of the culling, and the personnel responsible for the culling.

6. References

No external references are required for this SOP.

7. Reporting

All culling activities must be reported to the Master Grower, who is responsible for ensuring that all necessary documentation is properly filed and retained for future reference. Any issues related to culling must be reported to the Master Grower, who will determine the appropriate course of action to address the issue.

Growing Practices - Cultivation

1. Purpose

The purpose of this SOP is to provide guidance for the cultivation of cannabis plants in accordance with state regulations and the organization's standards.

2. Scope

This document covers the cultivation process for cannabis plants, from seed to harvest.

3. Prerequisites

- Room Setup SOP
- Nutrient Preparation SOP
- Integrated Pest Management SOP
- Irrigation SOP

4. Responsibilities

- Master Grower: oversees all aspects of the cultivation process, including training and supervising the cultivation team, ensuring compliance with regulations and SOPs, and ensuring the quality of the final product.
- Assistant Growers: responsible for assisting the Master Grower in all aspects of the cultivation process, including monitoring plant growth and health, implementing pest management strategies, and harvesting plants.
- Cultivation Team: responsible for daily maintenance and monitoring of plants, including watering, pruning, and harvesting.

5. Procedure

1. Seed Germination:

- Soak seeds in water for 24 hours before planting
 - Plant seeds in a growing medium, such as soil or rockwool
 - Keep the medium moist and at a temperature of 70-80 degrees Fahrenheit
 - Ensure the growing environment is free from pests and disease
2. Vegetative Phase:
- Ensure plants receive 16-18 hours of light per day
 - Monitor and maintain optimal growing conditions, including temperature, humidity, and nutrient levels
 - Train plants to grow horizontally, promoting even growth and maximizing yield
 - Monitor for pests and disease and implement pest management strategies as needed
3. Flowering Phase:
- Ensure plants receive 12 hours of light per day
 - Monitor and maintain optimal growing conditions, including temperature, humidity, and nutrient levels
 - Monitor for pests and disease and implement pest management strategies as needed
 - Monitor trichome development to determine the optimal harvest time
4. Harvesting:
- Cut plants at the base of the stem
 - Remove fan leaves and hang plants to dry in a cool, dry location with good airflow
 - Monitor humidity levels and adjust as needed
 - Once plants are dry, remove buds from the stem and trim them to remove excess plant matter
5. Curing:
- Place trimmed buds in airtight containers, such as glass jars

- Store containers in a cool, dry location with a humidity level of 55-65%
- Open containers daily to allow for airflow and monitor humidity levels
- Cure buds for at least two weeks before use

6. Quality Control:

- Sample buds from each harvest batch for potency and contaminants
- Maintain detailed records of each harvest batch, including the strain, growing conditions, and test results
- Take corrective action if test results show the presence of contaminants or if the potency is outside of the desired range.

6. References

- State regulations for cannabis cultivation
- Company standards and procedures

7. Reporting

- All actions related to the cultivation process will be recorded in the inventory and cultivation logs.
- Any deviations from this SOP or state regulations must be documented and reported to the Master Grower.

Growing Practices - Curing

1. Purpose

The purpose of this SOP is to provide guidance on the proper methods for drying and curing cannabis plants to ensure maximum potency, flavor, and aroma.

2. Scope

This document covers the drying and curing process for cannabis plants grown at our facility.

3. Prerequisites

- Harvesting of mature cannabis plants
- Trimming of harvested plants

4. Responsibilities

- Master Grower: Ensure that all cannabis plants are dried and cured properly.
- Assistant Growers: Assist the Master Grower in the drying and curing process.

5. Procedure

Drying Phase

1. Harvested plants are hung upside down from wires or hooks in a dry, well-ventilated room with a temperature range of 60-70°F and humidity level of 45-55%.
2. Fans are used to increase air circulation around the plants and dehumidifiers are used to maintain proper humidity levels.
3. Plants are left to dry for 7-10 days or until the stems snap when bent.

Curing Phase

1. Dried plants are trimmed and separated into individual buds.
2. Buds are placed in airtight containers, such as glass jars, at a temperature range of 60-70°F and humidity level of 60-65%.
3. Containers are opened for a few minutes once or twice a day to allow excess moisture to escape.
4. Buds are left to cure for 2-4 weeks, with the containers being opened less frequently as the curing process progresses.

5. Once the buds have reached the desired level of moisture, they can be stored in airtight containers at room temperature.

6. References

- Cannabis Cultivation and Science by K. Michael Hays
- Marijuana Horticulture: The Indoor/Outdoor Medical Grower's Bible by Jorge Cervantes

7. Reporting

Any issues or deviations from this SOP should be reported to the Master Grower for resolution.

Growing Practices - Drying

1. Purpose

The purpose of this SOP is to provide guidance on the proper procedure for drying cannabis after harvest to ensure consistent quality and maximize yield.

2. Scope

This document covers the process for drying cannabis plants after harvest.

3. Prerequisites

Before beginning the drying process, the following steps must be completed:

- Harvested plants must be properly trimmed
- Plants must be properly labeled to ensure traceability

4. Responsibilities

Select roles that this SOP applies to:

- Master Grower
- Assistant Growers

Expected responsible actions of these roles:

- The Master Grower or Assistant Growers will oversee and perform the drying process.

5. Procedure

1. Cut branches of harvested plants and remove any remaining leaves.
2. Hang branches upside down in a cool, dark, and well-ventilated room with a temperature range of 60-70°F and humidity level of 45-55%.
3. Check the drying buds every day and gently shake them to ensure that they are not sticking together.
4. Monitor the temperature and humidity level in the drying room every day and adjust as necessary.
5. After about 5-10 days, when the buds are dry to the touch, remove them from the branches and place them in airtight containers for curing.
6. Label the containers with the strain name, date of harvest, and other relevant information for traceability.

6. References

- Reference to the state laws and regulations regarding drying procedures

7. Reporting

All actions related to the drying process, including any deviations from the standard procedure, must be documented and reported to the Master Grower for review and future process improvements.

Growing Practices - Flowering Phase

1. Purpose

The purpose of this SOP is to provide guidance for the flowering phase of the cannabis cultivation process to ensure consistent and high-quality yields.

2. Scope

This document covers the procedures and guidelines for the flowering phase of the cannabis cultivation process, including plant maintenance, environmental controls, and harvesting.

3. Prerequisites

The following steps must be completed before the flowering phase can begin:

- Vegetative phase completed
- Plants must have reached the desired height
- Adequate lighting and environmental controls must be in place

4. Responsibilities

Select roles that this SOP applies to:

- Master Grower
- Quality Assurance
- Assistant Growers

Expected responsible actions of these roles:

- Master Grower: oversee the overall process and ensure adherence to procedures and guidelines
- Quality Assurance: ensure that all plants meet established quality standards
- Assistant Growers: carry out the day-to-day tasks of the flowering phase, including plant maintenance, environmental controls, and harvesting

5. Procedure

Plant maintenance

1. Monitor plants daily for signs of pests or disease.
2. Water plants as needed, being careful not to overwater.
3. Monitor and adjust nutrient levels as needed.
4. Train and prune plants to promote even growth and maximize yields.

Environmental controls

1. Maintain proper temperature and humidity levels to promote healthy plant growth.
2. Ensure proper ventilation to prevent mold and mildew.
3. Adjust lighting schedules as needed to promote flowering and maximize yields.
4. Monitor and adjust CO2 levels as needed.

Harvesting

1. Monitor plants for signs of maturity, including the development of trichomes.
2. Use appropriate tools and techniques to harvest plants without damaging them.
3. Hang plants to dry in a well-ventilated, low-humidity area.
4. Monitor plants during the drying process to ensure that they dry evenly and do not become moldy or damaged.

5. Trim plants once they are dry, removing excess leaves and stems.
6. Cure plants for several weeks in a cool, dark place, monitoring humidity levels to prevent mold.

6. References

Links or directions to access additional materials to help complete this procedure:

- Growing Elite Marijuana by Ryan Riley

7. Reporting

All actions related to the flowering phase must be recorded in the cultivation record system. This information will be used for reporting to regulatory authorities and for general learning within the organization.

Growing Practices - Flushing

1. Purpose

The purpose of this SOP is to provide guidance on the flushing process during the cannabis growing process to ensure high-quality and safe products.

2. Scope

This document covers the flushing process during the cannabis growing process.

3. Prerequisites

Before beginning the flushing process, the following steps must be completed:

- Harvesting and drying of the cannabis plants

4. Responsibilities

Select roles that this SOP applies to:

- Master Grower
- Assistant Growers

Expected responsible actions of these roles:

- Master Grower:
 - Oversees and approves the flushing process
 - Ensures that the appropriate flushing duration is followed
 - Reviews the results of the flushing process
- Assistant Growers:
 - Perform the flushing process according to the approved SOP
 - Monitor the plants during the flushing process
 - Document the flushing process

5. Procedure

1. Prepare the flushing solution according to the manufacturer's instructions.
2. Remove any excess soil and debris from the plants.
3. Water the plants with the flushing solution until the runoff is clear.
4. Continue flushing the plants with plain water until the runoff is clear.
5. Monitor the plants during the flushing process for any signs of stress or nutrient deficiencies.
6. Document the flushing process, including the duration and amount of flushing solution used.
7. Notify the Master Grower once the flushing process is complete.

6. References

No additional materials are required to complete this procedure.

7. Reporting

All actions related to enacting this SOP will be captured in the Growing Practices Log. Any issues or deviations from this SOP will be reported to the Master Grower and documented accordingly.

Growing Practices - Handling

1. Purpose

The purpose of this SOP is to provide guidance on the proper handling practices of cannabis plants and products throughout the cultivation and manufacturing process.

2. Scope

This document covers the handling practices of cannabis plants and products from the time of harvest through processing, manufacturing, and packaging.

3. Prerequisites

- Employees must be trained on proper handling procedures for cannabis plants and products.

4. Responsibilities

Select roles that this SOP applies to:

- Master Grower
- Quality Assurance

- Assistant Growers
- Manufacturing Staff
- Packaging Staff

Expected responsible actions of these roles:

- Master Grower: Ensure that all employees are trained on proper handling procedures and oversee the implementation of those procedures.
- Quality Assurance: Conduct regular inspections to ensure that handling procedures are being followed correctly.
- Assistant Growers: Follow proper handling procedures during the cultivation process.
- Manufacturing Staff: Follow proper handling procedures during the processing and manufacturing of cannabis products.
- Packaging Staff: Follow proper handling procedures during the packaging of cannabis products.

5. Procedure

1. All employees who handle cannabis plants or products must wash their hands and wear gloves before handling.
2. All cannabis plants and products must be handled with care to prevent damage and contamination.
3. Cannabis plants must be hung upside down in a cool, dry place to dry after harvesting.
4. Manufacturing and processing staff must handle cannabis products gently to prevent damage.
5. All cannabis products must be stored in a cool, dry place to prevent spoilage.
6. All handling equipment must be cleaned and sanitized regularly.

6. References

- Occupational Safety and Health Administration (OSHA) guidelines for handling hazardous materials
- State regulations for the handling of cannabis products

7. Reporting

Any deviations from the handling procedures outlined in this SOP must be reported to the Quality Assurance department immediately. Incidents must be recorded and reported according to the Incident Reporting and Incident Report Form SOP.

Growing Practices - Harvesting

1. Purpose

The purpose of this SOP is to provide guidance on the harvesting process in order to ensure consistent, efficient and safe production of high-quality cannabis.

2. Scope

This document covers the procedures for harvesting cannabis plants in the cultivation facility.

3. Prerequisites

Before beginning the harvesting process, the following steps must be completed:

- The Master Grower or designated grower has inspected and approved the plants for harvesting
- The harvesting equipment has been cleaned and sanitized
- All staff involved in the harvesting process have been trained and understand the procedures

4. Responsibilities

This SOP applies to the following roles:

- Master Grower or designated grower
- Harvesting team
- Quality Assurance team

Expected responsible actions of these roles:

- The Master Grower or designated grower will inspect and approve the plants for harvesting
- The harvesting team will carefully and systematically harvest the plants
- The Quality Assurance team will inspect the harvested product for quality and consistency

5. Procedure

1. Ensure that all equipment and tools are clean and sanitized before beginning the harvesting process.
2. Select the cannabis plants that are ready for harvest, as determined by the Master Grower or designated grower.
3. Cut down the selected plants using the appropriate cutting tools, taking care not to damage the buds.
4. Remove any large fan leaves from the plant and separate the smaller buds from the main stem.
5. Place the harvested buds in a designated container, ensuring that they are not compressed or damaged during transport.
6. Label the container with the appropriate strain and date of harvest.
7. Transport the harvested buds to the drying room for further processing.

6. References

-
- State and federal laws and regulations regarding cannabis harvesting and handling
 - Manufacturer guidelines and recommendations for equipment and tool maintenance and sanitation

7. Reporting

Any issues or incidents related to the harvesting process should be reported to the Master Grower or designated grower and documented in the cultivation facility's incident reporting system.

Growing Practices - Irrigation

1. Purpose

The purpose of this SOP is to provide guidance on the proper irrigation practices for cannabis plants during the cultivation process.

2. Scope

This document covers the irrigation procedures for all stages of cannabis plant growth in the cultivation facility.

3. Prerequisites

- The irrigation system must be installed and fully functional before beginning the cultivation process.
- The nutrient solution must be properly mixed and available for use.

4. Responsibilities

Select roles that this SOP applies to:

- Master Grower
- Assistant Growers

Expected responsible actions of these roles:

- Master Grower:
 - Oversees the implementation of the irrigation procedures.
 - Trains and monitors assistant growers on irrigation practices.
 - Maintains the functionality of the irrigation system.
- Assistant Growers:
 - Follows the irrigation procedures as outlined in this SOP.
 - Reports any issues or malfunctions with the irrigation system to the Master Grower.

5. Procedure

Irrigation Schedule

1. Determine the irrigation schedule based on the growth stage of the plants and the environmental conditions.
2. Record the irrigation schedule in the grow journal.

Nutrient Solution Preparation

1. Mix the nutrient solution according to the manufacturer's instructions.
2. Adjust the pH of the nutrient solution to the appropriate level.
3. Check the electrical conductivity (EC) of the nutrient solution and adjust as necessary.

Irrigation Procedure

1. Turn off the irrigation system before filling the nutrient tank.

2. Fill the nutrient tank with the prepared nutrient solution.
3. Turn on the irrigation system and allow the nutrient solution to circulate through the system for 5 minutes.
4. Check the pH and EC of the nutrient solution in the runoff.
5. Adjust the pH and EC of the nutrient solution as necessary.
6. Monitor the plants for signs of over or under-watering.
7. Adjust the irrigation schedule as necessary based on plant response and environmental conditions.
8. Record all irrigation data in the grow journal.

6. References

- Manufacturer's instructions for nutrient solution preparation
- Grow journal

7. Reporting

All actions related to enacting this SOP will be recorded in the grow journal for reporting and learning purposes.

Growing Practices - Labeling

1. Purpose

The purpose of this SOP is to provide guidance on the labeling practices for cannabis products to ensure compliance with regulations and promote accurate product identification.

2. Scope

This document covers the labeling procedures for all cannabis products including flowers, edibles, tinctures, and concentrates.

3. Prerequisites

None

4. Responsibilities

Select roles that this SOP applies to:

- Master Grower
- Quality Assurance
- Assistant Growers
- Marketing Director

Expected responsible actions of these roles:

- Master Grower: Ensure that all cannabis products are accurately labeled according to regulations and internal policies.
- Quality Assurance: Verify that all labeling information is correct and compliant with regulations.
- Assistant Growers: Assist with labeling procedures as needed.
- Marketing Director: Ensure that all labeling is consistent with the brand image and messaging.

5. Procedure

1. Label Creation:

- Label information must include the product name, net weight/volume, THC/CBD content, ingredients, and warning information.
- Labels must comply with state and federal regulations.

- Labels must be reviewed and approved by the Quality Assurance department before being printed.

2. Label Application:

- Labels must be affixed to the cannabis product in a manner that ensures they will not fall off or become illegible.
- Labels must be applied before the product is packaged for sale.

3. Label Verification:

- Quality Assurance must verify that all labels are accurate and comply with regulations before the product is released for sale.

6. References

- State and federal cannabis labeling regulations
- Internal policies and procedures

7. Reporting

All labeling activities will be documented in the product batch record and retained according to record retention policies. Any labeling errors or issues will be reported to the Quality Assurance department for investigation and corrective action.

Growing Practices - Mothers

1. Purpose

The purpose of this SOP is to provide guidance on the best practices for maintaining and growing healthy mother plants.

2. Scope

This document covers the proper techniques and procedures for maintaining mother plants within the facility.

3. Prerequisites

- All employees must have completed the required safety training and be familiar with the facility's safety protocols.
- The mother plants must have been properly tagged and labeled according to the facility's RFID and plant tagging SOP.

4. Responsibilities

Select roles that this SOP applies to:

- Master Grower
- Assistant Growers

Expected responsible actions of these roles:

- The Master Grower is responsible for overseeing the health and growth of the mother plants.
- Assistant Growers are responsible for monitoring the mother plants and notifying the Master Grower of any issues.

5. Procedure

1. Selecting and preparing mother plants:
 - Choose healthy plants that are at least 8 weeks old and have shown no signs of disease or pests.
 - Transplant the plants into appropriate pots with adequate drainage.
 - Label the pots with the appropriate strain and date of transplant.
2. Maintenance of mother plants:
 - Monitor the plants daily for signs of nutrient deficiency, pests, or disease.

- Adjust nutrient levels and water as needed to maintain healthy growth.
- Prune the plants regularly to promote healthy growth and prevent overcrowding.
- Monitor temperature and humidity levels to ensure optimal growing conditions.

3. Cloning:

- Take cuttings from the mother plants as needed.
- Follow the facility's cloning SOP to ensure proper procedures are followed.

6. References

Links or directions to access additional materials to help complete this procedure:

- Facility's cloning SOP

7. Reporting

All actions related to the maintenance and growth of the mother plants must be documented in the facility's inventory logs and reported to the Master Grower. Any issues or concerns must be reported immediately to the Master Grower for further action.

Growing Practices - Nutrient Documentation

1. Purpose

The purpose of this SOP is to provide guidance on nutrient documentation to ensure consistency and accuracy in nutrient management throughout the growth cycle.

2. Scope

This document covers the process of documenting the use of nutrients for cannabis plants during their growth cycle. It includes the use of nutrient schedules, measuring tools, and record-keeping requirements.

3. Prerequisites

Before implementing this SOP, the following prerequisites must be completed:

- Staff members involved in nutrient management must be properly trained in the use of measuring tools and nutrient schedules.
- All measuring tools must be properly calibrated before use.
- Nutrient schedules must be developed and approved by the Master Grower.

4. Responsibilities

Select roles that this SOP applies to:

- Master Grower
- Assistant Growers
- Quality Assurance

Expected responsible actions of these roles:

- Master Grower: Develop and approve nutrient schedules, provide training on the use of measuring tools and nutrient schedules, ensure staff compliance with this SOP.
- Assistant Growers: Follow the approved nutrient schedules and use measuring tools accurately, document nutrient use as required.
- Quality Assurance: Audit nutrient documentation for accuracy and completeness, report any deviations from this SOP to the Master Grower.

5. Procedure

1. Before starting the growth cycle, the Master Grower develops and approves a nutrient schedule for each strain of cannabis.
2. Assistant Growers use measuring tools to accurately measure the required amount of nutrients for each plant according to the approved schedule.

3. Assistant Growers document the use of nutrients in the plant's individual record, including the type of nutrient, the amount used, and the date of application.
4. Quality Assurance audits nutrient documentation periodically to ensure accuracy and completeness.
5. If any deviations from this SOP are discovered, they are reported to the Master Grower, and corrective actions are taken.

6. References

Links or directions to access additional materials to help complete this procedure:

- Nutrient manufacturer instructions
- Nutrient schedule templates

7. Reporting

All actions related to nutrient management must be captured in the plant's individual record. Nutrient use data is also used for generating reports on crop performance and compliance with state regulations. Any deviations from this SOP must be reported to the Master Grower for corrective action.

Growing Practices - Packaging

1. Purpose

The purpose of this SOP is to provide guidance on the packaging of cannabis products in a manner that ensures product quality, safety, and compliance with applicable regulations.

2. Scope

This document covers the packaging of all cannabis products produced or sold by the facility.

3. Prerequisites

Before packaging cannabis products, the following prerequisites must be completed:

- All cannabis products must have passed the required quality control tests and been approved for sale.
- All packaging materials must meet the requirements set forth by state and federal regulations.

4. Responsibilities

Select roles that this SOP applies to:

- Master Grower
- Quality Assurance
- Packaging Team Lead
- Packaging Team Member
- Shipping and Receiving Team Member

Expected responsible actions of these roles:

- Master Grower: Oversees the entire process of producing, testing, and packaging cannabis products.
- Quality Assurance: Ensures that all products meet the required quality standards before they are packaged.
- Packaging Team Lead: Manages the packaging process and ensures that all products are packaged correctly and in compliance with regulations.
- Packaging Team Member: Packages cannabis products in compliance with regulations and follows all safety procedures.

- Shipping and Receiving Team Member: Verifies that the packaged products match the corresponding order, and that all required documentation is included.

5. Procedure

1. Ensure that the packaging area is clean and free from any contaminants.
2. Verify that all packaging materials meet the required state and federal regulations and are appropriately labeled.
3. Ensure that all scales and measuring devices used in the packaging process are calibrated and functioning correctly.
4. The Packaging Team Lead will assign packaging tasks to the Packaging Team Members, ensuring that each team member is trained and qualified for the specific packaging task.
5. Packaging Team Members will weigh and measure the appropriate amount of cannabis product and place it in the correct packaging, following all regulations and safety procedures.
6. Once the cannabis product is packaged, the Packaging Team Lead will inspect the packaging to ensure that it is labeled correctly and that there are no visible defects or issues.
7. The Shipping and Receiving Team Member will verify that the packaged products match the corresponding order, and that all required documentation is included.
8. Once the packaging is complete and verified, the packaged products will be stored in a designated area until they are ready for shipment.

6. References

Links or directions to access additional materials to help complete this procedure:

- State and federal regulations regarding cannabis product packaging.
- Guidelines for packaging materials and labeling requirements.

7. Reporting

All packaging-related activities and any issues or incidents that arise during the packaging process must be recorded in the appropriate logbook. These logs will be reviewed periodically for quality control and compliance purposes.

Growing Practices - Transplant Procedures

1. Purpose

The purpose of this SOP is to provide guidance on the procedures for transplanting cannabis plants.

2. Scope

This document applies to all employees involved in the transplanting of cannabis plants in the cultivation facility.

3. Prerequisites

Before transplanting cannabis plants, the following prerequisites must be completed:

- The plants must be healthy and disease-free.
- The transplanting equipment, including pots, soil, and nutrients, must be clean and free of contaminants.

4. Responsibilities

The following roles are responsible for following this SOP:

- Master Grower
- Assistant Growers

Expected responsible actions of these roles:

- Master Grower:
 - Ensure that all employees are trained on the transplanting procedures.
 - Monitor the transplanting process to ensure compliance with this SOP.
- Assistant Growers:
 - Follow the procedures outlined in this SOP for transplanting cannabis plants.

5. Procedure

Equipment Preparation

1. Gather all necessary equipment, including pots, soil, and nutrients.
2. Clean and sterilize all equipment before use.
3. Fill the pots with soil and add appropriate nutrients according to the plant's growth stage.

Plant Preparation

1. Water the plants thoroughly 24 hours before transplanting.
2. Carefully remove the plant from its current pot, ensuring that the root ball remains intact.
3. Gently loosen the root ball with your fingers or a tool, being careful not to damage the roots.
4. Place the plant in the new pot and fill with soil, ensuring that the root ball is covered.
5. Water the plant immediately after transplanting.

Post-Transplant Care

1. Monitor the plants for signs of stress for the first 24-48 hours after transplanting.
2. Adjust the light and humidity levels as necessary to minimize stress on the plants.
3. Continue to monitor the plants regularly and adjust nutrients and watering as necessary.

6. References

Links or directions to access additional materials to help complete this procedure:

- "Cannabis Cultivation: A Complete Grower's Guide" by Mel Thomas

7. Reporting

The Master Grower is responsible for recording any incidents related to transplanting, including any plant loss, and reporting them to the appropriate personnel.

Growing Practices - Trimming Policies and Procedures

1. Purpose

The purpose of this SOP is to provide guidance on trimming policies and procedures during the cannabis cultivation process.

2. Scope

This document covers the trimming practices and procedures during the cannabis cultivation process.

3. Prerequisites

Before starting the trimming process, the following prerequisites must be met:

- The plants must have undergone the proper vegetative and flowering phases according to the SOPs for Growing Practices - Vegetative Phase and Growing Practices - Flowering Phase.
- All the necessary equipment must be present and in working order as per the SOP for Equipment Maintenance.

- Trimmers must have undergone training on trimming techniques and safety protocols as per the SOP for Training and Development.

4. Responsibilities

This SOP applies to the following roles:

- Master Grower
- Assistant Grower
- Trimmer

The expected responsible actions of each role are:

- Master Grower:
 - Ensure that the trimming process is performed according to the standard operating procedures.
 - Provide guidance and support to the trimmers, if needed.
 - Oversee the quality control checks of the trimmed product.
- Assistant Grower:
 - Ensure that the trimming equipment is clean, sanitized, and in working order.
 - Assist with the trimming process as needed.
 - Report any issues or concerns to the Master Grower.
- Trimmer:
 - Follow the trimming process as outlined in this SOP.
 - Report any issues or concerns to the Assistant Grower.
 - Maintain a clean and organized work area.

5. Procedure

1. Preparation

- Clean and sanitize all equipment before and after use.

- Ensure that the trimming area is clean and free of debris.
- Ensure that all the necessary equipment is in working order.

2. Trimming

- Harvest the plants according to the SOP for Harvesting and Drying.
- Remove all large fan leaves from the plant.
- Cut the remaining smaller leaves as close to the bud as possible without damaging it.
- Trim the buds into the desired shape and size, removing any excess material.

3. Quality Control

- Inspect the trimmed buds for any remaining leaves or debris.
- Weigh and package the trimmed buds according to the SOP for Packaging Requirements.

4. Cleanup

- Clean and sanitize all equipment used in the trimming process.
- Clean the trimming area and dispose of any debris according to the SOP for Waste Disposal.

6. References

Links or directions to access additional materials to help complete this procedure:

- SOP for Growing Practices - Vegetative Phase
- SOP for Growing Practices - Flowering Phase
- SOP for Equipment Maintenance
- SOP for Training and Development
- SOP for Harvesting and Drying
- SOP for Packaging Requirements
- SOP for Waste Disposal

7. Reporting

The trimming process and any related issues or concerns must be reported to the Master Grower or Assistant Grower. All data related to the trimming process, including weight and yield, should be recorded in the appropriate logs or reports as per the SOP for Logs and Record Keeping.

Growing Practices - Vegetative Phase

1. Purpose

The purpose of this SOP is to provide guidance on the vegetative phase of the growing process, which includes the steps required to produce healthy and robust plants.

2. Scope

This SOP applies to all personnel involved in the vegetative phase of the growing process, including the master grower, assistant growers, and quality assurance personnel.

3. Prerequisites

- Completion of the "Growing Practices - Seedling Phase" SOP.
- Verification of the seedling phase quality metrics.

4. Responsibilities

- Master Grower: Responsible for overseeing the vegetative phase of the growing process, ensuring adherence to the SOP, and supervising all personnel involved in the process.
- Assistant Growers: Responsible for day-to-day activities, including watering, fertilizing, and pruning of plants in the vegetative phase.

- Quality Assurance: Responsible for monitoring the quality of plants during the vegetative phase and reporting any issues to the master grower.

5. Procedure

5.1 Environment and Lighting

1. Maintain a temperature of 75-85°F and a humidity level of 60-70% during the vegetative phase.
2. Ensure that the lighting is set to a 16-hour on and 8-hour off cycle.

5.2 Watering and Fertilizing

1. Water plants every other day, ensuring that the soil is thoroughly moistened.
2. Apply appropriate fertilizers at least once a week, following the recommended application rates.

5.3 Pruning and Training

1. Monitor plant growth and prune leaves as needed to ensure proper light penetration.
2. Train plants to promote horizontal growth by gently bending the main stem and securing it in place.

5.4 Pest and Disease Control

1. Monitor plants regularly for pests and diseases.
2. Use integrated pest management practices to control any issues that arise.

5.5 Quality Control

1. Conduct daily inspections of plants during the vegetative phase.
2. Record any issues or abnormalities in the plant inspection log.

6. References

- Seedling phase SOP
- Best practices for growing cannabis
- State and federal regulations regarding cannabis cultivation

7. Reporting

Any issues related to the vegetative phase of the growing process must be reported to the master grower and recorded in the plant inspection log. The quality assurance team must also be notified of any issues.