#4307

Criteria 1. Ability to operate a business, including but not limited to education, knowledge, and experience	
Criteria 2. Plan for operating a medical marijuana dispensary in the county for which the applicant is seeking a license, including but not limited to a timeline for opening a retail dispensing location	
Criteria 3. Proof of financial stability and access to financial resources	
Criteria 4. Ability to comply with the security requirements of this chapter and section 329D-7, HRS	
Criteria 5. Capacity to meet the needs of qualifying patients	
Criteria 6. Ability to comply with criminal background check requirements pursuant to this chapter and sections 329D-7, 329D-12, and 846-2.7, HRS	
Criteria 7. Ability to comply with the requirements in this chapter and chapters 329 and 329D, HRS, for inventory tracking, security, and dispensing limits for qualifying patients	
Criteria 8. Ability to maintain confidentiality of a qualifying patient?s medical condition, health status, and purchases of marijuana or manufactured marijuana products	
Criteria 9. Ability to conduct or contract for certified laboratory testing on marijuana and manufactured marijuana products pursuant to this chapter and sections 329D-7 and 329D-8, HRS	
Criteria 10. Ability to comply with requirements for packaging, labeling, and chain of custody of products	
Criteria 11. A plan for secure disposal of marijuana and manufactured marijuana products	
Criteria 12. Ability to ensure product safety, in accordance with this chapter and sections 329D-8, 329D-10, 329D-11, HRS	
Criteria 13. No history of having a business license revoked.	
Total Merit Criteria Points Awarded to Applicant	

HELPFUL INFORMATION FOR FILLING OUT THIS FORM:

1. You can save your work on this form by checking the 'Save my progress and resume later' box and then clicking the 'Save form and resume later' button IMPORTANT: Remember to do this every time you leave your application or you will lose the information you have entered.

2. To keep your information secure, remember to log out of your application each time you finish working on it.

3. Use a current version of Google Chrome or Firefox browser when completing this form.

4. Save the form every 20 minutes to avoid timing out. When entering information in a spreadsheet, save and exit the form first.

5. Do not include single or double quote marks (' or ") or more than one period (.) in your document names.

INSTRUCTIONS FOR THE MEDICAL MARIJUANA DISPENSARY LICENSE APPLICATION

Before applying for a medical marijuana dispensary license, applicants must acknowledge that they have read the statute and administrative rules on medi to be redirected to the statute and administrative rules.

Hawaii Revised Statute (HRS) 329D	[redacted]
Hawaii Administrative Rules (HAR) Chapter 11-850	

Disclaimer:

[redacted]

MINIMUM REQUIREMENTS

All individual applicants and applying entities must meet the requirements listed below or the application will not be accepted. Applicants must attach proo sections.

INDIVIDUAL APPLICANT

*** Individual applicant shall be at least 21 years old.**
*** Shall be a legal resident of the State of Hawaii for at least five (5) uninterrupted years immediately preceding the date of the license application.**
*** Shall not have any felony convictions or any other disqualifying background history.**
*** Shall be authorized by the applying entity to submit an application for a dispensary license, and act as the primary point of contact with the department.**

APPLYING ENTITY

*** The applying entity must be organized under the laws of the State of Hawaii.**
*** Have a Hawaii tax identification number.**
*** Have a Department of Commerce and Consumer Affairs Business Registration Division number and suffix.**
*** Have a federal employer identification number.**
*** Not be less than fifty-one percent held by Hawaii legal residents or entities wholly controlled by Hawaii legal residents who have been legal residents for r application was submitted.**
*** Have financial resources under its control of not less than $1,000,000 for each license applied for, plus not less than $100,000 for each retail dispensing lo bank statements or escrow accounts, and those financial resources shall have been under the control of the applying entity for not less than ninety days in**
*** Be composed of owners, principals, or members, each of whom is not less than twenty-one years of age and has no felony convictions or any other disqu**

APPLICATION FEE

The license application fee of $5,000 by certified check or cashier's check payable to the State of Hawaii, Department of Health, is part of the minimum requ Medical Marijuana Dispensary Licensing, Room 337, 601 Kamokila Blvd., Kapolei, HI 96707 or be postmarked by 4:30 pm Hawaii Standard Time on the last c

Please note the application number on the check. This is found in the heading of the email confirmation you receive upon submittal, and is also visible whe

NOTE: ALL QUESTIONS MUST BE ANSWERED TO SUBMIT YOUR APPLICATION UNLESS OTHERWISE INDICATED.

SECTION A: APPLICATION FOR COUNTY

NOTE: An applicant may apply for a license for more than one county, but may only receive one license. Indicating here that you are applying for a license f license in another county; separate applications must be submitted. The applicant and applying entity must complete a separate application with all require refundable application fee of $5,000 for each application. The financial resources required ($1,000,000 plus not less than $100,000 for each retail dispensing can only apply toward one license, if granted.

1. For which county are you requesting a license?	City & County of Honolulu
2. Are you also applying for a dispensary license in another county?	No
2a. If YES, what other county or counties are you applying for a license? (NOTE: A separate application and check will be required for each county.)	

SECTION B: INDIVIDUAL APPLICANT INFORMATION

GENERAL INFORMATION

3. Legal Name of Applicant	Ivan Michael Lui Kwan

4. Upload Proof of Legal Name of Applicant

Scan and submit a certified copy of AT LEAST ONE (1) of the following:

*** Certified copy of a birth certificate or marriage certificate filed with a state office of vital statistics or equivalent agency in the individual's state of birth or marriage;**
*** Valid, unexpired U.S. passport [inside cover and first page only] or U.S. passport card;**
*** Consular report of birth abroad Form FS-240, DS-1350 or FS-545 issued by the U.S. Department of State;**
*** Valid, unexpired permanent resident card (Form I-551) issued by the Department of Homeland Security (DHS) or the U.S. Citizenship and Immigration Services (USCIS);**
*** Unexpired employment authorization document issued by the DHS, Form I-766 or Form I-688B;**
*** Unexpired foreign passport with the following: a valid, unexpired U.S. visa affixed, and an approved I-94 form documenting the applicant's most recent admittance into the United States or a DHS admittance stamp on the passport;**
*** Certified copy of the Certificate of Naturalization issued by DHS, Form N-550 or Form N-570;**
*** Certificate of citizenship, Form N-560 or Form N-561, issued by DHS;**
*** Court-issued, certified copy of a divorce decree;**
*** Certified copy of a legal change of name order**

[redacted]

5. Date of Birth (must be at least 21 years old)

[redacted]

6. Upload Proof of Date of Birth of Applicant

Scan and submit a certified copy of AT LEAST ONE (1) of the following:

*** Certified copy of a birth certificate or marriage certificate filed with a state office of vital statistics or equivalent agency in the individual's state of birth or marriage;**
*** Valid, unexpired U.S. passport [inside cover and first page only] or U.S. passport card;**
*** Consular report of birth abroad Form FS-240, DS-1350 or FS-545 issued by the U.S. Department of State;**
*** Valid, unexpired permanent resident card (Form I-551) issued by the Department of Homeland Security (DHS) or the U.S. Citizenship and Immigration Services (USCIS);**
*** Unexpired employment authorization document issued by the DHS, Form I-766 or Form I-688B;**
*** Unexpired foreign passport with the following: a valid, unexpired U.S. visa affixed, and an approved I-94 form documenting the applicant's most recent admittance into the United States or a DHS admittance stamp on the passport;**
*** Certificate of naturalization issued by DHS, Form N-550 or Form N-570;**
*** Certificate of citizenship, Form N-560 or Form N-561, issued by DHS;**
*** Valid, unexpired driver's license or government issued photo identification card.**

[redacted]

7. Social Security No. or Identifier No. (last 4 digits only):

[redacted]

8. Applicant's Address

9. Daytime Phone No.

10. Fax No.

11. Email

CRIMINAL HISTORY INFORMATION

12. Has the individual applicant ever been convicted of a felony? If YES, STOP, you are not an eligible applicant.

[redacted]

13. Has the individual applicant ever been convicted of a crime?

13a. If YES, please describe (e.g., conviction, date, disposition, etc.)

14. Has the individual applicant ever been arrested?

14a. If YES, please describe (e.g., date, disposition, etc.)

Obtain a Criminal History Report

Copy the Validation code from an eCrim report for the individual applicant generated by the Hawaii Criminal Justice Data Center no earlier than December 12, 2015 at 8:00 a.m. (Hawaii-Aleutian Standard Time).

Visit eCrim.ehawaii.gov (https://ecrim.ehawaii.gov/ahewa/) **to obtain the eCrim report.**

15. Enter the eCrim Validation Code here:

16. NOTICE: Pursuant to Chapter 329D HRS and Chapter 11-850 HAR, applicants are required to provide consent to a background check, including fingerprinting, to be conducted by the Department of Health or its designee.

Further information and instructions will be provided on http://health.hawaii.gov/medicalmarijuana/. If the information and instructions are not yet posted, please check the website often.

RESIDENCY INFORMATION 17. Is the Applicant a legal resident of the State of Hawaii for at least five years? If NO, STOP, you are not an eligible applicant. Yes

18. Upload Proof of Hawaii Residency:

Scan and submit AT LEAST ONE (1) of the following source documents as proof of Hawaii state residency for at least five years:

*** State of Hawaii tax return Form N-11 without schedules, worksheets, or attachments, and redacted to remove all financial information and all but the last four digits of the individual's social security number;**
*** Evidence of voter registration;**
*** Ownership, lease, or rental documents for place of primary domicile;**
*** Billing statements including utility bills; or**
*** Vehicle registration.**

19. Authorized to Act on Behalf of Applying Entity

Scan and submit evidence of the authority of the individual to act on beha of the applying entity, and supporting documentation (e.g. corporate resolution, bylaws, articles of incorporation):

SECTION C: APPLYING ENTITY INFORMATION

20. Name of Applying Entity

21. Applying Entity's Business Address

22. Entity Phone #

23. Entity Email

24. Entity Fax #

25. Is the applying entity organized under the laws of the State of H the answer is 'NO', STOP, you are not an eligible applicant.

26. Upload Applying Entity Incorporation or Business Status Documentation:

Upload a certified copy of applying entity's incorporation documents in the State of Hawaii.

Visit Hawaii Business Express (https://hbe.ehawaii.gov/documents/search.html) **for available documents.**

27. Provide the entity's Hawaii Department of Commerce & Consumer Affairs Business Registration Division Number & Suffix (file number).

Visit Hawaii Business Express - Business Name Search (https://hbe.ehawaii.gov/documents/search.html) **to locate your entity's file number.**

28. Upload a copy of the entity's Certificate of Good Standing from the Department of Commerce and Consumer Affairs.

29. Hawaii Tax Identification Number:

Provide the number along with a copy of the State of Hawaii Tax Identification Number (see question immediately below).

[redacted]

Visit Tax ID Search (https://dotax.ehawaii.gov/tls/app) **for this information.**

30. Upload a copy of the entity's State of Hawaii Tax Identification document.

31. Federal Employer Identification Number: Provide the Federal Employ Identification Number.

32. Upload a copy of the entity's Federal Employer Identification Number document.

OWNER(S), PRINCIPAL(S), & MEMBER(S) INFORMATION

[redacted]

33. Enter the total number of Owner(s), Principal(s), and Member(s) of the applying entity here: 3

34. Upload Owner, Principal, and Member Information Spreadsheet

INSTRUCTIONS: Download the EXCEL spreadsheet below, enter the following information in the format required, and upload it to attach it to your application.

Information to be provided:

1) List of Owners, Principals, and Members of the Applying Entity

For each Owner, Principal, and Member of the Applying Entity:
A) Name, Address, Phone number, and Email Address
B) Each individual's percent interest in the company
C) State of primary residence
D) Number of years each person has lived in Hawaii (the most recent, uninterrupted number of years that the person has been a resident), and
E) A criminal background check for each Owner, Principal, and Member.

[redacted]

Copy the validation code from an eCrim report for the individual generated by the Hawaii Criminal Justice Data Center no earlier than December 12, 2015 at 8:00 a.m. (Hawaii-Aleutian Standard Time).
Visit eCrim.ehawaii.gov (https://ecrim.ehawaii.gov/ahewa/) **to obtain the eCrim report.**

Please include a signed statement by each Owner, Principal, or Member certifying that the information is complete and accurate. Upload the signed statements in the following question (35.)

2) Other Businesses Holding an Interest

If there are businesses that hold an interest in the company, list the business names and percent interest on a separate tab on the spreadsheet.

Download Owner Principal Member Information Spreadsheet (/mmjdisp/templates/Owner_Principal_Member_Report.xls)

35. Upload Proof of Name, Date of Birth, and Residency for each Officer, Principal, or Member listed on the spreadsheet

1) Proof of Legal Name of Each Owner, Principal, and Member:

Scan and submit a certified copy of AT LEAST ONE (1) of the following:

*** Certified copy of a birth certificate or marriage certificate filed with a state office of vital statistics or equivalent agency in the individual's state of birth or marriage;**
*** Valid, unexpired U.S. passport [inside cover and first page only] or U.S. passport card;**
*** Consular report of birth abroad Form FS-240, DS-1350 or FS-545 issued by the U.S. Department of State;**
*** Valid, unexpired permanent resident card (Form I-551) issued by the Department of Homeland Security (DHS) or the U.S. Citizenship and Immigration Services (USCIS);**
*** Unexpired employment authorization document issued by the DHS, Form I-766 or Form I-688B;**
*** Unexpired foreign passport with the following: a valid, unexpired U.S. visa affixed, and an approved I-94 form documenting the applicant's most recent admittance into the United States or a DHS admittance stamp on the passport;**
*** Certificate of naturalization issued by DHS, Form N-550 or Form N-570;**
*** Certificate of citizenship, Form N-560 or Form N-561, issued by DHS;**
*** Court-issued, certified copy of a divorce decree;**
*** Certified copy of a legal change of name order;**

2) Proof of Date of Birth

Scan and submit a certified copy of AT LEAST ONE (1) of the following:

*** Certified copy of a birth certificate or marriage certificate filed with a state office of vital statistics or equivalent agency in the individual's state of birth or marriage;**
*** Valid, unexpired U.S. passport [inside cover and first page only] or U.S. passport card;**
*** Consular report of birth abroad Form FS-240, DS-1350 or FS-545 issued by the U.S. Department of State;**
*** Valid, unexpired permanent resident card (Form I-551) issued by the Department of Homeland Security (DHS) or the U.S. Citizenship and Immigration Services (USCIS);**
*** Unexpired employment authorization document issued by the DHS, Form I-766 or Form I-688B;**
*** Unexpired foreign passport with the following: a valid, unexpired U.S. visa affixed, and an approved I-94 form documenting the applicant's most recent admittance into the United States or a DHS admittance stamp on the passport;**
*** Certificate of naturalization issued by DHS, Form N-550 or Form N-570;**
*** Certificate of citizenship, Form N-560 or Form N-561, issued by DHS;**
*** Valid, unexpired driver's license or government issued photo identification card.**

3) Proof of Hawaii Residency:

Scan and submit AT LEAST ONE (1) of the following source documents as proof of Hawaii state residency for at least five years:

*** State of Hawaii tax return Form N-11 without schedules, worksheets, or attachments, and redacted to remove all financial information and all but the last four digits of the individual's social security number;**
*** Evidence of voter registration;**
*** Ownership, lease, or rental documents for place of primary domicile;**
*** Billing statements including utility bills; or**
*** Vehicle registration.**

Document size limit is 2 MB. Up to 10 documents may be attached.

SECTION D: FINANCIAL INFORMATION

36. FINANCIAL RESOURCES GENERAL INFORMATION

INSTRUCTIONS: Download the EXCEL spreadsheet below, enter the following information in the format required, and upload it to attach it to your application.

Information to be provided:
1) Financial Resources the applying entity has under its control. List each financial resource, amount of the resource (round to nearest dollar, no cents), and verifying information (account type, account number, account name, name of financial institution, applicant contact information) as shown on the spreadsheet

2) Date Resource/Dollar amount under the applying entity's control

Download Financial Resources General Information Spreadsheet (/mmjdisp/templates/Financial_Resources_General.xls)

Upload the completed Financial Resources General Information Spreadsheet

[redacted]

37. Upload Financial Resources General Information Supporting Source Documents

Upload supporting source documents, i.e. bank statements, escrow account information, balance sheets etc. Supporting source documents for Financial Resources General Information must be provided as proof of the financial resources.

Document size limit is 10 MB. Up to 5 documents may be attached.

38. FINANCIAL RESOURCES -
RETAIL DISPENSING LOCATION INFORMATION

INSTRUCTIONS: Download the EXCEL spreadsheet below, enter the following information in the format required, and upload it to attach it to your application.

Data to be provided:
1) Financial Resources the applying entity has under its control for each retail dispensing location allowed (2 locations maximum)

2) Dollar Amount (total aggregate for each retail dispensing location sha be not less than $100,000, or $200,000 for 2 locations)

3) Date Resource/Dollar amount under the applying entity's control (resources have been under the Applying Entity's control for not less than 90 days)

Download Financial Resources - Retail Dispensing Location Information Spreadsheet (/mmjdisp/templates/Financial_Resources_Retail_Dispensing_Location.xls)

Upload the completed Financial Resources - Retail Dispensing Location Information Spreadsheet

[redacted]

39. Upload Retail Dispensary Location Supporting Source Documents

Upload supporting source documents, i.e. bank statements, escrow account information, balance sheets etc. Supporting source documents for retail dispensary locations must be provided as proof of the financia resources.

Document size limit is 10 MB. Up to 5 documents may be attached.

SECTION E: MERIT INFORMATION - OPTIONAL

Responses for each criteria shall be no longer than specified for each criteria, double spaced, font size no smaller than 12, and margins no less than 1 inch

(1) Ability to operate a business, including but not limited to education, knowledge, and experience with:
(A) Regulated industries;
(B) Agriculture or horticulture;
(C) Commercial manufacturing;
(D) Pharmaceutical companies;
(E) Operating or working in a medical marijuana dispensary business;
(F) Creating and implementing a business plan, including a timeline for opening a business;
(G) Creating and implementing a financial plan;
(H) Retail sales;
(I) Secure inventory tracking and control;
(J) Protecting confidential customer information;
(K) Owning or managing a business that required twenty four hour security monitoring; and
(L) Any other experience the applicant considers relevant;

Response to (1) shall be no longer than five (5) pages.

Upload Response to (1)

(2) Plan for operating a medical marijuana dispensary in the county for which the applicant is seeking a license, including but not limited to a timeline for opening a retail dispensing location;

Response to (2) shall be no longer than five (5) pages.

Upload Response to (2)

(3) Proof of financial stability and access to financial resources, including but not limited to:
(A) Legal sources of finances immediately available to begin operating a dispensary;
(B) A summary of financial statements in businesses previously or currently owned or operated by the applicant;
(C) A financial plan for operating a medical marijuana dispensary in Hawaii;
(D) Good credit history; and
(E) History of bankruptcy by the applicant or entities owned or operat by the applicant;

Response to (3) shall be no longer than five (5) pages.

Upload Response to (3)

(4) Ability to comply with the security requirements of Chapter 11-850 a Section 329D-7, HRS;

Response to (4) shall be no longer than five (5) pages.

Upload Response to (4)

(5) Capacity to meet the needs of qualifying patients, including but not limited to:
(A) Educating patients on how marijuana can be used to assist patients with debilitating medical conditions and about the marijuana and manufactured marijuana products that will be available in the applicant's retail dispensing locations;
(B) Producing and maintaining a supply of marijuana that is sufficient t meet the needs of qualifying patients;
(C) Providing safe, accessible retail dispensing locations; and
(D) Measuring and improving customer satisfaction;

Response to (5) shall be no longer than five (5) pages.

Upload Response to (5)

(6) Ability to comply with criminal background check requirements pursuant to Chapter 11-850 and Sections 329D-7, 329D-12, and 846-2.7, HRS;

Response to (6) shall be no longer than three (3) pages.

Upload Response to (6)

(7) Ability to comply with the requirements in Chapter 11-850 and Sections 329 and 329D, HRS, for inventory tracking, security, and dispensing limits for qualifying patients;

Response to (7) shall be no longer than five (5) pages.

Upload Response to (7)

(8) Ability to maintain confidentiality of a qualifying patient's medical condition, health status, and purchases of marijuana or manufactured marijuana products;

Response to (8) shall be no longer than three (3) pages.

Upload Response to (8)

(9) Ability to conduct or contract for certified laboratory testing on marijuana and manufactured marijuana products pursuant to Chapter 11-850 and Sections 329D-7 and 329D-8, HRS;

Response to (9) shall be no longer than three (3) pages.

Upload Response to (9)

(10) Ability to comply with requirements for packaging, labeling, and chain of custody of products;

Response to (10) shall be no longer than three (3) pages.

Upload Response to (10)

(11) A plan for secure disposal of marijuana and manufactured marijuana products;

Response to (11) shall be no longer than five (5) pages.

Upload Response to (11)

(12) Ability to ensure product safety, in accordance with Chapter 11-85(and Sections 329D-8, 329D-10, 329D-11, HRS.

Response to (12) shall be no longer than five (5) pages.

Upload Response to (12)

(13) No history of having a business license revoked.

Response to (13) shall be no longer than three (3) pages.

Upload Response to (13)

SECTION F: CERTIFICATION AND SUBMITTAL

Certification

By checking the box above and entering the individual applicant's name below, the applicant has electronically signed this application.

Applicant Name	Ivan Michael Lui-Kwan

If you have previously submitted an application and this is a revision, enter the unique entry number(s) of your previous submission(s) here.

User ID

User Email

Entry Info

Date Created

Date Updated

IP Address

OWNER / PRINCIPAL / MEMBER REPORT

Please include a signed statement by each Owner, Principal, or Member certifying that the information is complete and accurate

Name of Owner, Principal, or Member	Address (Street, City, State, Zip, Country (if not USA))	Phone Number	Email Address	Percent Interest in the Company	State of Primary Residence	Number of Years Lived in Hawaii (most recent uninterrupted number of years person has been a resident)	Has person ever been convicted of a Felony? (If So, STOP, they are not an eligible applicant)	Has person ever been convicted of a crime?	If person has been convicted of a crime, please describe (e.g., conviction, date, disposition, etc.)	Has person ever been arrested?	If person has ever been arrested, please describe (e.g., date, disposition, etc.)	eCrim Report Validation Code
Ivan Lui Kwan	[redacted]	[redacted]	[redacted]	27.5	Hawaii	71	[redacted]	[redacted]	[redacted]	[redacted]		[redacted]
Kamaki Kanahele	[redacted]	[redacted]	[redacted]	27.5	Hawaii	71	[redacted]	[redacted]	[redacted]	[redacted]		[redacted]
Elemental HI, LLC a Delaware LLC	[redacted]	[redacted]	[redacted]	45	Delaware							
James Townsend - Sole member							[redacted]	[redacted]	[redacted]	[redacted]		[redacted]

I, Ivan Lui- Kwan, do hereby certify that the information on the attached spreadsheet is complete and accurate.

I, Kamaki Kanahele, do hereby certify that the information on the attached spreadsheet is complete and accurate.

Elemental HI, LLC, does hereby certify that the information on the attached spreadsheet is complete and accurate.

[redacted]

Merit Criteria - Question 2

KLM will be a vertically integrated medical marijuana company in the City and County of Honolulu, dedicated to providing safe and secure access to marijuana and manufactured marijuana products to qualified patients while ensuring the highest standard of patient, product, and public safety (see Appendix 2 - Section 2.1 – Business Mission Statement). This includes mitigating and preventing diversion of marijuana and misuse of marijuana, particularly by minors. In order to achieve this, KLM will commit great care to customer service and ensure that all operating procedures, policies, and facilities are in strict compliance with Chapter 329D, HRS and Hawaii DOH Administrative Rules for Medical Marijuana Dispensaries. KLM is financially prepared to commit the same level of care and resources in regard to all phases of the planned deployment of our operation, including but not limited to design and build out, inventory and quality control, consumer education, community outreach, security, compliance, staffing, and safe handling of marijuana in accordance with the Hawaii Narcotics Enforcement Division to ensure we meet the needs of patients in a timely, yet well executed manner.

Through our partnership arrangement with Medicine Man Technologies, KLM is fully equipped to navigate the process of operating a medical marijuana production center and retail facilities (see Appendix 2 - Section 2.2 - Facility Plan). We intend to have our building plans reviewed by the City and County of Honolulu Department of Planning and Permitting prior to license granting. If we are granted a license and if our build-out plans are accepted, we will begin construction immediately. Our goal is to have our production center and first retail dispensing fully completed and operational within 2016.

Considering the inherent risks that will come with the transition from the existing caregiver model to a fully integrated industrial process for commercial marijuana manufacturing,

KLM will mitigate that risk through the licensing and adoption of Medicine Man's Variable Capacity Continuous Harvest methodology which produces high quality, consistent, safe marijuana within an enclosed indoor production facility (see Appendix 2 - Section 2.3 - Production Plan Summary). KLM will deploy a world-class, extraordinarily clean and sanitary production center capable of maintaining complete control of the growing and manufacturing environment. KLM will establish standard operating procedures for cultivation, compliance, cleanliness, testing, production controls, and work instructions which have been refined over the course of six years of Medicine Man's operational history in Colorado. We will incorporate in-house and third-party testing to determine contents and potency in order to make sure patients get a consistent product with known quantities of active ingredients. In order to mitigate risk, we plan to deploy Hawaii state specific compliance software to help us continually monitor the complex maze of rules and regulations. (see Appendix 2 - Section 2.7 - Compliance Plan Software)

Product manufacturing will be an integral component of our vertically-integrated plan. We will reserve a significant quantity of our marijuana production to this segment of our business and we will dedicate 3,000 SF of our facility to the creation a state-of-the-art extraction lab and manufacturing facility.

We will design safe alternatives to inhaling marijuana that address state-approved medical conditions and patient needs. These products offer a variety of delivery methods including gastro-intestinal, sublingual, and transdermal absorption.

With the expert guidance of our manufacturing advisors, we are in the process of designing our facility, planning our manufacturing processes and refining our 5 primary product lines (see Appendix 2 - Section 2.4 Manufacturing Plan Summary).

Our retail dispensary facility will include a newly renovated, modern retail center with administrative offices (see Appendix 2 - Section 2.5 - Retail Dispensary Plan Summary). This facility will include a new and secure computer network, point-of-sale systems, security cameras, and décor. We will install a safe room that will exceed industry standards. We will provide our patients with elegant retail security and will not be marred by security bars or other prison-like vestiges.

Our retail location will be approximately 2,000 square feet which will provide ample space for a comfortable, safe, and secure location with ample interior and exterior lighting (see Appendix 2 - Section 2.5.1 - Retail Dispensary Photos). We will add aesthetic value to the community we build in. Operationally, KLM will also utilize the standard operating procedures developed by Medicine Man, who has six years of meeting patient needs tied to a wide variety of debilitating medical conditions.

KLM has obtained control of real property for its cultivation center through an MOU for an option agreement to purchase with KBP Holdings VII, L.L.C. attached as Appendix 1. The property is described as vacant lot number 6 located in Kapolei Business Park, Phase 2 subdivision consisting of 1060 acres of land, and located in Kapolei, Hawaii.

KLM intends to establish good relationships with neighboring businesses. We will maintain the exterior and surrounding property to the highest standards in the community. Having KLM as a neighbor will significantly increase exposure to other nearby businesses. Anticipating we will serve over 40 patients per day, KLM will act as an anchor operation, driving additional traffic to neighboring businesses. We will become an integral part of the Chamber of Commerce of Hawaii and look forward to becoming a leader in the Oahu community. We will install carbon filtration systems to minimize potential odor issues arising

from the marijuana and manufactured marijuana products. We plan to contract non-lethal armed security during business hours and will contract with a security agency to provide after hour patrols.

KLM will be committed to consistent and timely delivery of our products to our patients through the use of our partnership with the state-awarded seed-to-sale software system, BioTrackTHC, as well as our Variable Capacity Continuous Harvest production model adopted from our partner Medicine Man. We will conduct a weekly physical inventory and investigate any variances from actual inventory. With the ability to be vertically integrated, we will be empowered to supply timely, high-quality, safe and consistent medical marijuana to our retail dispensing location(s). We plan to start with 10-15 marijuana strains with a product mix of Indica, Sativa, Hybrid and high-CBD varieties to enable us to meet the needs of patients with approved debilitating medical conditions. As the market matures and with the evolution of rules, we will be able to add to our product mix as well as service new and existing conditions and demographics.

Our goal is to create a safe, positive working environment for all employees in order to build and maintain an excellent record of employee retention. We will mandate leadership training for all management personnel, provide opportunity for advancement, and provide a comprehensive benefits package for all full time employees. A unique opportunity is the ability for management and key personnel to train in Colorado within an operational medical marijuana production and retail environment through our relationship with Medicine Man, including the safe handling of all marijuana and related products. Additionally, we have internal performance monitoring programs to ensure employee performance.

In the event of a natural disaster, KLM will be fully insured to cover business operating costs for an extended period of time.

Establishment of any timeline will be subject to both internal and external circumstances and should be considered to be fluid throughout the interim time period up to first day of the retail dispensaries operational status when sales begin. Primary factors affecting these scheduling elements include; 1)compliance with all Hawaii Department of Health Administrative Rules, 2)the speed at which certified laboratories are available to begin product testing, 3)construction process and schedule elements, and 4)inspections and compliance with all building department requirements including but not limited to submittal of construction documents for permitting, interim inspections, final inspections, and issuance of a temporary as well as final certificate of occupancy. While speed to market is very important, the thing that is of paramount importance is patient, product and public safety. Although other applicants may be representing a faster speed to market, if a person were to follow all of the state guidelines it would be physically impossible to meet that timeline unless they were doing something illegal. Our timeline is aggressive and takes into account all state guidelines. As such our timeline clearly shows we will have a safe and consistent supply of materials in our retail dispensary by late December of 2016 (see Appendix 2 - Section 2.6 – Detailed Proposed Timeline).

APPENDIX 2-1

KBP Holdings VII, LLC

Queens Court, Suite 501
800 Bethel Street
Honolulu, HI 96813

January 28, 2016

Mr. Ivan M. Lui-Kwan
Ka Lau Malie LLC
3125 Huelani Place
Honolulu, HI 96822

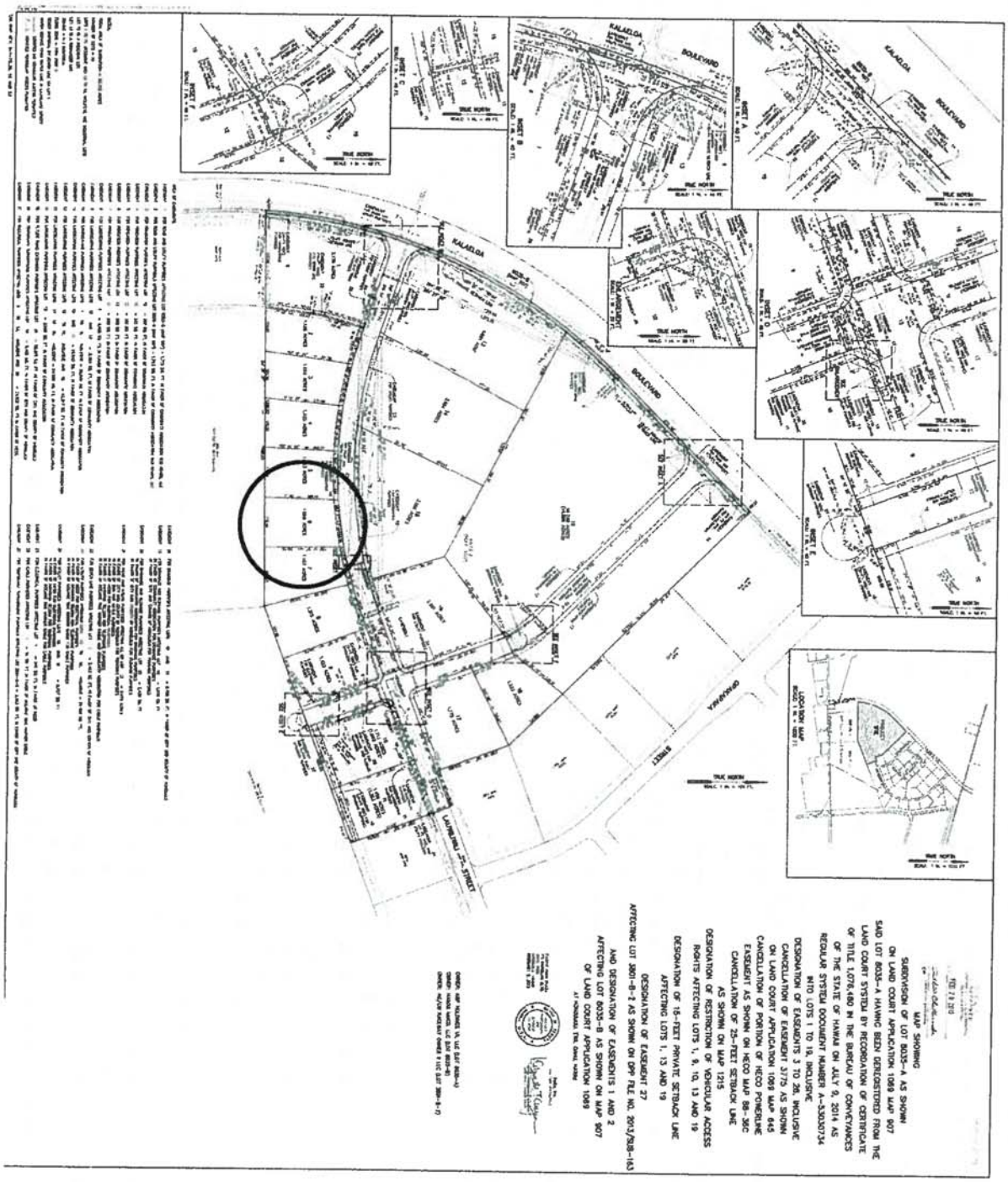
Subject: Memorandum of Understanding
Kapolei Business Park, Lot 6 ("Subject Property")

Dear Mr. Lui-Kwan,

This letter serves as a Memorandum of Understanding ("MOU") between Ka Lau Malie LLC ("Interested Party") and KBP Holdings VII, LLC ("Owner" of Lot 6):

[redacted]

Exhibit A


MAP SHOWING
SUBDIVISION OF LOT 8035-A AS SHOWN
ON LAND COURT APPLICATION 1069 MAP 907
SAID LOT 8035-A HAVING BEEN DEREGISTERED FROM THE
LAND COURT SYSTEM BY RECORDATION OF CERTIFICATE
OF TITLE 1,076,480 IN THE BUREAU OF CONVEYANCES
OF THE STATE OF HAWAII ON JULY 9, 2014 AS
REGULAR SYSTEM DOCUMENT NUMBER A-53030734
INTO LOTS 1 TO 19, INCLUSIVE
DESIGNATION OF EASEMENTS 3 TO 26, INCLUSIVE
CANCELLATION OF EASEMENT 3770 AS SHOWN
ON LAND COURT APPLICATION 1069 MAP 645
CANCELLATION OF PORTION OF HECO PONEROME
EASEMENT AS SHOWN ON HECO MAP 88-30C
CANCELLATION OF 25-FEET SETBACK LINE
AS SHOWN ON MAP 1215
DESIGNATION OF RESTRICTION OF VEHICULAR ACCESS
RIGHTS AFFECTING LOTS 1, 9, 10, 13 AND 19
DESIGNATION OF 15-FEET PRIVATE SETBACK LINE
AFFECTING LOTS 1, 13 AND 19
DESIGNATION OF EASEMENT 27
AFFECTING LOT 3801-B-2 AS SHOWN ON DPP FILE NO. 2013/SUB-163
AND DESIGNATION OF EASEMENTS 1 AND 2
AFFECTING LOT 8035-B AS SHOWN ON MAP 907
OF LAND COURT APPLICATION 1069
AT KOHANA, TMK
KALAELOA
BOULEVARD
DAIRY ROAD
LANDING
STREET
TRUE NORTH

OPTION AGREEMENT TO PURCHASE

This Option Agreement to Purchase (the "Option Agreement") is made as of January 26, 2016, by and between KBP Holdings VII, L.L.C., a Delaware limited liability company, having its principal place of business at 900 North Michigan Avenue, Suite 1900, Chicago, IL 60611 ("Seller") and Ka Lau Malie LLC, a Hawaii limited liability company, having its principal place of business at 3125 Huelani Place, Honolulu, Hawaii 96822 ("Buyer").

WITNESSETH:

WHEREAS, Seller is the fee simple owner of certain real property being, lying and situated in the City & County of Honolulu, State of Hawaii, such real property having the street address of 2350 Lauwiliwili Street, Kapolei, HI 96707 ("Premises") and such property being more particularly described as vacant lot number 6 of the Kapolei Business Park, Phase 2 subdivision consisting of 1.060 acres of land.

WHEREAS, Buyer desires to procure an option to purchase the Premises upon the terms and provisions as hereinafter set forth;

NOW, THEREFORE, for good and valuable consideration the receipt and sufficiency of which is hereby acknowledged by the parties hereto and for the mutual covenants contained herein, Seller and Buyer hereby agree as follows:

1. DEFINITIONS. For the purposes of this Option Agreement, the following terms shall have the following meanings:

    a. "Execution Date" shall mean the day upon which the last party to this Option Agreement shall duly execute this Option Agreement;

    b. "Option Fee" shall mean a non-refundable payment of Six Thousand and no/100 Dollars ($6,000.00) per month during the Option Term;

    c. "Option Term" shall mean that period of time commencing on the Execution Date and ending on or before April 29, 2016;

    d. "Option Exercise Date" shall mean that date, within the Option Term, upon which the Buyer shall send its written notice to Seller exercising its Option to Purchase;

    e. "Closing Date" shall mean the last day of the closing term or such other date during the closing term selected by Buyer.

2. GRANT OF OPTION. For and in consideration of the Option Fee payable to Seller as set forth herein, Seller does hereby grant to Buyer the exclusive right and Option ("Option") to purchase the premises upon the terms and conditions as set forth herein.

3. PAYMENT OF OPTION FEE. Buyer agrees to pay the Seller the Option Fee upon the first day of each new month of the Option Period. The monthly Option Fee is not divisable nor is it subject to pro rata calculation for partial months.

DRAFT

4. EXERCISE OF OPTION. Buyer may exercise its exclusive right to purchase the Premises pursuant to the Option, at any time during the Option Term, by giving written notice thereof to Seller. As provided for above, the date of sending of said notice shall be the Option Exercise Date. In the event the Buyer does not exercise its exclusive right to purchase the Premises granted by the Option during the Option Term, Seller shall be entitled to retain the Option Fee, and this Option Agreement shall become absolutely null and void and neither party hereto shall have any other liability, obligation or duty herein under or pursuant to this Agreement.

5. CONTRACT FOR PURCHASE & SALE OF REAL PROPERTY. In the event that the Buyer exercises its exclusive Option as provided for in the preceding paragraph, Seller and Buyer agree to the following terms and conditions on an Purchase & Sale Agreement:

   a. Purchase Price. The purchase price for the Premises shall be the sum of One Million Five Hundred Twenty Four Thousand and 00/100 Dollars ($1,524,000); however, Buyer shall receive a credit toward such purchase price in the amount of the Option Fee.

   b. Closing Date. The closing date shall be sixty (60) days after the Buyer has notified the Seller of its desire to exercise its option to purchase.;

   c. Closing Costs. Seller's and Buyer's costs of closing the Contract shall be borne by the Buyer and shall be paid by the Buyer;

   d. Default by Buyer; Remedies of Seller. In the event Buyer, after its exercise of its Option, fails to proceed with the closing of the purchase of the Premises pursuant to the terms and provisions as contained herein and/or under the Contract, Seller shall be entitled to retain the Option Fee as liquidated damages and shall have no further recourse against Buyer;

   e. Termination by Buyer. Buyer may terminate this Option by written notice to Seller. All payment(s) of the Option Fee due before such termination shall still be due and Seller shall be entitled to retain those as liquidated damage, no other payments of the Option fee shall be due and payable, the Seller shall have no further recourse against Buyer and Buyer shall have no further rights with respect to the Premises or under the Right of First Refusal.

6. RIGHT OF FIRST REFUSAL. Buyer shall have a right of first refusal ("Right of First Refusal") to purchase Lot 7 in lieu of Lot 2 at its discretion subject to the terms of this Option Agreement with exception to the following terms:

[redacted]

   c. The Right of First Refusal is subject to a current applicant receiving approval from the State of Hawaii for the medicinal marijuana program and/or proceeding toward closing.

7. MISCELLANEOUS.

DRAFT

a. Execution by Both Parties. This Option Agreement shall not become effective and binding until fully executed by both Seller and Buyer.

b. Notice. All notices, demands and/or consents provided for in this Option Agreement shall be in writing and shall be delivered to the parties hereto by hand or by United States Mail with postage pre-paid. Such notices shall be deemed to have been served on the date mailed, postage pre-paid. All such notices and communications shall be addressed to the Seller at Avalon Development Company LLC, 800 Bethel Street, Suite 501, Honolulu, HI 96813 and to Buyer at 3125 Huelani Place, Honolulu, Hawaii 96822 or at such other address as either may specify to the other in writing.

c. Fee Governing Law. This Option Agreement shall be governed by and construed in accordance with the laws of the State of Hawaii.

d. Successors and Assigns. This Option Agreement shall not be assigned to another party without the explicit written consent of the Seller.

e. Time. Time is of the essence of this Option Agreement.

f. Headings. The headings inserted at the beginning of each paragraph and/or subparagraph are for convenience of reference only and shall not limit or otherwise affect or be used in the construction of any terms or provisions hereof.

g. Entire Option Agreement. This Option Agreement contains all of the terms, promises, covenants, conditions and representations made or entered into by or between Seller and Buyer and supersedes all prior discussions and agreements whether written or oral between Seller and Buyer with respect to the Option and all other matters contained herein and constitutes the sole and entire agreement between Seller and Buyer with respect thereto. This Agreement may not be modified or amended unless such amendment is set forth in writing and executed by both Seller and Buyer with the formalities hereof.

DRAFT

IN WITNESS WHEREOF, the parties hereto have caused this Option Agreement to be executed under proper authority:

BUYER:

Ka Lau Malie LLC
a Hawaii limited liability company

_____

Name: Ivan M. Lui-Kwan
Title: Member

SELLER:

KBP Holdings VII, L.L.C.,
a Delaware Limited Liability Company

_____

Name: _____
Title: _____

Date of Signing of Buyer: January ___, 2016

2.1 - Business Mission Statement:

The mission of Ka Lau Malie LLC is to improve the health of Hawaii's people and to create healthy communities by developing cannabis-infused products with healing properties, and sale of such cannabis products to qualified patients for use through medically appropriate protocols. Dr. Shintani, Kahu Kanahele, Mr. Lui-Kwan, in collaboration with the Kupuna Council, will develop medically appropriate protocols and strategies to ensure that cannabis-infused healing products are provided to qualified cannabis patients.

2.2 - Facility Plans – See Attachments: "KLM Cultivation / Production Facility Building Plan V01 1-22-2016" and "KLM Dispensary Facility Building Plan V01 1-22-2016"

2.3 – Production Plan (Cultivation) Operating Summary – See Attachment "Appendix 2.3 – Production Plan Summary"

2.4 – Manufacturing Plan Operating Summary – See Attachment "Appendix 2.4 – Manufacturing Plan Summary"

2.5 Retail Dispensary Plan Summary

Ka Lau Malie will license standard operating procedures developed and refined by Medicine Man Technologies through their relationship with Medicine Man Denver. Within these standard operating procedures, quality service is of paramount interest. Medicine Man Denver's team of dispensary agents will share their knowledge and first-hand accounts from qualified

patients in Colorado in regard to the best applications for the core varieties of medical marijuana, including: Sativa, Indica, Hybrid, CBD.

Standard operating procedures for the safe, secure, and successful management of medical marijuana within a patient-facing environment are broken out as follows:

Inventory Control System / Point of Sale (POS) Software: user interface, barcodes, state ID tags, transaction tracking, reports, transactions, data entry into inventory control system;

Patient Consultation: first time patient, receptionist check in, marijuana consultation, manufactured marijuana product consultation, dosage, education, patient literature and resources;

Security Process and Procedures: patient check in, employee check in, vendor check in, ID verification, safety features, life safety plans, cash handling, transportation, diversion;

Packaging: labeling, exit bags;

Administration / Operational Best Practices: ordering/buying, work flow, record keeping, book keeping, compliance, maintenance, opening & closing procedures, cash handling, inventory control, product rotation, product return and disposal, product recalls.

The dispensary agent training process involves engaging Ka Lau Malie's Managers and Key Personnel of each job classification at Medicine Man Denver's facilities in the specific training regimens needed to secure their proficiency in understanding the performance basics of the position they are being hired to fulfill. This on-site time at an operational facility in Denver allows them to participate in active training at a fully functioning business which has deployed proven methodology in regard to retailing medical marijuana. This environment will provide trainees the ability to learn the associated tasking through repetitive exposure to the various duties they will be performing on a day to day basis.

The on-site training intervals are broken out into four key processes:

1. Review specific department training videos which are broken out by specific functions of the medical dispensary process, i.e.: POS system, security, patient consultation. Followed by a question and answer session.
2. Review of the cut sheet summaries pertaining to the training videos, which include a detailed step-by-step explanation of the duties and tasking which were provided in the training videos. Followed by a question and answer session.
3. Reviewing specific departmental standard operating procedures within the Medicine Man Technologies Dispensary Manual, pertaining to the training videos and cut sheets. Followed by a question and answer session.
4. Perform the function within the Medicine Man Denver medical dispensary, which can be in the form of:

a. Observation and job shadowing;
b. Actively asking questions to instructing dispensary agents;
c. Performing the functions within a live operating environment; this hands on training will be repeated several times within the training process;
d. Teach the teacher; enabling trainees within the live environment to teach the functions to the instructing dispensary agent while also receiving feedback on the process;
e. General de-briefing of the four-step training process for group follow up and question and answer.

This training and integration generally takes place over a period of two-three weeks, schedule in one week intervals, but may be repeated as needed to the benefit of KLM upon request. As a result of the arrangement with Medicine Man Technologies, KLM has access to an

operational medical marijuana retail dispensary assuring that KLM Management and Key Personnel will be getting exposure to current best practices within this industry.

These training intervals are broken out as follows:

Week 1: General overview of the marijuana retail dispensary process. Example week:

Monday: Review all training videos, training cut sheets, and standard operating procedures pertaining to general retail operations. Follow up question and answer session. Begin job shadowing and observation within the medical dispensary.

Tuesday: Debrief of Monday's training exercises, question and answer for clarifying questions and learnings, job shadowing and observation within the marijuana retail dispensary.

Wednesday: Job shadowing and observation within the marijuana retail dispensary

Thursday: Job shadowing and observation within the marijuana retail dispensary.

Friday: Administrative overview, including: human resources, tax, compliance, record keeping.

Week 2: Repeat of week 1 (general overview of the medical marijuana retail dispensary process).

Week 3: Focused on specific learnings from week 1 and 2 on-site training.

Within each week that trainees are on-site, there is a daily debrief and follow up question and answer session to ensure that standard operating procedures and expectations are being met.

Generally, KLM Management and Key Personnel of each team will receive feedback from the Medicine Man Denver staff that is designed to help point out both strengths as well as weaknesses as they are brought out by the training. This will allow KLM adequate time to schedule additional training follow up as needed to perform the tasks outlined in the standard operating procedures before becoming operational. This follows the basics of planned job

deployments on a practical application basis and as additionally requested once the initial training interval is completed at the Medicine Man Denver location.

Follow up training by Medicine Man Denver staff as needed or requested by KLM is available onsite at their facility; particularly once the dispensary agents have been hired as well as the first week of operations of the business. Additional custom training as well as interim contract support for positions that may still be vacant or that were vacated abruptly are also available to KLM via the arrangement with Medicine Man Technologies as needed.

Finally, once KLM Management and Key Personnel are sufficiently trained in regard to the standard operating procedures, designated management staff members will be responsible for internally managing this robust training process for any new hires. This training process will take place at KLM Hawaii-based retail dispensing facility, and trainees will have access to licensed standard operating procedures, training videos, training cut sheets, and other support materials as needed.

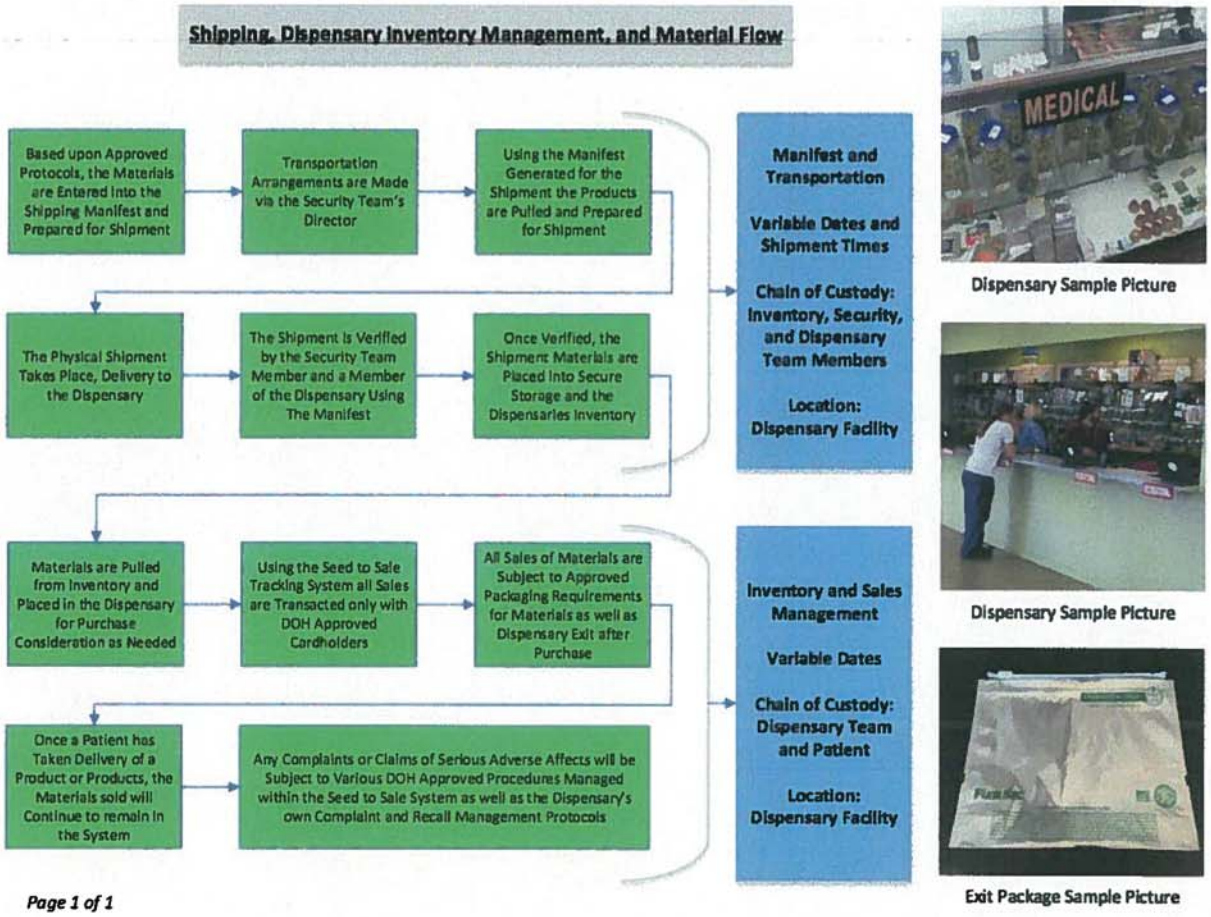
Operating a cannabis dispensary requires a full team of professionals in order to operate efficiently and effectively. KLM will have access to the following job descriptions, including but not limited to: Controller, Dispensary Manager, Dispensary Supervisor, Dispensary Technician, Security and Loss Prevention Supervisor, Inventory Control Supervisor, Facility Maintenance Supervisor, Information Technology Supervisor, Receptionist.

2.5.1 - Retail Dispensary Photos (File Photos Similar)

Medical Marijuana Retail Dispensary (Interior)

Medical Marijuana Retail Display Jar

Medical Marijuana Retail Display Cases & Security Guard



2.6 - Detailed Proposed Timeline

PROPOSED TIMELINE: Day One Assumed to be April 15, 2016

Day 001 - Award of License, Site already under control, Shell building in process

Day 007 - Submission deadline for $75,000 application fee to the DOH (must be in by this date by certified funds or cashier's check State of Hawaii, Department of Health

Day 010 – Narcotics Enforcement Division application and approval of destruction protocol (11-850-22) and securing certificate to provide to the DOH within seven (7) days of obtaining the certificate

Day 015 – Key Staff hiring completed and Staffing Plan updated

Day 020 – Long lead items ordered (mechanical, electrical, other), shipping deadlines defined

Day 030 – MEP and permitting submittal to local building officials for approval

Day 060 – NED Approval Certificate in place and submitted to the DOH

Day 065 – 11-850-32 (30 days prior to operations start of the cultivation and manufacturing facility) submittal deadline target

Day 075 – Permits in place, building shell fast start

Day 080 – Long lead items ordered (production/manufacturing), shipping deadlines defined

Day 090 – 11-850-71 Product and Product Standards submittal deadline target

Day 095 – Cultivation training initiation (offsite)

Day 098 – Department of Health inspections completed and all approvals in place

Day 099 – Temporary Certificate of Occupancy in place (genetics enclosure in place onsite)

Day 100 – Genetics initiated (Clone and 'Mother/Seed' genetics start)

Day 140 – Cultivation training initiation (onsite)

Day 159 – Final inspections completed, Certificate of Occupancy in place

Day 160 – Build out complete and ready to start mid veg cultivation cycle

Day 161 – Final Dispensary locations designated, leases (or purchases) in place

Day 175 – Full team hiring initiative completed, all paperwork and training schedules in place

Day 195 – 11-850-33 (60 days prior to operational start, Dispensary) submittal deadline

Day 200 – Dispensary training initiation (offsite)

Day 240 – Dispensary training imitation (onsite)

October 15, 2016 – 11-850-38 1st Quarterly Reports Due

Day 250 – Tight trim extraction start

Day 270, December 26th, 2016 – Flower material and extraction products from tight trim in store, 1st day of dispensing (projected)

January 15, 2017 – 11-850-38 1st Quarterly Reports Due

February 15, 2017 – 11-850-39 Annual Audit Due 60 days prior to YE (April 15, 2015)

April 15, 2017 – First year anniversary from License Award

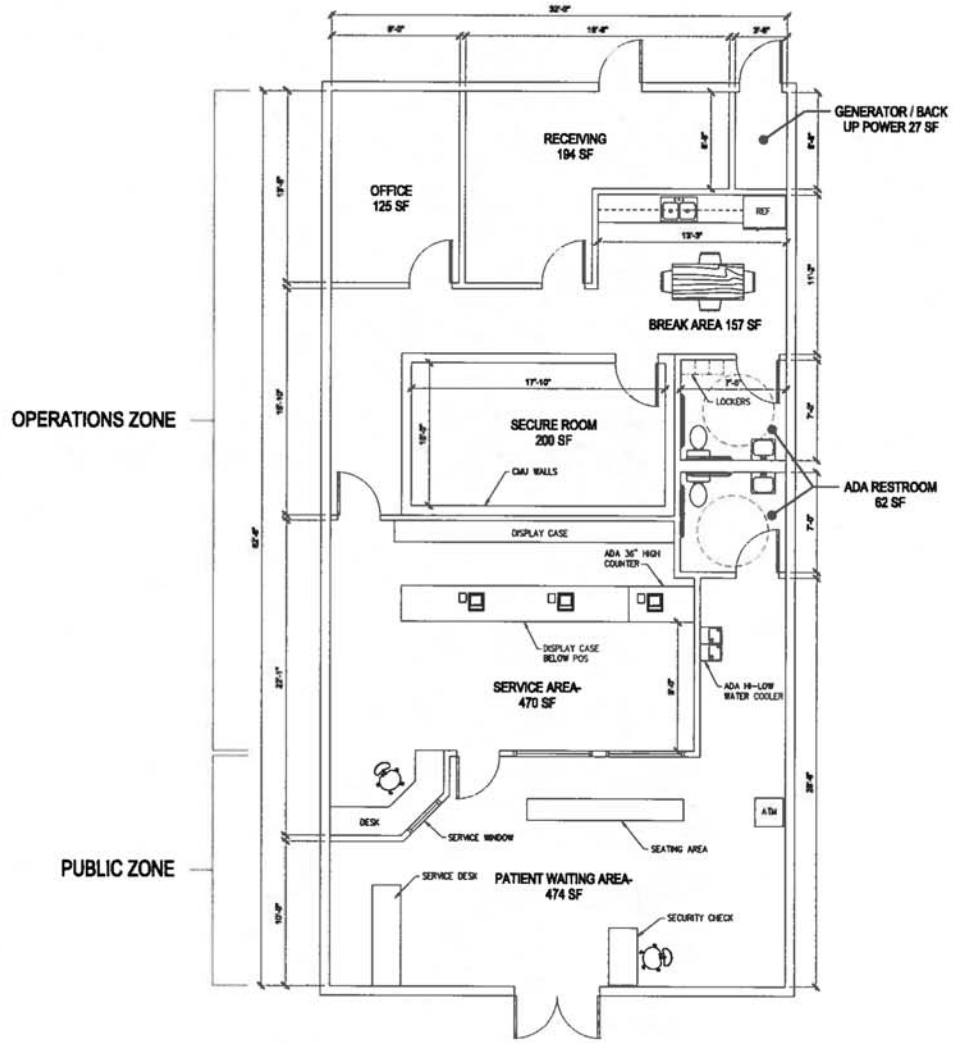
2.7 - Compliance Plan Software

CannaScore is a real-time compliance software, built to analyze any cannabis facility. This thorough analysis covers medical marijuana dispensaries and production facilities to accurately gauge how compliant businesses are in terms of following all of the arduous rules imposed by states, counties, and local government.

Created by industry leaders, The CannaScore auditing system was implemented by those in the business that have been continuously operating as rules were being implemented. The audit process takes approximately 2-3 hours per license, depending on the type of license and the size of the facility. Robust questioning of all aspects of these businesses involves following every line of state regulations to ensure the licensed facility is operating properly and within the law. Once the audit is completed, each license will receive a score based on their compliance. By receiving a score, it allows the owner to fix and rectify existing problems to ensure they can avoid fines, closure, or other business setbacks.

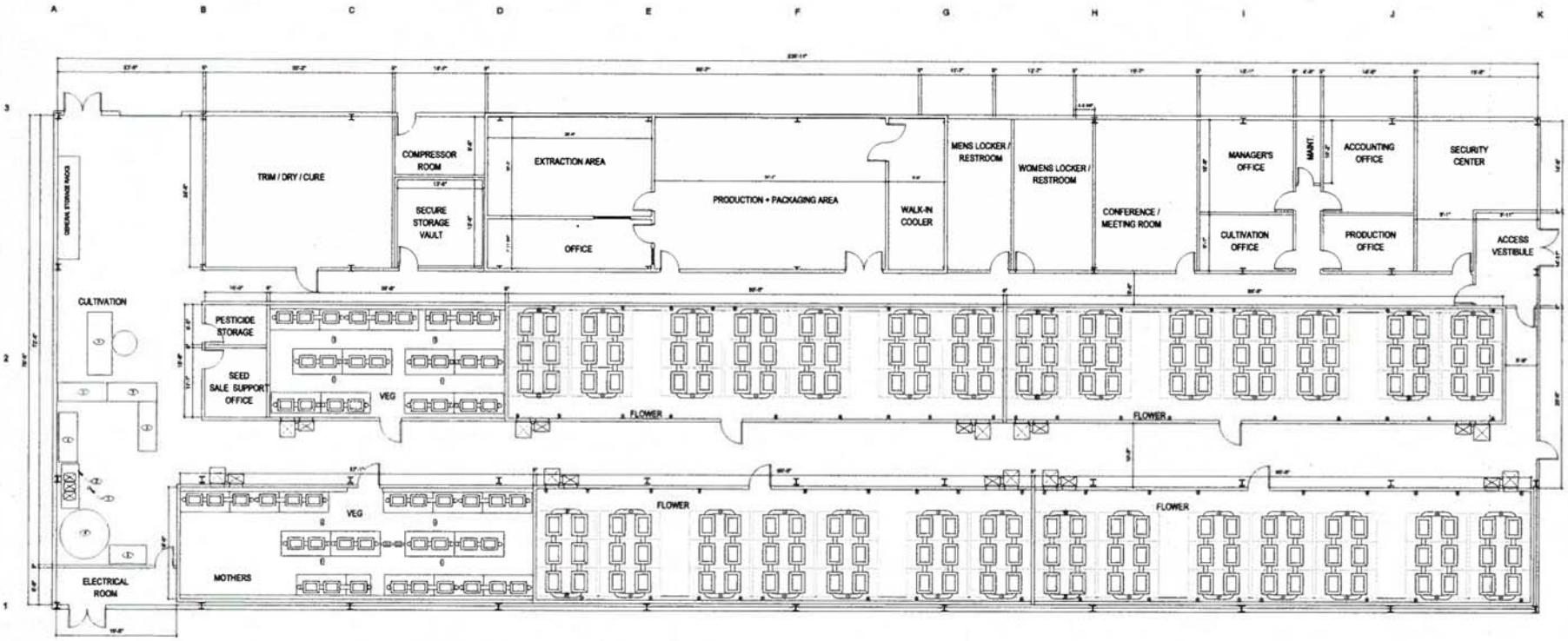
The U.S. Department of Justice, on August 29, 2013, issued a memorandum for all United States Attorneys. This memo, written by James M. Cole, laid out specific priorities that are particularly important to the federal government. In order for cannabis businesses and ancillary businesses that work with cannabis businesses to properly follow the "Cole Memo", they must be sure that those they are working with are operating compliantly, lest they be at risk

for working with a company that is not following the wishes of the Cole Memo. CannaScore gives cannabis owners and those doing business with cannabis companies the peace of mind that the businesses are compliant and aren't in danger of running afoul of the law. Each audit performed, comes with real time reports, meaning problems discovered can be fixed the same day. Photos of violations and issues are attached to make it quick and apparent what needs to be fixed. Reminders can be set to ensure future checks are done on "problem" areas. See attachment "CannaScore Description" for more information.



1 FLOOR PLAN
1/4" = 1'-0"

HAWAII SAMPLE BUILDING PLAN – DISPENSARY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GENERAL STORAGE RACKS
TRIM / DRY / CURE
COMPRESSOR ROOM
SECURE STORAGE VAULT
EXTRACTION AREA
OFFICE
PRODUCTION + PACKAGING AREA
WALK-IN COOLER
MENS LOCKER / RESTROOM
WOMENS LOCKER / RESTROOM
CONFERENCE / MEETING ROOM
MANAGER'S OFFICE
MAINT.
ACCOUNTING OFFICE
SECURITY CENTER
CULTIVATION OFFICE
PRODUCTION OFFICE
ACCESS VESTIBULE
CULTIVATION
PESTICIDE STORAGE
SEED SALE SUPPORT OFFICE
VEG
FLOWER
FLOWER
VEG
FLOWER
FLOWER
MOTHERS
ELECTRICAL ROOM

2.3 - Production Plan (Cultivation) Operating Summary

Ka Lau Malie will be provided with access to cultivation standard operating procedures developed and refined by Medicine Man Technologies through their relationship with Medicine Man Denver. Within these standard operating procedures, quality assurance is of paramount concern during each phase of the plant life-cycle. Standard operating procedures for the safe, secure, and successful growth and management of medical marijuana are broken out into the following key sections:

Genetics/Plant Management: Plant acquisition, seed propagation, cloning, mother plant husbandry and rotation, protocols for entering plant information into the inventory tracking software, and protocols for creating labels and tracking tags assigned to each plant.

Cultivation Process: Early, mid, and late vegetative state(s), plant transfer protocols, water management, watering schedules, hand watering techniques, nutrient management, nutrient feeding schedules, flowering, pruning, topping, cleaning and maintenance, fungicide management, pesticide management, detecting common plant afflictions (ie: powdery mold and mildews, botrytis, spider mites, aphids, etc.), and harvesting a flower system.

Post-Harvest Process: Hand-trimming, machine-trimming, drying, de-stemming, batching, curing, lab testing, and waste disposal.

The cultivation training process involves engaging KLM Managers and Key Personnel of each job classification at Medicine Man Denver's facilities in the specific training regimens needed to secure their proficiency in understanding the performance basics of the position they are being hired to fulfill. This on-site time at an operational facility in Denver, CO allows them to participate actively in training at a fully functioning business which has deployed proven methodology in regard to industrial marijuana production. This environment will provide

trainees the ability to learn the associated tasking through repetitive exposure to the various duties they will be performing on a day to day basis. The on-site training intervals are broken out into the following key processes:

1. Review specific department training videos which are broken out by specific functions of the cultivation and production process, i.e.: cloning, clone maintenance, and flowering. Followed by a question and answer session.
2. Review of the cut sheet summaries pertaining to the training videos, which include a detailed step-by-step explanation of the duties and tasking which were provided in the training videos. Followed by a question and answer session.
3. Reviewing specific departmental standard operating procedures within the licensed Medicine Man Technologies Cultivation Manual, pertaining to the training videos and cut sheets. Followed by a question and answer session.
4. Perform the function within the Medicine Man Denver cultivation facility, which can be in the form of:
    a. Observation and job shadowing;
    b. Actively asking questions to instructing grower agents;
    c. Performing the functions within a live operating environment, through repetition;
    d. Teach the teacher; enabling trainees within the live environment to teach the functions to the instructing grower agent while also receiving feedback
    e. General de-briefing of the training process for group follow up and question and answer session.

This training and integration generally takes place over a period of four weeks, scheduled in one week intervals, but may be repeated as needed to the benefit of the KLM upon request. As

a result of the arrangement with Medicine Man Technologies, KLM has access to an active cultivation operation assuring that KLM Management and Key Personnel will be getting exposure to current best practices within the medical marijuana industry. These one-week long training intervals are broken out as follows:

Week 1: General overview of the medical marijuana cultivation process. Example week:

Monday: Trained on preparing troughs with nutrients, learning feeding schedules, physically feeding marijuana plants, carefully checking each plant for afflictions or issues concerning fungus or pests to remain proactive in regard to plant management, take clippings from mother plants, create a clone, and clone maintenance.

Tuesday: Trained on cleaning and disinfecting a flower system, potting and transplanting marijuana plants, mixing soil, populating vegetative systems, populating flower systems, efficient plant transport between vegetative and flower rooms, creating a screen of green by manipulating plant structure, topping early and mid-vegetative plants, and pesticide management protocols.

Wednesday: Repeat of Monday's training exercises.

Thursday: Repeat of Tuesday's training exercises, and learn proper fungicide management protocols.

Friday: Repeat of Monday and Wednesday's training exercises.

All week (intermittently): Trained on properly harvesting a flower system, proper hand and machine-trimming techniques – the art of trimming the plant, including a flower, tight trim, and fan leaves. Also trained on the post-harvest drying and curing process focused primarily on quality assurance.

Week 2: Repeat of week 1 (overview of the medical marijuana cultivation process).

Week 3: Focused on specific training based on learnings achieved during the week 1 and week 2 on-site training experiences, i.e.: if an individual grower agent has trouble learning proper plant cloning techniques, the individual will spend the bulk of week 3 getting hands on experience with the cloning process.

Week 4: Repeat of week 3 (focused individual training process).

Within each week that trainees are on-site, there is a daily debrief and follow up question and answer session to ensure that standard operating procedures and expectations are being met. Generally, KLM Management and Key Personnel of each team will receive feedback from the Medicine Man Denver staff that is designed to help point out both strengths as well as weaknesses as they are brought out by the training. This will allow KLM adequate time to schedule additional training follow up as needed to perform the tasks outlined in the standard operating procedures before becoming operational. This follows the basics of planned job deployments on a practical application basis and as additionally requested once the initial training interval is completed at the Medicine Man Denver location.

Follow up training by Medicine Man Denver staff as needed or requested by KLM is available onsite at their facility; particularly once the grower agents have been hired as well as during the first week of operations of the business. Additional custom training as well as interim contract support for positions that may still be vacant or that were vacated abruptly are also available to KLM via the arrangement with Medicine Man Technologies as needed.

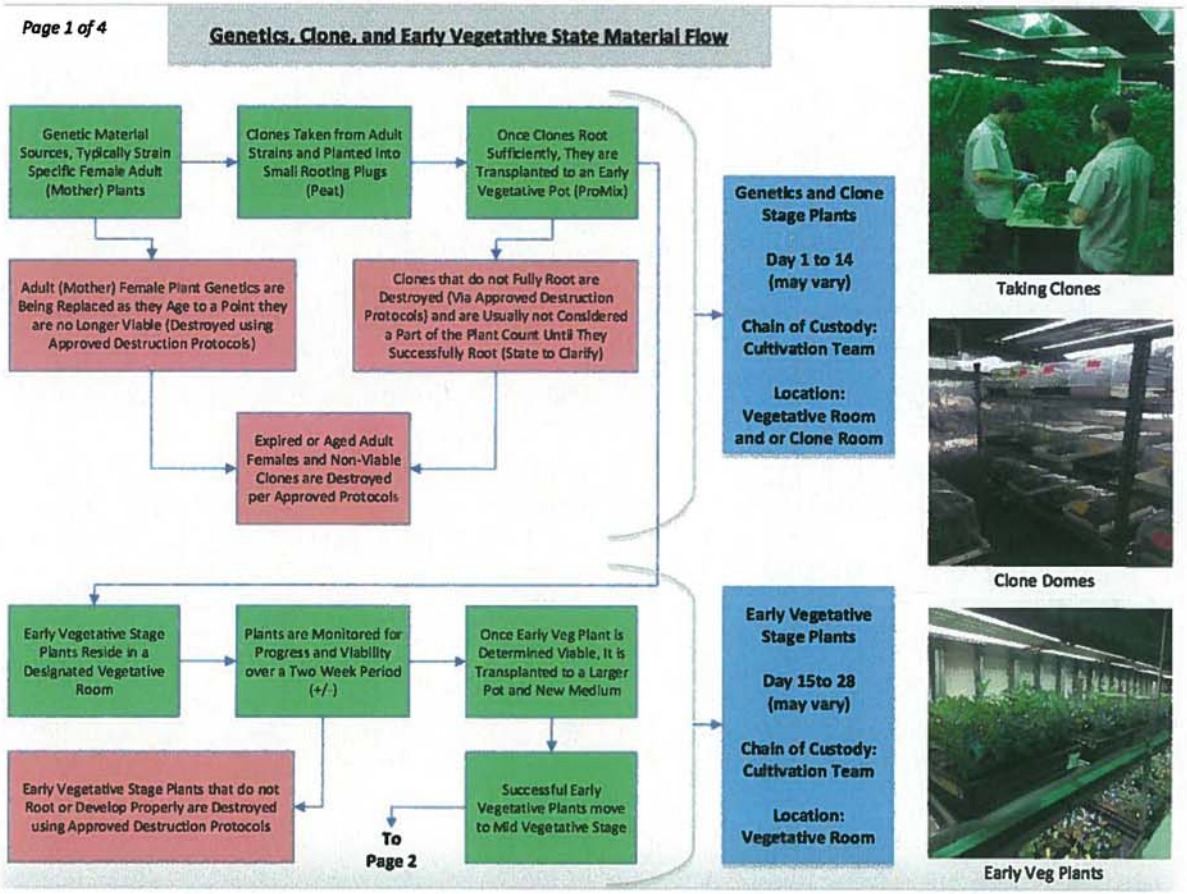
Finally, once KLM Management and Key Personnel are sufficiently trained in regard to the standard operating procedures, designated management staff members will be responsible for internally managing this training process for any new hires. This training process will in the

future take place at KLM operational facility, and trainees will have access to licensed standard operating procedures, training videos, training cut sheets, and other support materials as needed.

KLM will also be given access to all of the current standard planning elements and guidance developed by Medicine Man Technologies including those addressing: genetics, cultivation, post-harvest, batch processing, finished goods, packaging, product alerts, product recalls, quality control, destruction, security, transportation, dispensary, patient/product education, community impact, community outreach, staffing/HR/employment, facility/building management, compliance/auditing, seed-to-sale, inventory management, emergency response protocols management, business, and testing.

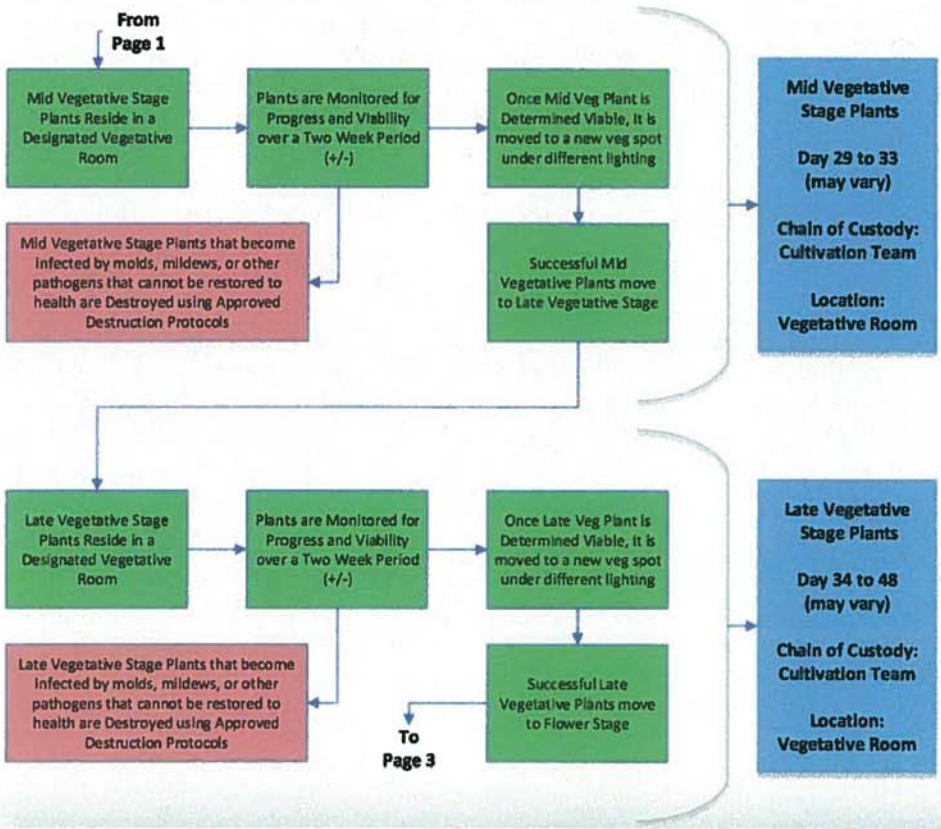
Within the KLM production center, a large staff will be required to ensure the cultivation process runs smoothly and without interruption. This robust staff will be composed of management, security, maintenance and cultivation personnel. In order to facilitate staffing for these roles, KLM will have access to the following job descriptions, including but not limited to: Accountant, General Manager, Controller, Human Resource Manager, Information Technology Supervisor, Trimming Supervisor, Security and Loss Prevention Supervisor, Operations Manager, Inventory Control Supervisor, Compliance Officer, Facility Maintenance Supervisor, Curing and Quality Assurance Supervisor, Curing and Quality Assurance Specialist, Facility Maintenance Technician, Lead Grower, Grower, Grower Trainee, Human Resource Specialist, Information Technology Technician, Pot Washer, Security and Loss Prevention Specialist, Trimming Technician, Trim Trainee.

2.3.1 Production Plan – Cultivation Process Flowchart and Chain of Custody



Page 2 of 4

Mid and Late Vegetative State Material Flow

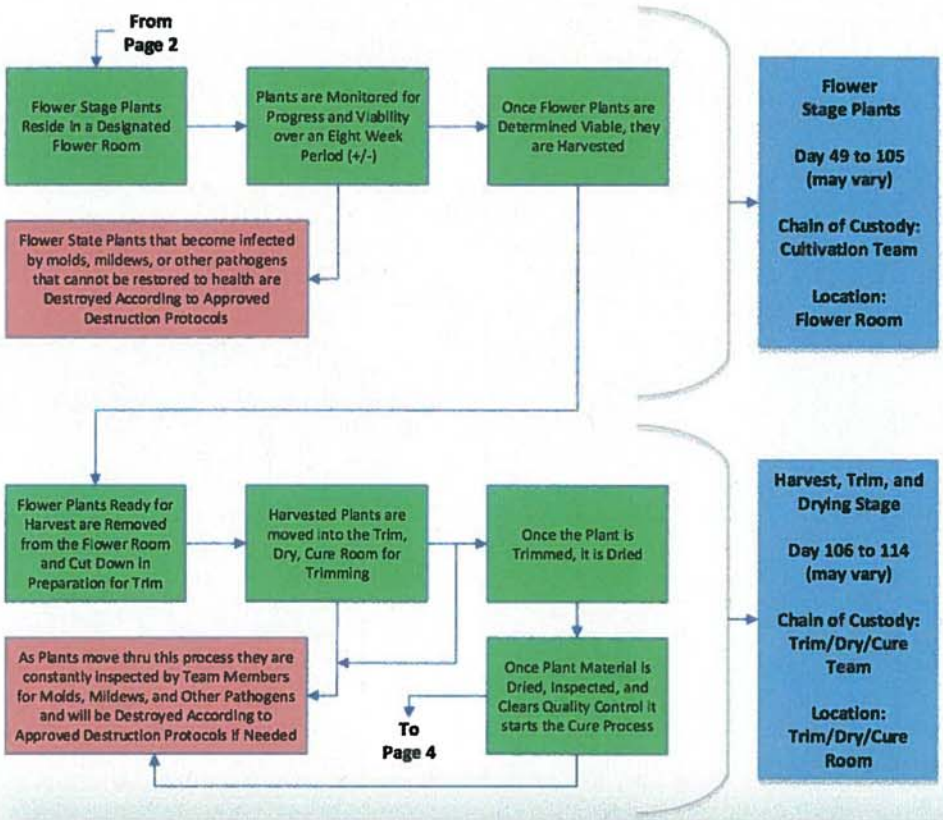


Mid and Late Veg Room

Mid Veg Plants

Page 3 of 4

Flower and Harvest/Trim/Dry Stage Material Flow



Flower Room

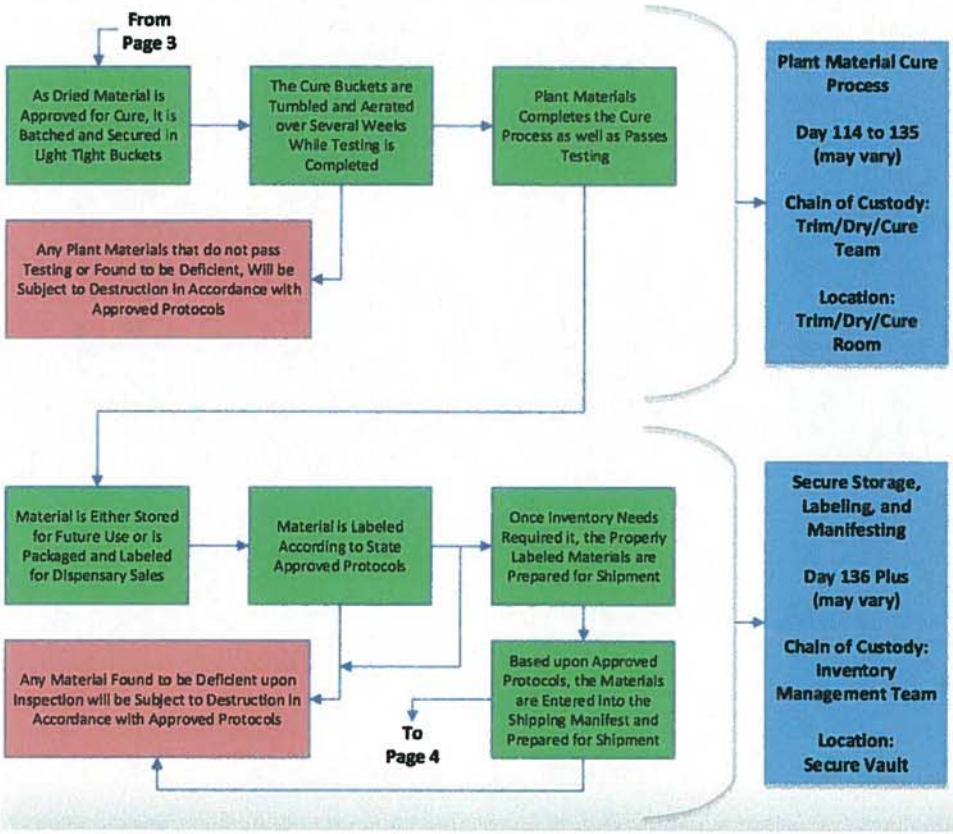
Flowers or Buds

Drying Racks

Trimmed Plants

Page 4 of 4

Flower and Harvest/Trim/Dry/Packaging Stage Material Flow



Cure Bucket

Plant Work Area

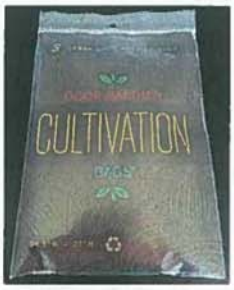
Cultivation Accessway

Waste, Recalled, or Deficient Plant Materials Destruction Protocol

Waste Materials Generated by the Cultivation Operations are Gathered to a Central Secure Location (Usually very low THC basis Stalks/Stems and or Failed Plant Material)

Waste Materials are then Staged to be Ground up to a Fine Basis and Afterwards Mixed with an Approved Media Element to Facilitate Material Anonymity

Waste Materials are then Sprayed with an Approved Sanitizing Agent Prior to Mixing with an Approved Media Prior to Disposal



The Generally Unrecognizable as a Marijuana Materials are then Placed into Odor Resistant Bags Where it is Stored Until Pickup by a Suitable Refuse Materials Contractor or

The Generally Unrecognizable as a Marijuana Materials are then Placed into a Secure Lockable Waste Receptacle Where it is Stored Until Pickup by a Suitable Refuse Materials Contractor

2.3.2 Production Plan – Standard Operating Procedure Cut Sheets

Initial Cloning Process Utilizing Mother Plant Genetics

Average Time Requirements: 30 Minutes

Staffing Requirements: Senior Grower

Prep Items Needed:

- Mother plant
- Table
- Spray bottle with water
- 6 pack root aeration containers
- Rapid Rooter root balls
- Hormone solution applicator
- Hormone solution
- 10 gallon buck filled with mixture of water, liquid Karma™ and Myco™
- 90% isopropyl alcohol
- Clone dome
- Rubber gloves
- Shot glass
- Scissors
- Paper Towels

Cloning is a proven method of propagation. Cloning is the process of taking a small clipping from a mother plant, placing the clipping in a root ball and causing it to take root. In using a mother's proven genetics you will know what strain you are working with, the characteristics and attributes of the plant and when the plant will be harvested.

Step 1: Place all your prep items out on a table with the lid of the clone dome removed from the clone dome base tray.

Step 2: Fill your water bottle and the 10 gallon bucket with water. Put your root balls into the bucket to soak. Put as many root balls in the bucket as clones you plan on clipping. 1 clone dome contains 12 6 pack root aeration containers or 72 clones.

Step 3: Put 10 to 12 6 pack root aeration containers in your clone dome base tray.

Step 4: Put on rubber gloves. Using the applicator fill the shot glass half way with hormone solution and set off to the side.

Step 5: Remove the root balls from the water bucket and squeeze the excess water from the root balls so that they are moist but not soaking. Then place the root ball in each of the aeration containers in the clone dome tray till the entire clone dome is full.

Step 6: Take your scissors and clean them in rubbing alcohol and then wipe the tip with a paper towel to dry off.

Step 7: Use the tip of the scissors to poke holes in the center of the root balls in the clone dome tray.

Step 8: Again clean your scissors with rubbing alcohol and dry them with a paper towel.

Step 9: With the mother plan make a 90 degree cut between a node and a leaf and then trim off the top half of each leaf on the clone clipping.

Step 10: Dip the clone stem in the hormone solution and insert the stem into the root ball hole.

Step 11: Return to the mother plan and make another 90 degree cut between a node and a leaf and then trim off the top half of each leaf on the clone clipping. Dip the clone stem in hormone solution and insert the stem into the next root ball hole. Continue this process until all the root balls are filled with clones.

Step 12: When the entire clone dome tray is filled with clones, take the clone dome lid and spray the entire inside with water from your spray bottle. Then fasten the clone dome lid to the base and using a sticky note pad, write todays date and stick on the outside of the clone dome.

Topping the Plant During the Early Vegetative Stage

Average Time Requirements: 1 minutes per pot

Staffing Requirements: 1 to 4 Growers depending on the magnitude of the job

Prep Items Needed:

- Scissors
- Early Veg potted plants

Toping a plant is a method of training the plant to grow bushier and fuller. Through cutting above a node, it will allow the plant to sprout two branches in place of only one. This is done in preparation for the plant to later sprout several more colas throughout the plant during the flowering cycle.

Step 1: Take an early veg 1 gallon potted plant and count the nodes starting from the bottom of the stem and count 4 nodes up. The 4th node will be the one at the top and will be the newest and freshest node. Using your scissors, clip the stem off at a 45 degree angle above the 4th node to remove any nodes or fan leaves above the 4th node.

Step 2: Check the soil for any debris or old leaves and remove them from the pot as well.

Step 3: Continue this process with each early veg plant needing topped. This process will be done 1 to 2 times during the plants early vegetative stage.

Transplanting Early Veg Plant from 1 Gallon Pot to a Mid Veg 5-gallon Pot

Average Time Requirements: 2-4 minutes per pot

Staffing Requirements: 2 to 5 Growers depending on the magnitude of the job

Prep Items Needed:

- Early Veg plants
- Table
- 5-gallon pots
- Premixed perlite/canna coco soil in a 100 gallon pot
- Tracking Tag

Transplanting is the process of moving the plant from a small pot to a larger pot. This is necessary as the plant grow it will shoot more roots throughout the soil. It is important to have the correct root to soil ratio. More water and nutrients will be necessary as the plant grows. A larger pot will facilitate this need.

Step 1: Use a large table on which to work. Place you premixed perlite/canna coco soil in a 100-gallon pot and put it in the middle of the table. Have ready several 5-gallon pots.

Step 2: Take a 1 gallon Early Veg potted plant ready for transplanting and remove the tracking tag and place it on the table, then begin squeeze the sides of the pot to loosen up the soil.

Step 3: Place your hand over the top of the pot and flip it upside down in order to remove the plant and the soil from the 1 gallon pot.

Step 4: Once the plant and soil have been separated from the 1 gallon pot, flip the plant and soil upright once again and gently place the plant in the center of the new 5-gallon pot.

Step 5: Using the old 1 gallon pot from which the plant had been removed, scoop the premixed soil out of the 100 gallon pot and begin filling the 5-gallon pot until it is about 2 to 3 inches from the top of the 5-gallon pot.

Step 6: Once full, pat down the soil with both hands and insert your tracking tag in the soil.

Topping the Plant during the Mid and Late Vegetative Stage

Average Time Requirements: 1 minutes per pot

Staffing Requirements: 1 to 4 Growers depending on the magnitude of the job

Prep Items Needed:

- Scissors
- Mid and/or Veg potted plants

Toping a plant is a method of training the plant to grow bushier and fuller. Through cutting above a node, it will allow the plant to sprout two branches in place of only one. This is done in preparation for the plant to later sprout several more colas throughout the plant during the flowering cycle.

Step 1: Take a mid or late veg 5-gallon potted plant and begin by first removing any crispy or dead leaves.

Step 2: Check the soil for any debris or old leaves and remove them from the pot as well.

Step 3: At the top of the plant remove all nodes that are long or bushing out by cutting the node at a 45 degree angle. The goal is to even out the canopy at the top of the plant and create new stems that will grow outward to make a bushier and fuller plant.

Step 4: Continue this process with each mid and late veg plant needing topped. This process will be done 1 to 2 times during the plants mid and late vegetative stages.

Watering/Nutrient Feeding the Veg Room

Average Time Requirements: 1 hour

Staffing Requirements: 1 to 2 Growers depending on the size of the job

Prep Items Needed:

- Run-off buckets
- Watering wand
- Hose
- Water source or trough

Feeding the plant is crucial to a healthy, high yielding plant. Proper feeding is required. Resort to the systems feeding schedule for proper nutrients levels.

Step 1: When watering the plants you need to wait till the plant soil is fairly dry. This will be an indication that it is time for watering. Using a watering wand will give you the length you need to reach deep into the middle of the table. With your wand start filling the pots and soil with water starting with the early veg 1 gallon potted plants. Give the early veg plants a 1 to 2 count feeding depending on how moist the soil is. (one 1000, two 1000 as you spray the soil).

Step 2: Place run-off buckets on the floor to catch any excess water run-off as you water the system. There should be little to no runoff because the vegetative plants are not getting fed too much nutrients.

Step 3: Once early veg plants have been fed nutrients, move to the mid veg 5-gallon potted plants. Give the plants a 2 to 3 count depending on how moist the soil is. Water each plant on the mid veg shelf, front to back, row by row till they are all fed.

Step 4: Once mid veg plants have been all fed, move to the late veg 5-gallon potted plants. Give the plants a 4 count when feeding. Water each plant on the late veg shelf, front to back, row by row till they are all fed.

Populating a Flowering System

Average Time Requirements: 15-20 minutes per plant

Staffing Requirements: 1 to 2 Growers

Prep Items Needed:

- Empty, cleaned flowering table

Populating a flowering system is initiated once the flowering system tables have been harvested and cleansed of all old plant matter, soil and debris and cleaned with bleach water to ensure it is

aseptic and free of any possible molds, mildews or traces of anything that could afflict the plants. A system should never go very long sitting empty.

Step 1: Working from the back of the table to the front you will want to transport the shortest plants to the tallest plants. The busiest plants will remain around the edges and on the outer sides of the table and place the skinnier, less full plants in the middle of the table. This will ensure good plant coverage throughout the system.

Step 2: Be sure to have an even spacing of the plants on the table. There are 6 lights that will cover the table. There should be 9 plant spaced evenly under 1 light for a total of 54 plants throughout the table.

Step 3: Once the table is filled with the 54 plants it will be ready to add the trellis netting and get ScrOGed.

ScrOG Netting a New System during the Flowering Stage

Average Time Requirements: 45 to 60 minutes

Staffing Requirements: 2 to 4 Growers depending on the number of new flowering systems

Prep Items Needed:

- Scissors
- Flowering Plant System
- ScrOG trellis net
- Bell wire
- Zip ties

A ScrOG net or trellis net is a fiber net that is laid over the entire system. Each system has a halo surrounding the upper table. The net is harnessed to this trellis so as to lay over the upper base of the plants canopy. This allows the grower to tie down the upper plant canopy to the net. It helps to create an even canopy and helps facilitate the filtration of air and light through the upper region of the plant.

Step 1: After 54 plants have been situated on a table system, take the trellis net and gently place it over the top of the plant system.

Step 2: Gently push the netting down through and around the plant branches and leaves without breaking any plant matter.

Step 3: Stretch the trellis netting tightly around the system halo so that the netting is taut.

Step 4: Using the zip ties, tie down the netting onto the halo around the entire system about every 6 inches ensuring that the trellis netting remains taut.

Step 5: Using scissors, cut away any excess trellis netting below the halo.

Step 6: Using bell wire, tie down the branches of each of the 54 plants on the system to the trellis netting. This is known as ScrOGing (Screen of Green). ScrOGing the plants will create an even canopy on the system and will open the branches to oxygen and light in order to better nourish the entire plant system.

Pruning a Flowering Plant System

Average Time Requirements: 45 minutes to an hour per system

Staffing Requirements: 1 to 2 Growers per system

Prep Items Needed:

- Hand clippers
- Waste bucket
- Rolling stool

Pruning is the process of removing the foliage from the lower 12 to 18 inches of the plant stalk. Otherwise the lower foliage would compete for air, light and nutrients. By removing this superfluous plant matter, it allows the screen of green canopy to take in the additional nutrients the plant will need to dedicate to producing healthy colas.

Step 1: Pruning will be conducted 3 times while the plant is in the flowering stage. The first pruning will be done the first week the plant has been moved into the flowering room. The second pruning will be done once during the second week and the third pruning will be done during the third week the plant is in flower. The Grower will need to utilize a rolling stool so he/she can sit down during this task. Taking the hand clippers, the Grower will begin at one corner of the system and work row by row till all 54 plants on the system have been worked.

Step 2: On the first week prune, start with the first plant in the corner of the system. Start at the base of the plant and trim all leaves and stems closest to the soil. Make sure that no stems or leaves are touching the soil as this could contaminate the soil. Only trim 6 inches up from the soil and then stop. Throw all discarded plant material into the waste bucket. This will later be ground up mixed with soil and bleached for disposal. You will not want to trim any more than about 6 inches because you want to be careful to not shock the plant.

Step 3: Continue trimming off the bottom 6 inches of each plant, row by row and plant by plant until the entire 54 plant system is complete.

Step 4: During week 2 trim off another 6 inches below the canopy starting at the lowest leaves and stems. Work it row by row and plant by plant till the entire system is complete.

Step 5: During week 3 trim off another 6 inches below the canopy starting at the lowest leaves and stems. Work it row by row and plant by plant till the entire system is complete. The goal after the 3rd week of trimming is that by this time you have pruned up to the bottom of the trellis canopy. The idea behind pruning slowly in this manner is to not shock the plant. Also, by removing the lower branches and leaves the base foliage of the plant will not compete for resources, energy and nutrients with the top most canopy.

ScrOGing a New Plant System in Flowering

Average Time Requirements: 1 to 2 hours per system

Staffing Requirements: 1 to 2 Growers per system

Prep Items Needed:

- Bell Wire

ScrOGing is the process of tying down the upper canopy of the flowers on a system to the trellis net in order to keep the canopy even and level. This helps to efficiently and evenly spread the air and light resources throughout the entire system.

Step 1: ScrOGing the flowering system will be done 3 to 4 times during the first 21 days the plants are in Flower. The first ScrOGing is done as soon as the 54 new plants have populated the flowering system and after the trellis netting has been tightly fastened down to the halo. As the plant continues to grow while in flower, further ScrOGing will be required. About every 3 or 4 days during the first 21 days. The idea behind ScrOGing is to tie down and train the plant so that there is an even canopy across the entire flowering system. This will help utilize maximum resources consistently and evenly throughout the entire system. Starting at the corner of the flowering system with the first plant, tie down a branch to the trellis netting with bell wire. When attaching the bell wire to a stem or branch, don't tie the bell wire too tightly. It is better to loop the bell wire around the branch with a little give in order to not damage the plant and allow it to breath.

Step 2: Work the canopy of the entire plant, tying down all the tallest branches to the trellis netting. When the first plant has been tied down move to the next plant, row by row and plant by plant till all 54 plants of the system have been ScrOGed. The idea is to cover each netting square in the trellis so that the netting is evenly covered with plant material. You are creating a ScrOG

or Screen of Green. This is an even and flat canopy of growth throughout the system where each plant is getting the maximum light, CO2 and air circulation. This will prevent inefficient use of resources in given areas around the trellis netting.

Step 3: After 3 or 4 days repeat this process by starting in the corner and ScrOGing down each plant, row by row and plant by plant. Look for branches that have grown upward and are higher than the rest of the canopy.

Step 4: After another 3 or 4 days repeat this process by starting in the corner and ScrOGing down each plant, row by row and plant by plant. Look for branches that have grown upward and are higher than the rest of the canopy. This process will continue till day 21 of the system flowering. Then you will stop ScrOGing the plants and allow them to grow out. Day 21 is around the time the plants begin to bud.

Flower Room System Feeding Schedule

Average Time Requirements: NA

Staffing Requirements: 1 Grower

Prep Items Needed:

- Feeding schedule sheet
- Clipboard

Maintaining a feeding and nutrients schedule for each system is the most effective way of communication among the growing staff. It helps to keep organized as the nutrients levels will increase as the system ages. To give too much or too little of water and nutrients during the plants flowering stage can destroy your harvest and ruin production. Or cause an inferior plant with fewer yield.

Step 1: Each flowering room will have a feeding schedule sheet attached to a clipboard hanging by each system in a flower room. One flower room will typically have 6 to 7 systems resulting in 6 to 7 feeding schedules per system. Organization and communication are the key to a healthy grow operation. It is crucial to maintain information about each system such as the feeding day, the date and the name of each plant on the table.

Step 2: The sheet is filled out in the following manner. On the left is a calendar of the entire month day 1 through 30 or 31. At the top of the calendar boxes put Monday through Sunday. On the right fill out the room and system number, the system start date and the estimated harvest date. Below this information also write in if the system is a 7, 8 or 9 week harvester. In the boxes below fill in the name of each plant on the system in the order in which they are placed on the table from left to right, row by row.

Step 3: Nutrient feedings occur on Mondays, Wednesdays and Fridays. Each day of each week as the system receives feedings, document what watering it is and the date of the watering for that day and that week. In other words for the 3 days of feedings during the first week, the grower will write on Monday, W1 meaning water 1 and will also write the date of that feeding. On Wednesday of the same week they will write in W1 and the date but the quantity will have increased in nutrients given, so on and so forth. The nutrients are increased with each successive feeding. By week 6 or 7 (depending on the strain's harvest time) the plant has been given the largest dosage of nutrients.

Step 4: 10 days to 2 weeks before the system is to be harvested is when the flush feedings are applied to the plants. The feedings consist of water and molasses only. Flushings will also occur Mondays, Wednesdays and Fridays. These flushings are applied in order to clean or flush the

nutrients and any chemicals from pesticide, fungicide and miticide applications out of the plants system.

Step 5: After flushing on Monday at the end of the calendar month, write in F for flush and the date and do this for each successive flush.

Prepping the Trough with Nutrients for Flower Room Feedings

Average Time Requirements: 10 to 15 minutes per trough

Staffing Requirements: 2 Growers

Prep Items Needed:

- Feeding schedule sheets per system
- Scissors
- Shot glass
- 2 one gallon pitchers
- 2 graduated cylinders
- 150 gallon trough filled with water
- Large mixing paddle
- TDS meter
- Manual fork lift
- Paper and pencil
- Silica
- Micro Nutrients
- Macro Nutrients
- Drip Weed
- Bud Swell
- Canna Coco A
- Canna Coco B
- ph Down

Adding the proper amount of nutrients to the water is important in producing the most vibrant product. Depending on the stage of development of the plants on a system will determine how to prepare the trough and how much nutrients is required. To give too much or too little nutrients to a system can be detrimental to your plants and cause the plants to under produce.

Step 1: Nutrient feedings are performed for the flower rooms every Monday, Wednesday and Friday. The Veg room will be fed during Tuesdays, Thursdays and sometimes Saturdays if needed. The plants are fed with macro nutrient mixtures of nitrogen, phosphorous, potassium, calcium and magnesium. They are also fed with micro nutrient mixtures of zinc, iron, magnesium immobile and sulfur. All crucial to the health and vigor of the plant. The grower will start by walking the flowering rooms and review all feeding schedules on each system to see what feeding week each system is on. The week determines how many parts per million of pH will have to be added to the mixture. As the days and weeks go by, more pH is added to the water. Write down each system's feeding day.

Step 2: Fill the 150 gallon trough full of water and with a manual forklift transport the trough to the nutrient table. One trough will feed two systems.

Step 3: On the nutrient table lay out all your chemicals you will need for mixing as well at your pitchers and graduated cylinders.

Step 4: Working in a team of two growers per trough is best so you can get the mixture done quickly and get the other growers feeding the rooms. First you will add Silica to the water as this will ensure no salt is in the water. If salt is in the water it will crystalize and won't allow the other chemicals to mix as well. Silica removes the salt content.

Step 5: Next you will add the micros, Drip Weed, Bud Swell, Canna Coco A and B. It is a good idea to have 2 one gallon pitchers for the Canna Coco. Write an A on one pitcher to be used for

only Canna Coco A and write B on the other pitcher to be used for only Canna Coco B. You do not want to cross contaminate any chemicals with the canna coco.

Step 6: Once all the chemicals are added, use a TDS meter to measure the parts per million once everything is added. Using a paddle, stir the water to mix everything well. This will help to get an accurate reading on the meter. If the parts per million are too low (depending on the systems feeding schedule) you will need to add more Canna Cocoa A and B till the reading is where you want it.

Step 7: When you get the parts per million where it needs to be, you will finally ad the citric acid pH Down. Using a meter you will shoot for a reading of 6 regardless of the feeding schedule. A reading of 6 is safe. pH Down is very powerful so it is important to add it slowly on capful at a time. Start with 1 cap and see if you get the reading you want. Should you overshoot 6 on the meter, you will have to add pH Up till you get to the range of 6. It is best never to use pH Up if possible so try to hit the range with pH Down.

Step 8: Use a paddle to mix the pH Down. You will need to let it settle for a second to get an accurate reading because pH Down will flux slowly.

Watering/Nutrient Feeding the Flowering Plant System

Average Time Requirements: 30 Minutes

Staffing Requirements: 1 to 2 Growers depending on the size of the job

Prep Items Needed:

- Run-off buckets
- Watering wand
- Hose
- Water source or trough

Feeding the plant is crucial to a healthy, high yielding plant. Proper feeding is required. Resort to the systems feeding schedule for proper nutrients levels.

Step 1: When watering the plants you need to wait till the plant soil is fairly dry. This will be an indication that it is time for watering. Using a watering wand will give you the length you need to reach deep into the middle of the table. With your wand start filling the pots and soil with water starting on the corner of the system working plant by plant and row by row.

Step 2: Place run-off buckets on the floor to catch any excess water run-off as you water the system.

Step 3: Fill the first pot with a good coverage so that the water is standing on the surface of the soil prior to soaking in.

Step 4: Move to the next pot and fill it and each successive pot in this manner till the entire system has been watered.

Step 5: Remember you are only watering the soil and not the plant canopy.

Fungicide Management During Flowering

Average Time Requirements: 30 to 60 minutes depending on the time the system has been in flower

Staffing Requirements: 1 to 2 Growers

Prep Items Needed:

- Two Sprayer Applicator 2 gallon mixing tanks
- Green Headlamp
- Fungicide Treatment: Serenade™ and SaferGro Mildew Cure™

Fungicide management is usually performed once a week in flower. Wednesday is the designated day for treatment sprays. Only organic safe chemicals are used during flower.

These treatments are only done during the 12 hours that lights are out in the flower room photoperiod. Green headlamps are used so the grower can see in the dark. The green spectrum light is not harmful to the plant and will not cause the plant stress. It is important to be delicate with the plants so as not to disrupt their growth process nor disrupt this photoperiod during light deprivation.

Step 1: Preparing the two spray applicator mixing tank is the first step. Be sure to completely rinse out the mixing tanks with cold water several times prior to beginning. This will ensure there is no cross contamination with any residual chemicals sitting in the sprayer canister.

Step 2: Fill the two empty and flushed mixing tanks with warm water till it is about 2 gallons full.

Step 3: Next you will begin adding the fungicide chemicals to the warm water. In the first tank you will add Serenade™ disease control concentrate. It will be used during days 1 through 35 of the plants being in flower. Add Serenade™ to a 2 gallon mixing tank. Apply 3 cap fulls which equal 1.5 caps per gallon.

Step 4: Next will be to prepare a second mixing tank for Mildew Cure™ treatments. Mildew Cure™ is cotton seed oil and garlic oil. You will add 1 ounce per gallon or 2 ounces in the two gallon mixing tank. This is sprayed day 36 till the start of flush. Flush begins 10 day prior to harvest.

Step 5: Now you should have two mixing tanks prepared, one with Serenade™ mixture and one with Mildew Cure™ mixture. Now screw on the lids give them a good shake to ensure they are mixed well with the warm water.

Step 6: Grab the handle and pump it up and down several times to build pressure through the lines. You will want to take a moment and clear the lines to ensure that all residual chemicals

have been fully cleared prior to spraying the flowering plants. Clear the line by spraying in a trash can for a count of 10 seconds. Now you are ready to spray the flowering system.

Step 7: In the flowering room you will only spray the canopy, not the soil or stalk. Apply the treatment by spraying the canopy sweeping back and forth, row by row, front to back. A 2 gallon mixing tank can treat about 2 to 3 systems depending on the growth phase or time the systems have been in flower. The longer a system has been in flower the fuller and larger the canopy will be. A system that has been in flower longer will require more of the treatment.

Harvesting the Flowering Plant

Average Time Requirements: 1 to 1.5 hours per system

Staffing Requirements: 2 Growers per system

Prep Items Needed:

- Scissors
- Rolling transport staging cart
- Twine
- Support stick

Harvesting a system is the process of removing the ScrOG trellis net from around the plant by cutting the netting away from the stems and leaves that are tied down. Harvesting is the crowning day to the entire plant production life cycle. By this stage the plants have fully grown and produced the desired finished bud, tight trim and kitchen leaves that will be cut away and sold.

Step 1: Remove the ScrOG trellis netting by first cutting one side of the netting attached to the halo down the row of plants closest to the halo. Leaving the rest of the halo netting intact will support the rest of the top heavy plants on the system.

Step 2: It is best to work one system in teams of two growers. One grower will cut away the trellis netting while the other will hold the plant so as not to fall over. The plants will be very top heavy. Working 1 plant at a time down the first row. Use scissors and begin cutting the trellis netting attached to the branches of the first plant in the first row (it is not necessary to remove the bell wire holding the plant branches to the trellis netting. It is better to leave it on the plant and cut a few inches out from the plant. The Trim Department will remove the bell wire and trellis netting when they begin trimming the plant). As the plant comes loose have the other grower hold the plant stalk up so that it does not fall over and damage the colas.

Step 3: Once the plant comes loose, while the second grower is holding up the plant, his partner grower will stake a support stick into the soil next to the stalk. Tie the stalk to the stick with twine in order to keep the stalk vertical and prevent it from falling over.

Step 4: Once the plant has been cut loose and staked, the second grower will walk the plant to the rolling transport staging cart.

Step 5: This process will be repeated for each plant down the first row. Once the entire first row is removed, start working the second row of the system by again removing the trellis netting around the plant.

Step 6: When all 54 plants are removed from the table and placed on the rolling staging carts, wheal the cart to the Trim Department staging area.

Hand Trimming Cannabis

Average Time Requirements: 1 to 2 hours per plant

Staffing Requirements: 1 Trimmer per plant

Prep Items Needed:

- 4 aluminum turkey trays baking pans

- Hydrofarm or Fiskars hand clippers
- Nitrile gloves
- Isopropyl rubbing alcohol
- Paper towels
- Permanent marker
- Weigh scale

Trimming consists of breaking the harvested plant down to its three most basic products…finished bud, tight trim and kitchen leaf. Finished bud will be sold in the dispensary for smoking, tight trim (Sugar Leaf) will be either sent to make joint mix and pre-rolls, or it will be sent to an extraction facility to make oils and infused products. The kitchen leaves will be sent to the kitchens to make edibles.

Step 1: The trimmer will retrieve one harvested 5-gallon potted plant from the staging cart and bring it to their trim work station.

Step 2: Put on a pair of Nitrile gloves. Remove the support stake by cutting off the twine holding the stalk to the stake. Next, using the hand clippers, cut the stalk at soil level to remove the plant from the soil and the 5-gallon pot and put the entire plant into a large aluminum baking pan.

Step 3: Remove the tracking tags from the 5-gallon pot and put the old pot and soil aside to later have the soil removed from the pot and the pot cleaned for reuse.

Step 4: Weigh the entire plant in the tray and on the reverse side of the tracking tag record the plant weight, our name, the time and date.

Step 5: Return the tray to your trim work station and lay out two more aluminum baking trays. One tray will be used for waste and the other will be used for the stems that are removed from

the stalk. Begin by removing all ScrOG netting and bell wire from around the plant and put them in the waste tray.

Step 6: Once the netting and bell wire have been removed from the plant, using your hand clippers, cut the stems from the stalk and put the stems in a separate aluminum baking tray. The stems should be about a foot or less in length. If any loose bud breaks off as you are removing the stems from the stalk, place the loose bud in a separate tray. Once all the stems have been removed from the stalk, place the stalk in the waste tray.

Step 7: Put the waste tray aside and grab the stem tray and put it in front of you. Then grab a new aluminum baking pan and set it in front of you next to the stem tray. Take one stem out of the stem tray and remove all large fan leaves from the stems. When the leaves have been removed from that stem, put the stem back into the stem tray. Work each stem in the tray till all fan leaves have been removed, then set the fan leaf tray aside with the waste tray.

Step 8: The stem tray should now have all fan leaves removed. Grab two new aluminum baking tray and set them by the stem tray. One tray will be for the sugar leaves and the other will be for the finished bud. Put on a new pair of gloves and grab the hand clippers. Take a stem from the stem pan and remove all the tight trim, also called sugar leaves, and collect all the clippings in the tight trim pan. The goal is to trim the tight trim off in such a way that the finished but is attractive and round. Work all the buds on the stem till all the tight trim is removed and collected in the tight trim pan. You should then be left with a foot long or shorter stem with several finished buds connected. Put the finished but stem in the other pan designated as the finished bud pan.

Step 9: Grab another stem from the stem tray and repeat this process. Continue working the entire stem tray until every stem has been separated into a tight trim tray and a finished bud tray.

Step 10: You should now have a waste tray full of stalks, dead leaves, ScrOG netting and bell wire; a fan leaf tray that will go to a kitchen to make edibles and other infusions; a tight trim tray that will go to an extractor or to make joint mix; and you should have a finished bud tray that will go to the Cure department to be hung up and dried. Take these four trays and put them by the scale to be weighed.

Machine Trimming Cannabis

Average Time Requirements: 10-20 minutes per plant

Staffing Requirements: 2 to 3 Trimmers

Prep Items Needed:

- Scissors
- Harvested plant
- 4 Aluminum baking Trays
- Rubber gloves
- Weigh scale
- Trimming Machine

Utilizing a trimming machine is ideal for large scale industrial grow operations where production and output is high. One machine can trim 10 times what one Trimmer can produce. It is best to machine trim hardier strains not bothered by the machine or lesser strain varieties as the machine will not produce as nice a presentation on the bud as a Trimmer. Machine trimming will aid in pushing out quicker and more efficient buds in a timely manner to meet demand. Machine trimming is performed in two phases, the machine trim prep phase and the actual machine trim phase.

Step 1: During the prep phase you need to prepare the plant prior to getting machine trimmed. Take a harvested plant and cut it away from the 5-gallon pot by cutting the stalk just above soil level and place the plant stalk-side-up in an aluminum baking tray.

Step 2: Weigh the plant tray and record the weight in to the POS tracking system.

Step 3: Prep your table by placing 3 aluminum baking trays on the table. 1 tray will be for waste material, 1 for large fan leaves and 1 for the bud.

Step 4: Put on rubber gloves and using your scissors, cut the branches away from the plant matter and place the branches in the waste tray.

Step 5: Begin the shucking process by taking on stem and removing all the largest fan leaves. Place the fan leaves into the fan leaf tray. As you remove large fan leaves you will begin to uncover the bud. Place the bud in bud tray. Once you have removed all the fan leaves and buds off the stem, put the stem in the waste tray.

Step 6: Take another stem and remove the fan leaves and the buds as before, placing the stem, buds and fan leaves in their proper trays. Work the entire plant in this fashion till the plant is complete and broken down into all three byproducts.

Step 7: Weigh all three trays individually and record the fan weight, the bud weight and the waste tray weight into the POS tracking system and write the weights down on the tracking tag.

Step 8: Once all is weighed and recorded, the large fan leaf tray will go to the Cure/Dry department to complete its drying phase. This will later be sold to kitchen operators to make edibles. The waste tray plant materials will be ground up and bleach and then disposed of. The bud tray will be taken to the machine trimmer.

Step 9: With the bud tray now transported to the machine trim room it is time to begin the second phase of trimming the plant. It is important to start and end with a clean machine. Make sure the

machine has been properly cleaned out of all small plant fibers to avoid clogging the machine or preventing the tightest trim possible.

Step 10: With the machine trimmer clean, take the bud tray and dump the entire contents of plant matter into the feeding net and begin by removing the smaller fan leaves from the buds and placing the fan leaves into a separate aluminum tray. Also remove any excess stems from the buds and place those in a waste tray.

Step 11: Once all the smaller fan leaves and stems have been separated from the buds, push only a few handfuls of the buds into the machines tumbler. You do not want to push too many buds into the tumbler at any given time or it will affect the machines ability to adequately trim the tight trim from the bud. The machine will spin the buds through the tumbler's blades and begin removing the tight trim from the bud.

Step 12: After a minute or so of tumbling the first few handfuls of bud, remove the trimmed bud by inserting your hand into the tumbler and pushing out the bud into the bud tray.

Step 13: Repeat this process with the next few handfuls of bud sitting in the feeding net. Do this till all the buds have been tumbled and all the tight trim has been removed.

Step 14: Once all the buds have been tumbled, dump the entire trimmed bud into the feeding net a second time and allow the buds to be tumbled once again. This will ensure that all the tight trim has been separated away from the bud. Only push a few handfuls of the buds through the machine at a time in order to get a close trim.

Step 15: Once the buds have all gone through the machine a second time, take the tray containing any waste and have it disposed of by grounding it and bleaching it so it is unrecognizable. Take the bud tray and the fan leaf tray to the cure/dry department to complete the drying phase of the plants life cycle.

Drying the Finished Cannabis

Average Time Requirements: Depends on the number of newly trimmed plants

Staffing Requirements: 1 Cure Specialist per drying rack

Prep Items Needed:

- Drying rack
- Several trays of finished bud product
- Step stool
- POS tracking tags
- Several aluminum turkey tray baking pans

Drying is the process of taking the plants three basic products of finished bud, tight trim and kitchen leaves and allowing them to dry in an environment conducive to proper drying. Most of the moister must be removed in order to create a quality product to be sold. Once the tight trim is dried it will be de-nugged and cured.

Step 1: A finished bud requires between 7 to 10 days to dry depending on the strain. Drying the finished bud is necessary in order to remove plant moister and aid in the curing process. If a drying rack is full of dried finished bud that have been dried the requisite amount of days, then they will first need to be removed from the rack. Using a step stool and several aluminum baking pans, begin removing one plant at a time starting at the top left corner of the rack and working from left to right row by row. The drying rack should be viewed the same as if you were reading a book. One plant and its tag will be placed on the rack from left to right with the tracking tag placed at the end on the far right of the plant in order to differentiate one plant from the next. Behind the tag will be the start of another plant from left to right with the tracking tag

hanging on the far right, so on and so forth. Use one baking pan per plant and place them off to the side to be de-nugged (the process of removing the dried cola from the stem).

Step 2: Retrieve the trimmed plant from the trim department. The plant will have been trimmed and broken down into 3 main trays, the fan leaf, the tight sugar leaf and the finished bud. Retrieve these 3 trays and its plants tracking tag and transport them to the Dry/Cure room.

Step 3: Place the fan leaf tray and the tight sugar leaf tray on the curing shelf to allow it to air dry for 7 to 10 days. Place the finished bud trays on a table or on the floor next to the drying racks.

Step 4: On the empty drying rack begin by working one finished bud pan at a time, from left to right using the stem of the plant as a hook to hang the plant to the wire. If you have several plants to dry, it is okay to press each finished bud stem tight together to make room for as much plant product as possible. If there are few plants to hang then it is ideal to spread the stems out a bit on the rack as this will aid in drying the plant quicker. Once the first plant tray is fully hung for drying, hang the POS tracking tag at the far right of the plant to act as the division line between one plant to the next. Grab the next plant and work again from left to right hanging the tracking tag at the far right. Repeat this process from left to right and row by row till you are either out of finished bud to dry, or the rack is full.

Step 5: You may notice in the finished bud pan that there are a few loose buds without a stem. These sometimes break off the stem when they are getting trimmed. These will be placed in a net to dry and will later be added to a batch of mixed bud. Mixed because several strains of loose bud will be placed in the drying net to be sold as mixed bud product later on.

De-nugging the Dried Finished Cannabis

Average Time Requirements: 30 min to an hour depending on the size of the plant

Staffing Requirements: 1 Cure Specialist per tray

Prep Items Needed:

- Hydrofarm™ clippers
- Aluminum baking tray of dried finished bud product
- POS tracking tags
- Several aluminum turkey tray baking pans

De-nugging the finished bud is the process of taking the dried finished bud and removing the colas from the stems. The colas will then be cured and the stems will be disposed as waste.

Step 1: Once the plant's finished bud stems have completed the 7 to 10 day drying process, the plant is then removed from the drying rack and placed into an aluminum baking pan. One pan is to be used for each individual plant so that the strains do not get mixed up.

Step 2: Place the dried finished bud pan on the table and grab a second empty aluminum baking pan and place it on the table next to the dried finished bud pan. Remove the POS tracking tag from the dried finished bud pan and place it in the empty baking pan.

Step 3: Using the Hydrofarm clippers grab one stem of dried finished bud from the pan and begin removing the buds from the stem. This process is known in the industry as de-nugging the plant. You can either cut the cola from the stem or you can often break it off with your hand because it is so dry. The de-nugged colas will be put on one half of the empty baking pan and the stems will be placed on the other half of the pan next to the POS tracking tag.

Step 4: Once one entire stem of the plant has been de-nugged, take another dried finished bud stem and repeat the process of de-nugging. Continue this process till the entire plant's dried finished bud has been de-nugged. Be sure that as you are de-nugging the plant you are paying close attention and inspecting each cola for impurities such as powdery mold or mildews. This

should always be reported to the Grow team. The Cure Specialist acts as a crucial line of defense in quality control.

Step 5: Once the plant has been fully de-nugged it is now time to weigh the tray. Once half of the tray has the colas and the other side of the tray has the dried stems. The stems are waste but still must be weighed. Put an empty aluminum baking tray on a scale and place the stems in the tray to be weighed. Record the weight by writing the weight on the back of the POS tracking tag. Then weigh the de-nugged colas and record the weight on the back of the tag as well. Then go to the computer and record these numbers into the tracking system.

Step 6: This is the process for one entire plant. Repeat this process with the next plant until all dried finished bud plants have been de-nugged and their weights recorded into the tracking system.

Aerating Cannabis During Cure

Average Time Requirements: 15 minutes to burp and 2 minutes to flip the product

Staffing Requirements: 1 to 2 Cure Specialists

Prep Items Needed:

Cure Bucket

A good cure is important in aiding the colas in bringing out their resins, smells and flavors. A cure can take anywhere from 3 weeks to 3 months on average. Very similar to curing a fine wine. The product must be burped on a regular basis during the cure process. Burping is the process of opening the cure bucket for 30 minutes at a time and giving the bucket a good shake. This allows the product to breath and removes some additional moister. In dry environments it is important not too over burp as this could overly dry out the product which will make for an inferior product.

Step 1: Curing consists of putting the dried finished buds into a light-tight/air-tight bucket or container and sealing it with a lid. Denying the bud light and air creates the proper environment to allow the plants natural resins and flavors to come out. Like a fine wine, the buds will sit and age, improving the quality of the finished product.

Step 2: Burping the cure bucket is the process of opening up the bucket lid and airing the buds for no more than 1 hour daily. Remove the lid and let the open container sit on the shelf for an hour.

Step 3: Set a timer to let you know when the hour is up. You do not want to burp longer than an hour each day or the bud could get too dried out and loose too much weight and ultimately ruin the quality of the finished product.

Step 4: Repeat the burping procedure with all curing product daily. The cure and burp process can last for several days or several weeks depending on the demand.

Flipping the Product During Cure

Average Time Requirements: 2 minutes

Staffing Requirements: 1 to 2 Cure Specialists depending on the size of the job

Prep Items Needed

Cure Bucket

Flipping the cure buckets (1 time per month in dry climates, 2 to 3 times per month in higher humidity climates) is the process of removing the product from a cure bucket into another cure bucket and then replacing the product back into its original cure bucket. This allows the product resting at the bottom of the bucket to now be on the top. It helps to release the moister that accumulates at the bottom of the bucket.

Step 1: Flipping the cure buckets is a process that needs to be done 1 time per month for each cure bucket during the life of the cure cycle. Flipping is important to release trapped air and moister at the bottom of the bucket to improve the overall cure of the finished product.

Step 2: Place an empty cure bucket on a table and remove the lid.

Step 3: Go to the cure storage shelves and take a sealed cure bucket full of finished product and carry it to the empty cure bucket on the table.

Step 4: Remove the cure lid and remove the product batch tags and poor the entire cured plant bud into the empty container.

Step 5: Now pour the newly filled container back into the original cure bucket once again and place the product batch tags back into the container.

Step 6: Reseal the cure bucket lid and place the cure bucket back on the cure shelf.

Step 7: These steps are to be repeated with each curing bucket one time per month.

2.3.3 - Production Center Photos (File Photos Similar)

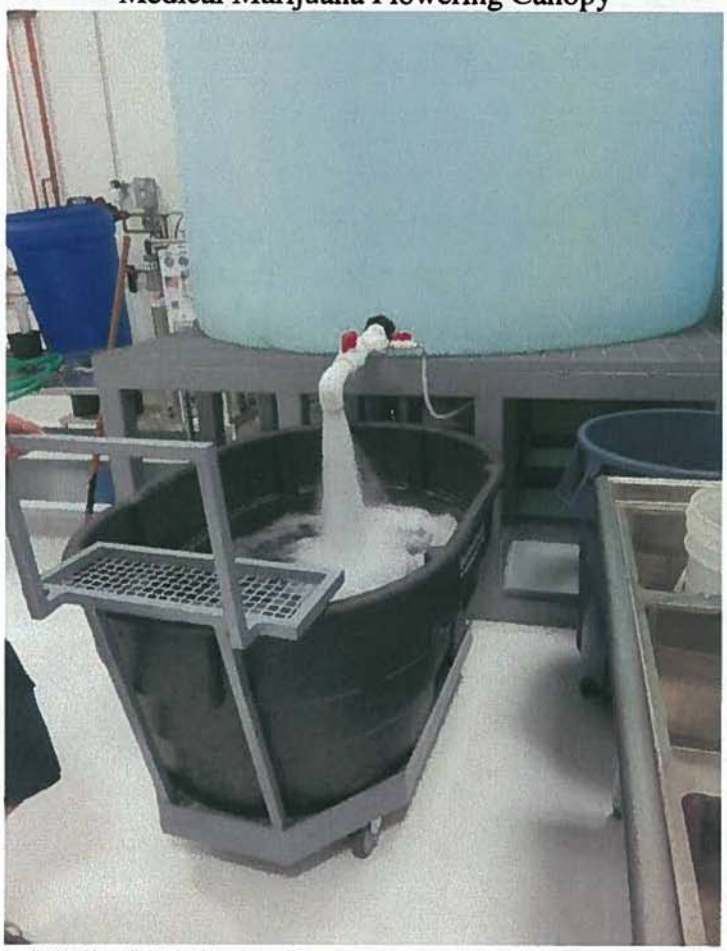
Medical Marijuana Plant Management Area

Medical Marijuana Plant Management Corridor

Medical Marijuana Plant Cultivation Access Corridor

Medical Marijuana Vegetative Space

Medical Marijuana Flowering Canopy



Medical Marijuana Reverse Osmosis Water Station

Medical Marijuana Flower Table Detail (Canopy Frame)

Medical Marijuana Flowering Room (Table + Light System)

Typical Vegetative Space (Mid Veg Lower photo, Late Veg Upper photo)

Medical Marijuana Hanging Dry Racks

2.4 Manufacturing Operating Plan Summary

Overview

The extraction and manufacturing area of the medical marijuana manufacturing facility will manage and produce the extraction of cannabinoids from the leaves and flowers of the female marijuana plant and the production of these extractions into medical marijuana products. The extraction and manufacturing area shall meet or exceed requirements set forth by the State of Hawaii. All extraction, packaging and labeling of medical marijuana products will comply with all state and local laws. All local and state fire, safety and building codes will be followed and internal manufacturing systems will be approved before operation.

The medical marijuana product extraction and manufacturing area will be physically separated from the other areas within the manufacturing facility and shall be considered a Limited Access Area. Only employees designated to work within the area will be permitted access. The facility will have designated areas for: Manufacturing, Packaging and Labeling, Climate Controlled Storage (walk-in coolers, reach-in coolers and freezers), Secured Storage and Toxic and/or Flammable Materials Storage. The area for the extraction and manufacture of medical marijuana products will have mechanical ventilation of sufficient capacity as necessary to keep rooms free of excessive heat, steam, condensation, vapors, obnoxious odors, smoke and fumes.

The extraction and manufacturing area will have independent exhaust vents respectively in addition to the facility HVAC system. Equipment and surfaces used throughout the areas of extraction, manufacturing, processing and packaging of medical marijuana products will be constructed of NSF certified stainless steel. All equipment and utensils used will be lab grade or

of commercial kitchen standards and meet or exceed State of Hawaii requirements. The areas will be open and free as to provide ample space for preparation and sanitation.

Extraction

Marijuana concentrate is extracted from raw, cured marijuana by the use of:

- CO2 Sub/Super-Critical Extraction provides pure, solvent-free extracts by utilizing carbon dioxide. CO2 is a green alternative to solvent-based extraction techniques. The properties of a supercritical fluid can be altered by varying the pressure and temperature, allowing selective extraction. The low viscosity of supercritical carbon dioxide allows it to penetrate into the material more easily while its diffusivity allows for faster extractions. CO_2 is an environmentally friendly solvent that leaves no residue. Known as the "Entourage Effect" these "Whole Plant Extractions" are known to be more effective medicinally by four unique qualities:

1. Ability to affect multiple targets within the body
2. Ability to improve the absorption of active ingredients
3. Ability to overcome bacterial defense mechanisms
4. Ability to minimize adverse side effects.

CO2 extractions will be performed in a professional-grade, closed- loop extraction system, rated to minimum 900 pounds per square inch. All solvents will be stored in secure and approved flammable materials storage containers. All MSDS sheets will be displayed along with emergency procedures to provide proper response to an accident involving a solvent.

Employees will be will be trained by the industries best practices and company extraction Standard Operation Procedures (SOPs) Marijuana flower and trim is cured in the Cultivation Area of the Manufacturing Facility. After the curing process, cured flower and trim will be delivered securely to the Extraction Area of the Manufacturing Facility and prepared for the

extraction process. Marijuana from the cultivation area will be delivered securely to the extraction area when after properly cured and ready to be extracted. The chain of custody of the marijuana plant material from cultivation to extraction will be documented within the Seed-to-Sale Inventory Tracking Software. The extraction staff will properly and securely store the marijuana leaves and flowers until the cannabinoids are processed and extracted. Marijuana extract shall be assigned a lot number immediately upon creation. Extraction employees will be trained in the best practices of all emergency procedures.

The extraction area ventilation system will be spark-resistant and separate from the main manufacturing HVAC system. All employees working in the Extraction and Production Area will be trained in Standard Operating Procedures, Good Manufacturing Practices and Emergency Procedures.

CHEMICAL HANDLING

Material Safety Sheets:

Safety data sheets (SDS), material safety data sheets (MSDS), and product safety data sheets (PSDS) are an important component of product stewardship and occupational safety and health. They are intended to provide workers and emergency personnel with procedures for handling or working with that substance in a safe manner, and include information such as physical data (melting point, boiling point, flash point, etc.), toxicity, health effects, first aid, reactivity, storage, disposal, protective equipment, and spill-handling procedures.

Our standard operating procedures will include reference to relevant safety data sheets applicable to that specific process documented in the SOP. In addition the Company will maintain a comprehensive database of all safety data sheets in hard copy and electronic scanned copies on site. The Company will ensure the SDSs are readily accessible to employees for all

hazardous chemicals in their workplace. We will also designate a person responsible for obtaining and maintaining the SDSs and contacting the manufacturer to obtain one.

Employees will be trained with regard to the use of safety data sheets as part of the orientation process as well as the specific training provided by their supervisor in the performance of their duties. OSHA has published a "brief" describing the "Hazard Communication Standard: Safety Data Sheets". Section 7 of this brief covers the Handling and Storage of chemicals and outlines the type of information that will be included in the SDS for a chemical. This brief will be provided to all employees in the training process to provide guidance to help workers who handle hazardous chemicals to become familiar with the format and to understand the contents of the SDSs. It will also be included in relevant SOPs as a clickable link.

OSHA Protocols for handling and storage of chemicals:

The safety of our employees and the public is our foremost business consideration. The prevention of accidents and injuries takes precedence over expedience. In the conduct of our business, every attempt will be made to prevent accidents from occurring. The Company's safety SOPs address both OSHA regulations and good laboratory practice. Key laboratory personnel will be required to participate in OSHA Certification in Health and Safety educational classes. All employees will be fully trained in the safe and efficient use of chemicals, tools, and machinery.

There are several key safety precautions necessary for extraction operations:

The room must be well ventilated and separate from all other processes. The area will have a CO2 monitor as a safety precaution designed to sound when the level of CO2 in the room nears

an unsafe level. Equipment safety features must be maintained so that in the event of a leak, pressure will no longer be maintained by the system and the pump will shut off.

Standards will be established, documented and followed for chemical receiving, tracking, storage, and disposal. The General Manager and department supervisors will implement and maintain the PPE program. The program will be compliant with OHSA and EPA standards and address:

1. Hazards present;
2. Selection, maintenance, and use of PPE;
3. Training; and
4. Monitoring.

Personnel will be required to wear protective clothing, chemical resistant gloves and goggles when handling hazardous chemicals.

For each of the chemicals we are using in our production process we will determine the appropriate OSHA protocols. OSHA has defined specific protocols for handling and storage of chemicals in their CFR regulations. These are included in OSHA CFR 29, Standard number 1910, subpart H. We are subject to or will voluntarily adopt these OSHA standards in our storage and handling procedures.

All employees will be appropriately trained on spill response. Every employee is responsible for participating in spill response activities. A fully stocked spill kit will be maintained in the processing and laboratory facilities.

Our batch processing for extraction generally uses CO2, though other chemicals may be used for processing and sanitation. Hence we will adopt, CFR 29 H 1910.101 which concerns the general requirement for Compressed Gases. This will apply to our use of CO2 in extraction

during the chemical processing stage of production. We are subject to or will voluntarily adopt these OSHA standards in our storage and handling procedures. Another example is CFR 29 H 1910.106 which concerns the requirements for Flammable liquids. This OSHA protocol will also be applicable to certain of our processes for production, such as those processes which use ethanol, and for sanitation where flammable liquids or aerosols are used. We are subject to or will voluntarily adopt these OSHA standards in our storage and handling procedures.

MANUFACTURING PROCESS VALIDATION

GMP defines Validation as: "Establishing documented evidence which provides a high degree of assurance that a specific process will consistently produce a product meeting predetermined specifications and quality attributes." These production runs will be of limited units, produced under routine conditions and the number of production runs and observations made will be sufficient to allow for the normal extent of variation and trends to be established and provide sufficient data for evaluation. This will include at a minimum, 10 batches of any new concentrate, product or process. A state of control will be maintained with the use of procedures for monitoring and control systems for process performance and product quality. The facility will utilize an ISO9001 'Process Approach' Quality-Management System to analyze hazards and place managerial controls on each process.

Before any batch or lot is commercially-distributed, we will have gained a high-degree of assurance that processes will consistently produce products meeting attributes of identity, strength, quality, purity, and potency. Additionally, FDA211.180(e) states the quality standards of each product will be evaluated "annually" to determine the need for changes in product specifications, manufacturing or control procedures.

The FDA describes process-validation in three stages:

(1) Process Design: The commercial-manufacturing process is defined during this stage.

(2)Process Qualification: The process design is evaluated to determine if the process is capable of reproducible, commercial manufacturing.

(3) Continued Process Verification: Ongoing assurance is gained during routine production that processes remains in a state of control.

The following are examples of circumstances requiring validation:

1. Major site changes
2. Major changes to equipment
3. Major Changes in Composition and Components: (1) addition of a new product (2) addition of a new dietary ingredient to a formulation; (3) changes to excipient concentration that are likely to have detectable impact on formulation quality and performance.
4. Major Process Changes: Changes to the type of process used in the manufacturing of the product, such as change from wet granulation to direct compression of dry product.
5. Major Changes to Specification: usually as a result of a formulation change;
6. When an adverse event is experienced where a process has failed to provide the desired result, such as contamination, and the process must be re-evaluated.

VALIDATION MASTER PLAN

The Company will create an SOP to document our master plan and standard protocols for validation, summarized as follows:

1. Establish predetermined specifications that define a successful validation result.
2. Determine appropriate resources and assign responsibilities for the project.

3. Define equipment and instruments to be used.

4. Define ingredients and chemicals to be used.

5. Establish review team.

6. Establish time-line and number of production runs included in the test.

7. Determine number of units or volume of production in each run.

8. Define test protocols (number of units in each lot to be "sampled", sampling methods, testing protocols and laboratories).

9. Documents used:

- Validation plan
- Validation report
- Discrepancy forms
- SOPs
- System-change request forms
- Test results

10. Perform validation on a minimum of 10 lots produced according to a single manufacturing order during the same cycle of manufacture.

11. Acceptance. All documentation obtained and filed in the established Validation Filing System.

VARIATION

During Production of validation Lots employees will identify sources of variation affecting process performance and product quality for improvement to reduce or control variation. Scrutiny of intra-batch and inter-batch variation is part of a comprehensive process-verification program under 21CFR§211.180(e). Control Procedures shall be established to

monitor the output and validate performance of manufacturing processes that may be responsible for variability in the characteristics of in-process material and the drug product.

Sources of Variation include:

Employees -Employees will be trained to analyze parameters and attributes identified in the control strategy to verify continued operation within a state of control. Employees will provide feedback on product quality from both internal and external sources (e.g., complaints, product rejections, non conformances, recalls, deviations, audits and regulatory inspections). Employees will be provided proper tools to perform their duties and receive ongoing education and training. Supervisors will perform Direct Observation of SOPs during Process-Validation runs.

Raw Materials - Strict SOPs of sourcing raw ingredients will be followed. Specifications of quality for suppliers have been developed to limit the variability of raw materials and packaging. We have the advantage of purchasing raw material from suppliers with existing strategic partnerships with our consultants. All suppliers have proven cGMP and tested product. Product received into the facility will be inspected upon arrival, recorded, refused or received, and stored in accordance with FDA cGMP. These controls are a foundation of the validation process by limiting the variable of compromised or inconsistent packaging and raw-materials entering the facility. We will source our cannabis from our own vertically-integrated cultivation facility located contiguous to our processing operation. In addition to a lab-testing facility we will utilize in-house testing at critical control points (including raw marijuana, marijuana concentrate, marijuana infused final product) throughout the production facility to control intrinsic variables.

Equipment – Equipment used in production will be used for its intended use and will be of "appropriate design, adequate size and suitably located to facilitate operations for its intended use and for its cleaning and maintenance. (FDA cGMO Sec 211.63) All equipment will be regularly maintained and documented. FDA cGMP sec 211.67). Employees will be properly trained and certified on equipment

Measurement Systems -Acceptance criteria for sampling and testing conducted by the quality control unit shall be adequate to assure the batches meet each appropriate specification and appropriate quality control criteria as a condition for their approval and release.

SOP– SOPS are discussed in detail in other sections of the application and will document every movement and method in the process.

Environment -Managerial control measures will be implemented in all phases of the operation. Controls of critical control-points will be supported with proper documentation in accordance to FDA cGMP Sec.211.100. Data collection of the production process is ongoing with direct-observation documentation of all critical control-points throughout receiving, extraction, production, storage, sample collection, and lab testing. Documentation provides a record that appropriate corrective actions were taken when critical limits were not met due to internal or external variables.

The validation process will allow us to:

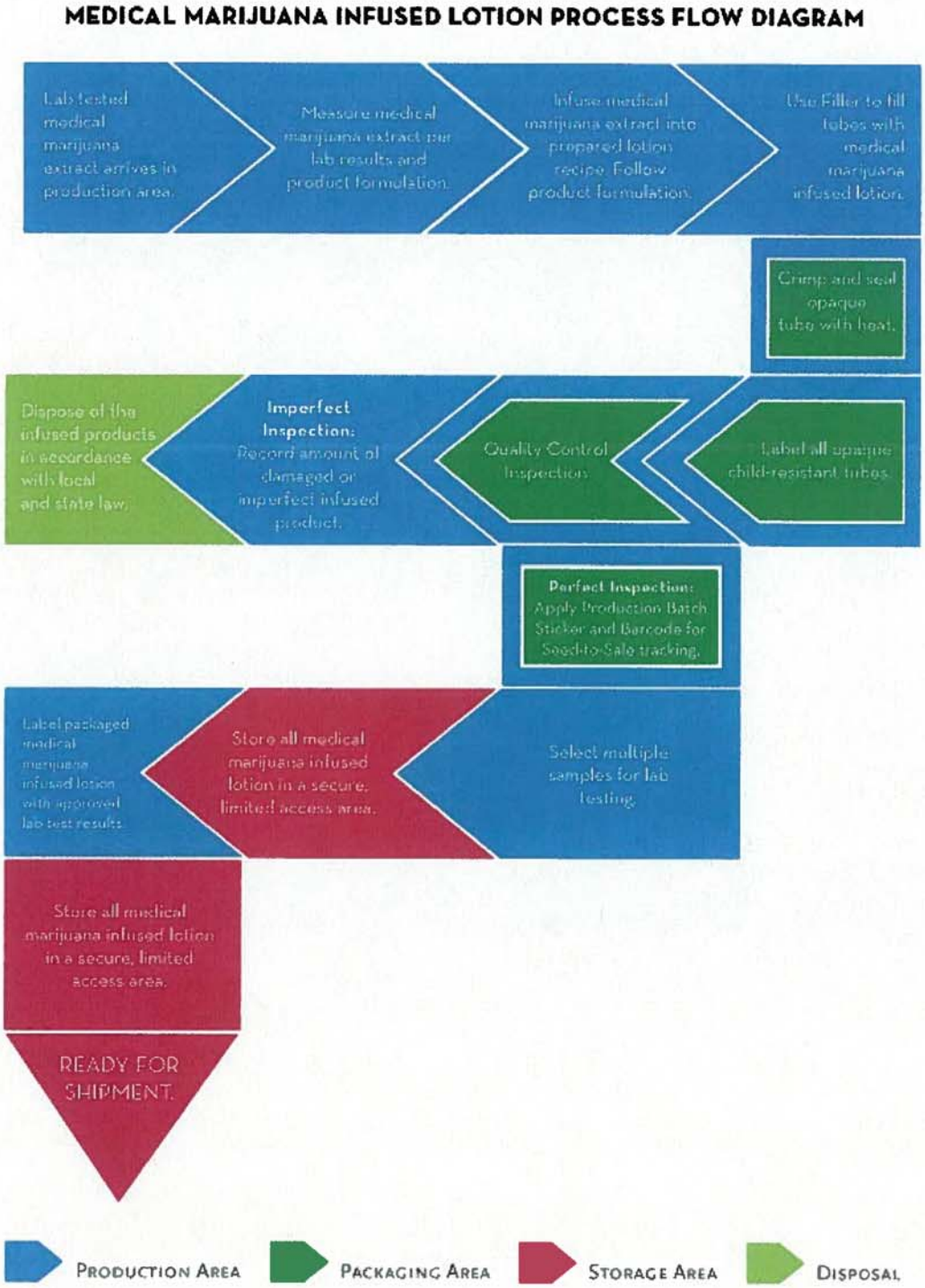
1. Understand the sources of variation
2. Detect the presence and degree of variation
3. Understand the impact of variation on the process and ultimately on product attributes
4. Control variation in a manner commensurate with the risk it represents to the process

5. Judge whether we have gained sufficient understanding to provide a high degree of assurance in our manufacturing process to justify commercial distribution.

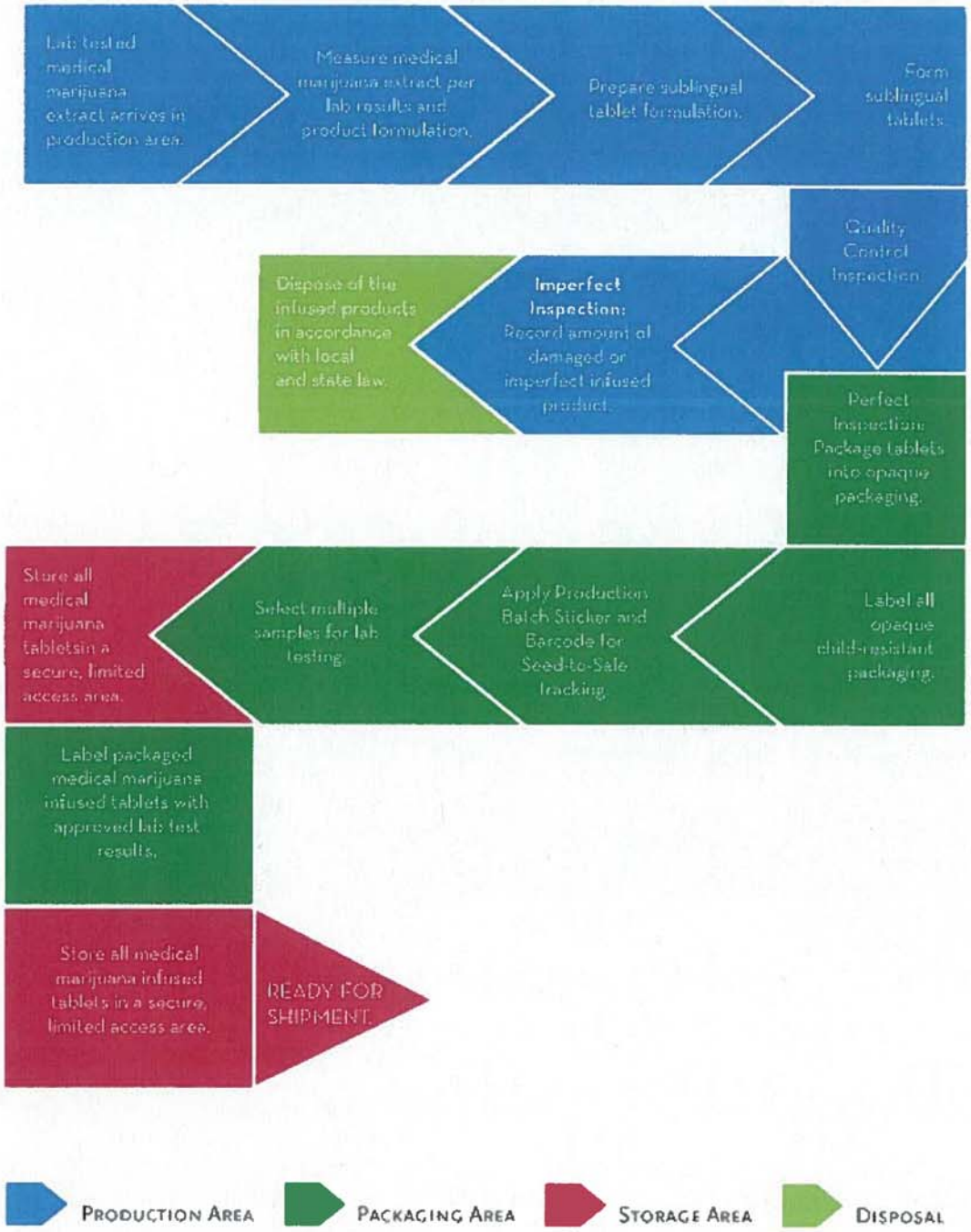
Documentation - All Validation Protocols, final Validation Reports and associated testing results required by this procedure shall be retained for at least five years after distribution of the product manufactured, processed or packaged utilizing that that process or equipment.

2.4.1 Process Flow Diagrams

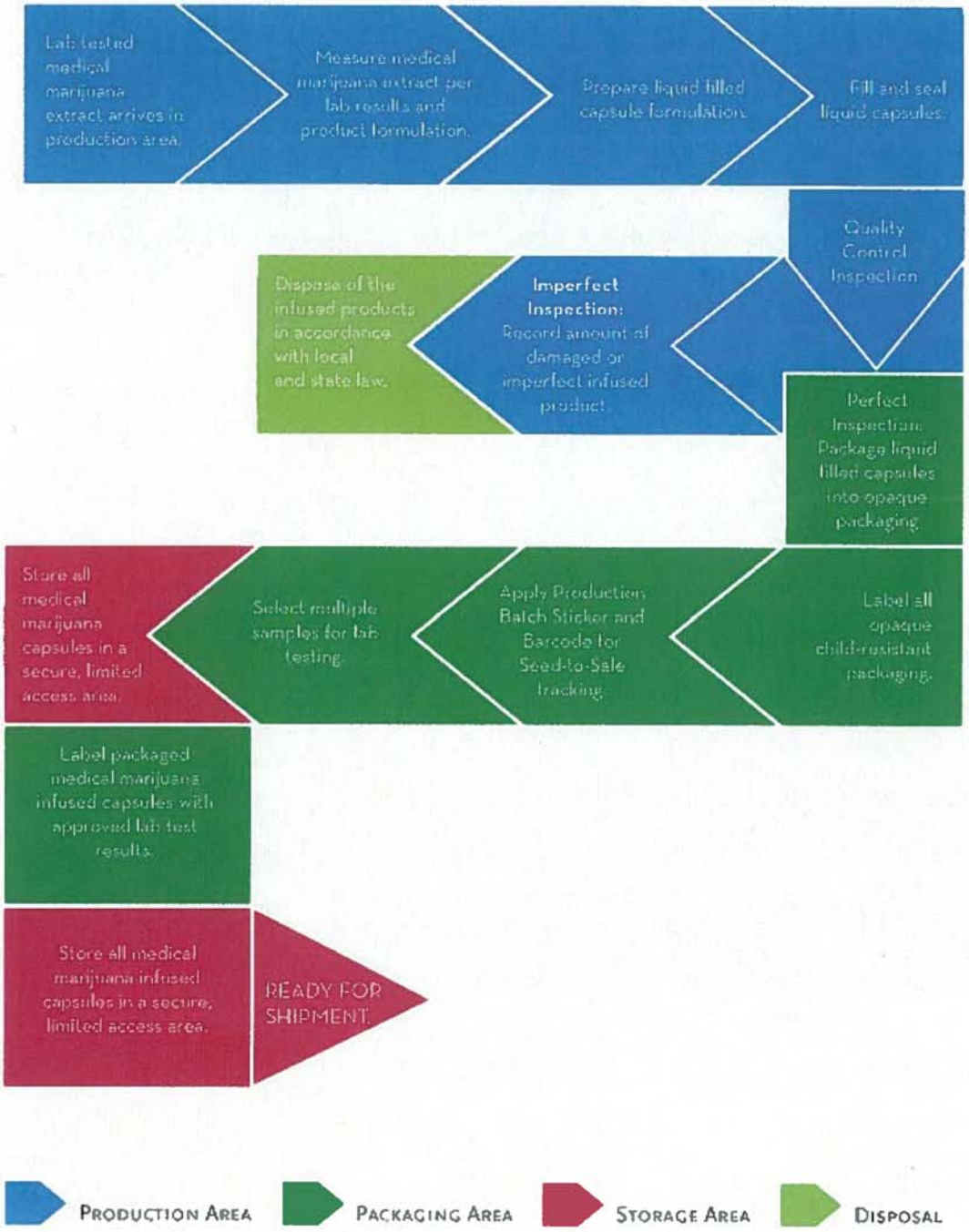
The following are process flow diagrams for the manufacture of our core products:



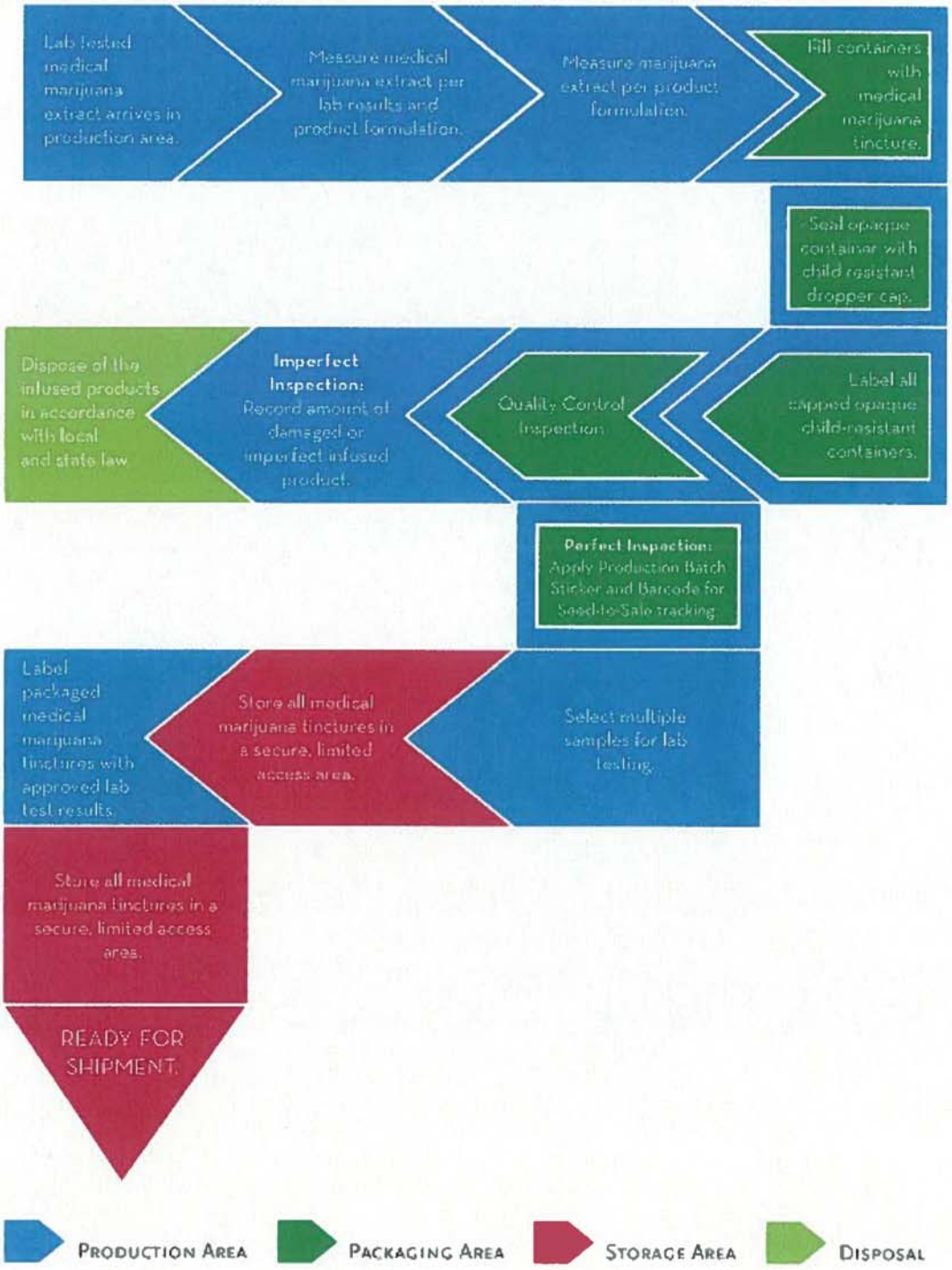
MEDICAL MARIJUANA SUBLINGUAL TABLET PROCESS FLOW DIAGRAM



MEDICAL MARIJUANA LIQUID FILLED CAPSULE PROCESS FLOW DIAGRAM



MEDICAL MARIJUANA TINCTURE PROCESS FLOW DIAGRAM



2.4.2 Standard Operating Procedures

The following are preliminary Standard Operating Procedures for our core products and other significant manufacturing operations.

STANDARD OPERATING PROCEDURE

PRODUCTION OF SUBLINGUAL MARIJUANA TINCTURES

PRODUCT DESCRIPTION

2oz Sublingual Medical Marijuana Tincture. 2ml Dropper for Metered Dosing.

POLICY

To prepare and package sublingual marijuana tinctures in child resistant packaging. All production will be documented.

RESPONSIBILITY

Production Manager or their designee.

RECORDS

Production Log

Inventory Tracking Software

PROCEDURE

1. Before daily processing begins, sanitize work surface with 50-200 ppm sanitizer solution. Mix 5 gallons of water with 1 teaspoon full of sanitizer in a five gallon bucket. Check the bleach solution with tester strips to ensure proper ppm level. Fill Spray bottle with solution and label as 'Sanitizer' Fill a 1 quart sized bucket with sanitizer solution, label as 'Sanitizer' and set a bucket at every workstation. Wipe all work surfaces with sanitizer solution, allow to air dry. Ensure that all utensils are cleaned and sanitized.

2. Assemble filling machine per instructions.

3. Sanitize all containers and droppers. Fill the food grade plastic container with sanitizer solution. Fill perforated insert for food grade plastic container. Fill with containers, caps or droppers. Submerge into sanitizer solution for five minutes. After five minutes, remove perforated insert and let drain over plastic container. Move sanitized containers or droppers into dry food grade plastic container and cover with plastic wrap. Place container of sanitized containers, caps or droppers on production line.

4. Sanitize filling machine.

5. Fill an 8 quart container with sanitizer solution and place Small Immersion Blender in sanitizer. NOTE: DO NOT submerge motor.

6. A designated employee shall retrieve marijuana extract from the secure storage area and bring to the Production Area.

7. Begin the Production Form - The Production Form is a hard copy record that tracks the marijuana extract, approved non-marijuana ingredients, employees involved, quantity produced and verifies multiple quality control inspections of the medical marijuana product during the production process. In addition to this form, Inventory Tracking software will be used to track all medical marijuana products. To begin: print the production form and fill out manually during production run, enter into digital format by end of production day. Assign a Medical Marijuana Product Batch Number to the production run. Fill in remaining information before beginning the production run: Extract Batch Number, Date, and Product Name.

8. Use the approved lab test results for cannabinoid profile associated with the Marijuana Extract Batch to determine the amount of Marijuana Extract to be utilized for the Production

Batch. Accurate test results from a state certified testing lab ensure consistent and metered medical marijuana products.

9. Formulation for amount of cannabis concentrate to be used: begin by determining total mg of THC needed for production run.

multiply the **mg/THC** of each unit by the **number of units** to be produced to find the **total mg THC needed** for production run

(# units) x (#)mg/THC = (#) total mg needed

divide the **total mg needed** by the **mg of THC per gram** of the concentrate.

(#) total mg needed/(#) mg THC per gram = grams of concentrate to use in production

10. Use a NTEP approved scale to measure an accurate amount of marijuana concentrate needed for production.

11. Record in the Production Form and Inventory Tracking Software the amount of marijuana extract used per production run.

12. Follow product formulation to create a homogenous and consistent Form of marijuana infused product. Quality Control Direct Observation of a Production Tech and Production Manager to be performed and recorded on the Production Form throughout the production of the marijuana product. Quality Control Direct Observation provides an ongoing and documented inspection of all products being produced to ensure safe and consistent medical marijuana products.

13. Fill Tinctures to the 2 oz line using the assembled and sanitized Filler. Proper equipment maintenance and operation will ensure an accurate and consistent quantity of marijuana product.

14. Quality Control Direct Observation of the filled containers will ensure proper quantity amounts of each container to provide a safe and consistent marijuana product.

15. Secure and seal child resistant dropper cap. This step seals the marijuana product ensuring no contamination of the product. Perform and document Direct Observation Quality Control that all marijuana products are properly sealed.

16. Turn power on to the Heat Shrink Tunnel. Set speed control to '3' and Heat control to 180F. For tincture labeling close top 4 heat tunnel vents, leaving only the bottle 2 vents open. Allow 15 minutes for Heat Tunnel to reach temperature. If applicable turn on exhaust fan to remove hot air from production area.

17. Label with tamper evident, opaque shrink-wrap label. Perform and document Direct Observation Quality Control that labels contain all required information. "Sleeve" the bottled product. -- Place shrink wrap label onto every filled and capped tincture bottle by sliding the label over the container and positioning the label properly so that front of label is centered on front of bottle.

18. Run Sleeved product through the heat tunnel. Carefully place each unit onto the conveyor belt so that the Tincture bottle stays upright. Bottle placement should be so that the front of the bottle faces the left side of the Heat Tunnel. As tincture bottles exit the Heat Tunnel each unit should be Quality Control inspected for tearing, wrinkling, stretching, or improper label placement. Adjust Heat Tunnel controls if necessary. Next. Label products with Production Batch Label.

19. Apply the Production Batch Sticker which will contain the following information:

a. Dispensary License Number

b. The date of packaging and "use by" date

c. Production Batch Number

d. Marijuana Concentrate Batch Number

e. The pre-mixed total weight (in ounces or grams) of usable cannabis in the package.

f. A list of cannabinoid content by weight.

20. Final Quality Control Inspection of product includes:

a. proper label applied correctly

b. proper production batch label applied correctly

c. dropper cap is applied correctly

d. package is clean and dry

21. Segregate products found to be damaged and imperfect from the Production Batch. Document the Product Name, Production Batch, Extract Batch, Date, Reason for disposal, and Quantity of the marijuana product to be disposed of.

22. Once documented, render damaged or imperfect marijuana products unusable and unrecognizable as a marijuana product and dispose of in accordance with state law.

23. Complete the Production Form and enter information into Inventory Tracking Software.

24. Select three products from the Production Batch to be sent to a state certified Testing Lab facility for required cannabinoid and contaminant testing. Select one unit that was produced at the beginning of production, one unit towards the middle of production and one unit at the end of production, to accurately represent the consistency of the Production Batch. Provide samples for testing to Shipping Dept to schedule and deliver samples to the testing lab facility. Final medical marijuana product samples will be submitted to the testing lab facility sealed, packaged and labeled exactly as they will be delivered to a patient from a dispensing facility.

25. Move all final marijuana products to a secure storage area within the Production Area to await lab test results.

26. Upon receiving approved test results for the marijuana product Production Batch, apply a label to the final product providing the cannabinoid profile. All test results will be recorded in Inventory Tracking Software and associated with the Production Batch. Accurate cannabinoid test results ensure marijuana product is safe and consistent.

27. Store the marijuana products in the secure storage area. Products should be stored off the ground, in an organized and clean manner. The secure storage area is to be climate controlled. Use the Refrigerator/Freezer Monitoring Form to record storage area temperature throughout the day.

STANDARD OPERATING PROCEDURE

PRODUCTION OF MARIJUANA CAPSULE

PRODUCT DESCRIPTION

Medical Marijuana Infused Capsule

POLICY

To prepare and package marijuana concentrate into consistent and metered capsules.

RESPONSIBILITY

Production Manager or their designee.

RECORDS

Production Log

Seed-to-Sale Inventory Tracking System

PROCEDURE

1. Before daily processing begins, sanitize work surface with 50 - 200 ppm sanitizer solution.

2. Mix 5 gallons of water with 1 teaspoon full of unscented bleach in a five gallon bucket. Check the bleach solution with tester strips to ensure proper ppm level.

3. Wipe all work surfaces with bleach solution, allow to air dry.

4. Ensure that all utensils are cleaned and sanitized.

5. Have a container with sanitizer on the table at all times.

6. A designated employee shall retrieve marijuana extract from the secure storage area and bring to the Production Area.

7. Begin the Production Form by assigning a Medical Marijuana Product Batch Number to the production run. Fill in remaining information before beginning the production run: Extract Batch Number, Date, and Product Name. The Production Form is a hard copy record that tracks the marijuana extract, approved non-marijuana ingredients, employees involved, quantity produced and verifies multiple quality control inspections of the medical marijuana product during the production process. In addition to this form Inventory Tracking Software Inventory Tracking software will be used to track all medical marijuana products.

8. Use the approved lab test results for cannabinoid profile associated with the Marijuana Extract Batch to determine the amount of Marijuana Extract to be utilized for the Production Batch. Accurate test results from a State certified testing lab ensure consistent and metered medical marijuana products.

9. Use a NTEP approved scale to measure an accurate amount of marijuana extract per medical marijuana product formulation.

10. Record in the Production Form and Inventory Tracking Software the amount of marijuana extract used per production run.

11. Follow product formulation to create a homogenous and consistent Form of marijuana product. Quality Control Direct Observation of a Production Tech and Production Manager to be performed and recorded on the Production Form throughout the production of the marijuana product. Quality Control Direct Observation provides an ongoing and documented inspection of all products being produced to ensure safe and consistent medical marijuana products.

12. Using the assembled and sanitized packaging equipment to fill and seal Capsules. Proper equipment maintenance and operation will ensure an accurate and consistent quantity of marijuana product. Quality Control Direct Observation of the filled and sealed containers will document proper quantity amounts and sealing of each container to provide a safe and consistent marijuana product

13. Operate the packaging equipment to package and label capsules in child resistant packaging. The packaging provides a consistent and recognizable child resistant packaging to provide safety for the patient

14. Final Quality Control Inspection of product.

15. Segregate products found to be damaged and imperfect from the Production Batch. Document the Product Name, Production Batch, Extract Batch, Date, Reason for disposal, and Quantity of the marijuana product to be disposed of.

16. Once documented render damaged or imperfect marijuana products unusable and unrecognizable as a marijuana product and dispose of in accordance with state law.

17. Select three products from the Production Batch to be sent to a state certified Testing Lab facility for required cannabinoid and contaminant testing. Select one unit that was produced at the beginning of production, one unit towards the middle of production and one unit at the end of production, to accurately represent the consistency of the Production Batch.

18. Enter Batch Number, quantity produced, date of production, and marijuana extract Batch information into Inventory Tracking Software.

19. Final medical marijuana product samples will be submitted to the testing lab facility sealed, packaged and labeled exactly as they will be delivered to a patient from a dispensing facility.

20. Move all final marijuana products to a secure storage area within the Production Area to await lab test results.

21. Upon receiving approved test results for the marijuana product Production Batch, apply Production Batch Sticker to the final product. All test results will be recorded in Inventory Tracking Software and associated with the Production Batch. Accurate cannabinoid test results ensure marijuana product is safe and consistent.

22. Apply the Production Batch Sticker which will contain the following information:

a. Dispensary License Number

b. The date of packaging and "use by" date

c. Production Batch Number

d. Marijuana Concentrate Batch Number

e. The pre-mixed total weight (in ounces or grams) of usable cannabis in the package.

f. A list of cannabinoid content by weight

23. Store the marijuana products in the secure storage area. Products should be stored off the ground, in an organized and clean manner. The secure storage area is to be climate controlled. Use the Refrigerator/Freezer Monitoring Form to record storage area temperature throughout the day.

STANDARD OPERATING PROCEDURE

PRODUCTION OF MARIJUANA SUBLINGUAL TABLET

PRODUCT DESCRIPTION

Medical Marijuana Sublingual Tablet

POLICY

To prepare and package marijuana concentrate into accurately dosed sublingual Tablets.

RESPONSIBILITY

Production Manager or their designee.

RECORDS

Production Log

Seed-to-Sale Inventory Tracking System

PROCEDURE

1. Before daily processing begins, sanitize work surface with 50 - 200 ppm sanitizer solution.

2. Mix 5 gallons of water with 1 teaspoon full of unscented bleach in a five gallon bucket. Check the bleach solution with tester strips to ensure proper ppm level.

3. Wipe all work surfaces with bleach solution, allow to air dry.

4. Ensure that all utensils are cleaned and sanitized.

5. Have a container with sanitizer on the table at all times.

6. A designated employee shall retrieve marijuana extract from the secure storage area and bring to the Production Area.

7. Begin the Production Form by assigning a Medical Marijuana Product Batch Number to the production run. Fill in remaining information before beginning the production run: Extract

Batch Number, Date, and Product Name. The Production Form is a hard copy record that tracks the marijuana extract, approved non-marijuana ingredients, employees involved, quantity produced and verifies multiple quality control inspections of the medical marijuana product during the production process. In addition to this form Inventory Tracking Software Inventory Tracking software will be used to track all medical marijuana products.

8. Use the approved lab test results for cannabinoid profile associated with the Marijuana Extract Batch to determine the amount of Marijuana Extract to be utilized for the Production Batch. Accurate test results from a State certified testing lab ensure consistent and metered medical marijuana products.

9. Use a NTEP approved scale to measure an accurate amount of marijuana extract per medical marijuana product formulation.

10. Record in the Production Form and Inventory Tracking Software the amount of marijuana extract used per production run.

11. Follow product formulation to create a homogenous and consistent Form of marijuana product. Quality Control Direct Observation of a Production Tech and Production Manager to be performed and recorded on the Production Form throughout the production of the marijuana product. Quality Control Direct Observation provides an ongoing and documented inspection of all products being produced to ensure safe and consistent medical marijuana products.

12. Use the assembled and sanitized equipment to form the tablets. Proper equipment maintenance and operation will ensure an accurate and consistent quantity of medical marijuana product. Quality Control Direct Observation of the tablets to provide a safe and consistent medical marijuana product.

13. Operate the packaging equipment to package tablets in child resistant packaging. The packaging provides a consistent and recognizable child resistant packaging to provide safety for the patient.

14. Apply label. Perform and document Direct Observation Quality Control that labels contain all required information

15. Final Quality Control Inspection of product.

16. Segregate products found to be damaged and imperfect from the Production Batch. Document the Product Name, Production Batch, Extract Batch, Date, Reason for disposal, and Quantity of the marijuana product to be disposed of.

17. Once documented render damaged or imperfect marijuana products unusable and unrecognizable as a marijuana product and dispose of in accordance with state law.

18. Select three products from the Production Batch to be sent to a state certified Testing Lab facility for required cannabinoid and contaminant testing. Select one unit that was produced at the beginning of production, one unit towards the middle of production and one unit at the end of production, to accurately represent the consistency of the Production Batch.

19. Enter Batch Number, quantity produced, date of production, and marijuana extract Batch information into Inventory Tracking Software.

20. Final medical marijuana product samples will be submitted to the testing lab facility sealed, packaged and labeled exactly as they will be delivered to a patient from a dispensing facility.

21. Move all final marijuana products to a secure storage area within the Production Area to await lab test results.

22. Upon receiving approved test results for the marijuana product Production Batch, apply Production Batch Sticker to the final product. All test results will be recorded in Inventory Tracking Software and associated with the Production Batch. Accurate cannabinoid test results ensure marijuana product is safe and consistent.

23. Apply the Production Batch Sticker which will contain the following information:

a. Dispensary License Number

b. The date of packaging and "use by" date

c. Production Batch Number

d. Marijuana Concentrate Batch Number

e. The pre-mixed total weight (in ounces or grams) of usable cannabis in the package.

f. A list of cannabinoid content by weight.

24. Store the marijuana products in the secure storage area. Products should be stored off the ground, in an organized and clean manner. The secure storage area is to be climate controlled. Use the Refrigerator/Freezer Monitoring Form to record storage area temperature throughout the day.

STANDARD OPERATING PROCEDURE

PRODUCTION OF INFUSED TOPICAL LOTION

PRODUCT DESCRIPTION

6oz Medical Marijuana Infused Lotion

POLICY

To prepare and package Infused Topical Lotion in child resistant packaging. All production will be documented.

RESPONSIBILITY

Production Manager or their designee.

RECORDS

Production Log

Inventory Tracking Software

PROCEDURE

1. Before daily processing begins, sanitize work surface with 50-200 ppm sanitizer solution. Mix 5 gallons of water with 1 teaspoon full of sanitizer in a five gallon bucket. Check the bleach solution with tester strips to ensure proper ppm level. Fill Spray bottle with solution and label as 'Sanitizer' Fill a 1 quart sized bucket with sanitizer solution, label as 'Sanitizer' and set a bucket at every workstation. Wipe all work surfaces with sanitizer solution, allow to air dry. Ensure that all utensils are cleaned and sanitized.

2. Assemble filling machine per instructions.

3. Sanitize all packaging. Fill the food grade plastic container with sanitizer solution. Fill perforated insert for food grade plastic container. Fill with packaging. Submerge into sanitizer solution for five minutes. After five minutes, remove perforated insert and let drain over plastic container. Move sanitized packaging into dry food grade plastic container and cover with plastic wrap. Place container of sanitized packaging on production line.

4. Sanitize filling machine.

5. Fill an 8 quart container with sanitizer solution and place Small Immersion Blender in sanitizer. NOTE: DO NOT submerge motor.

6. A designated employee shall retrieve marijuana extract from the secure storage area and bring to the Production Area.

7. Begin the Production Form - The Production Form is a hard copy record that tracks the marijuana extract, approved non-marijuana ingredients, employees involved, quantity produced and verifies multiple quality control inspections of the medical marijuana product during the production process. In addition to this form, Inventory Tracking software will be used to track all medical marijuana products. To begin: print the production form and fill out manually during production run, enter into digital format by end of production day. Assign a Medical Marijuana Product Batch Number to the production run. Fill in remaining information before beginning the production run: Extract Batch Number, Date, and Product Name.

8. Use the approved lab test results for cannabinoid profile associated with the Marijuana Extract Batch to determine the amount of Marijuana Extract to be utilized for the Production Batch. Accurate test results from a state certified testing lab ensure consistent and metered medical marijuana products.

9. Formulation for amount of cannabis concentrate to be used: begin by determining total mg of THC needed for production run.

multiply the **mg/THC** of each unit by the **number of units** to be produced to find the **total mg THC needed** for production run

(# units) x (#)mg/THC = (#) total mg needed

divide the **total mg needed** by the **mg of THC per gram** of the concentrate.

(#) total mg needed/(#) mg THC per gram = grams of concentrate to use in production

10. Use a NTEP approved scale to measure an accurate amount of marijuana concentrate needed for production.

11. Record in the Production Form and Inventory Tracking Software the amount of marijuana extract used per production run.

12. Follow product formulation to create a homogenous and consistent Form of marijuana infused product. Quality Control Direct Observation of a Production Tech and Production Manager to be performed and recorded on the Production Form throughout the production of the marijuana product. Quality Control Direct Observation provides an ongoing and documented inspection of all products being produced to ensure safe and consistent medical marijuana products.

13. Fill Topical Lotions to the 6oz line using the assembled and sanitized Filler. Proper equipment maintenance and operation will ensure an accurate and consistent quantity of marijuana product.

14. Quality Control Direct Observation of the filled containers will ensure proper quantity amounts of each container to provide a safe and consistent marijuana product.

15. Heat seal the tube. This step seals the marijuana product ensuring no contamination of the product. Perform and document Direct Observation Quality Control that all marijuana products are properly sealed.

16. Apply label. Perform and document Direct Observation Quality Control that labels contain all required information. Apply the label onto every filled and sealed Topical Lotion package properly so that front of label is centered on front of the package.

17. Apply the Production Batch Sticker which will contain the following information:

a. Dispensary License Number

b. The date of packaging and "use by" date

c. Production Batch Number

d. Marijuana Concentrate Batch Number

e. The pre-mixed total weight (in ounces or grams) of usable cannabis in the package.

f. A list of cannabinoid content by weight

18. Final Quality Control Inspection of product includes:

a. proper label applied correctly

b. proper production batch label applied correctly

c. dropper cap is applied correctly

d. package is clean and dry

19. Segregate products found to be damaged and imperfect from the Production Batch. Document the Product Name, Production Batch, Extract Batch, Date, Reason for disposal, and Quantity of the marijuana product to be disposed of.

20. Once documented, render damaged or imperfect marijuana products unusable and unrecognizable as a marijuana product and dispose of in accordance with state law.

21. Complete the Production Form and enter information into Inventory Tracking Software.

22. Select three products from the Production Batch to be sent to a state certified Testing Lab facility for required cannabinoid and contaminant testing. Select one unit that was produced at the beginning of production, one unit towards the middle of production and one unit at the end of production, to accurately represent the consistency of the Production Batch. Provide samples for testing to Shipping Dept to schedule and deliver samples to the testing lab facility. Final medical marijuana product samples will be submitted to the testing lab facility sealed, packaged and labeled exactly as they will be delivered to a patient from a dispensing facility.

23. Move all final marijuana products to a secure storage area within the Production Area to await lab test results.

24. Upon receiving approved test results for the marijuana product Production Batch, apply a label to the final product providing the cannabinoid profile. All test results will be recorded in

Inventory Tracking Software and associated with the Production Batch. Accurate cannabinoid test results ensure marijuana product is safe and consistent.

25. Store the marijuana products in the secure storage area.Products should be stored off the ground, in an organized and clean manner. The secure storage area is to be climate controlled. Use the Refrigerator/Freezer Monitoring Form to record storage area temperature throughout the day.

STANDARD OPERATING PROCEDURE

CLOSED LOOP SUB AND SUPERCRITICAL CO_2 EXTRACTION

PRODUCT DESCRIPTION

A concentrated extract of cannabinoids including but not limited to THC, THCA, THCV, CBD, CBDA, CBDV, CBN, CBG, and CBC derived from the leaves and flowers of the female marijuana plant.

EXTRACTION METHOD

CO_2 has a polarity that is compatible for the solubilization of lipophilic compounds such as lipids and essential oils. The low polarity index makes SFE CO2 highly advantageous during medical marijuana extraction. Closed-Loop Sub/Supercritical C02 and Co-Solvent Introduction. C02 is a non-polar solvent. We utilize the latest Subcritical (17 MPa / 2500 PSI and below) and Supercritical (above 17 MPa/ 2500 PSI) Fluid Extraction (**SFE**) technologies and combine them with our own proprietary processes, formulas and equipment. SFE allows the processing of our medical grade marijuana at low temperatures limiting thermal degradation while preserving the most vital medicinal components of the plant.

POLICY

To follow all company standard operating procedures and sanitation protocols while manufacturing marijuana extract in compliance with Hawaii State and local law.

RESPONSIBILITY

Lab Manager or their designee.

RECORDS

Seed-to-Sale Inventory Tracking Software

EQUIPMENT

1) One extraction vessel 5000 mL in size.

2) Two separators each 1500 ML in size.

3) Temperature range maintained between 40 and 50 °C.

4) Pressures are created to subject the marijuana flowers to either a subcritical extraction process or a supercritical extraction process.

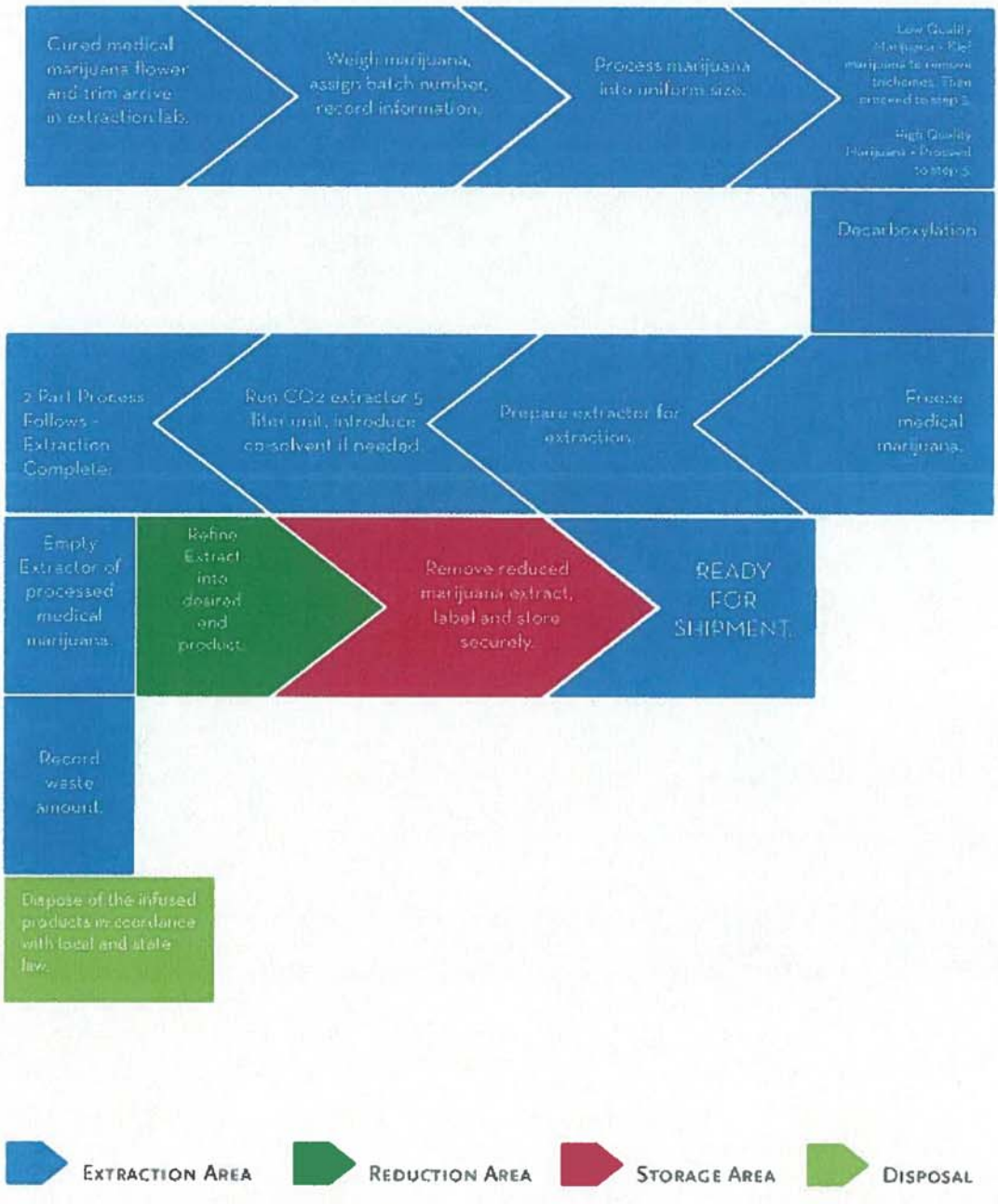
Pressure variance applied to each process:

A) subcritical extraction process pressures: (17 MPa* and below)

B) supercritical extraction process pressures: (above 17 MPa to 69 MPa)

* MPa: 1 megapascal (MPa) = 145.037738 pound-force/square inch (PSI)

Co2 SUB/SUPERCRITICAL EXTRACTION (SOLVENT AND CO-SOLVENT) PROCESS FLOW DIAGRAM



Our Sub/Supercritical Extraction Process is illustrated in 8 procedures:

(1) Penetration of matrix (marijuana plant matter).

(2) SCF solubilizes the solutes inside the pores.

(3) Intra-particle (or internal) diffusion of the solutes takes place until the external surface is fully saturated with solvent.

(4) External (or film) diffusion of the solutes from solid-fluid interface to the SCF bulk.

(5) Precipitation of target solutes in the trapping system by changing the pressure and/or temperature of the fluid.

(6) Apply proprietary formulas that vary time intervals and solvent quantities to control and output the anticipated extraction grade and type.

(7) Apply proprietary extract refinement processes to complete the end product output.

(8) Based on the final extract output selected, Co-solvents are sometimes introduced at different phases of the extraction process.

(8a) CO-SOLVENT Introduction:

Co-solvents are introduced at different time phases of the extraction process based on the desired final product. Primary intervals are 25%, 50%, and 75% time interval to completion of the extraction process.

Additional Extraction Runs, Matrix Disposal and further Solvent Reclaim:

Due to our closed-loop extraction equipment, all solvents are reclaimed for re-use or disposed per State of Hawaii solvent removal procedures. Due to the primary extraction process achieving a greater than 90% efficiency very little extract potential resides within the marijuana plant matter. The remaining extract potential of the marijuana is subjected to a primary ethanol solvent rinse to capture all remaining marijuana extract. The exhausted post extract marijuana plant

matter is then classified as "unusable" and packaged for safe removal and disposal from the lab.

A) Subcritical extraction process (17 MPa and below)

Time Interval to completion of process is related to the percentage (%) of co-solvent introduced of total solvent in system at a temperature range: 40- 50 °C.

- 25% / 10%
- 50% / 5%
- 75% / 2%

B) Supercritical extraction process (above 17 MPa to 69 MPa)

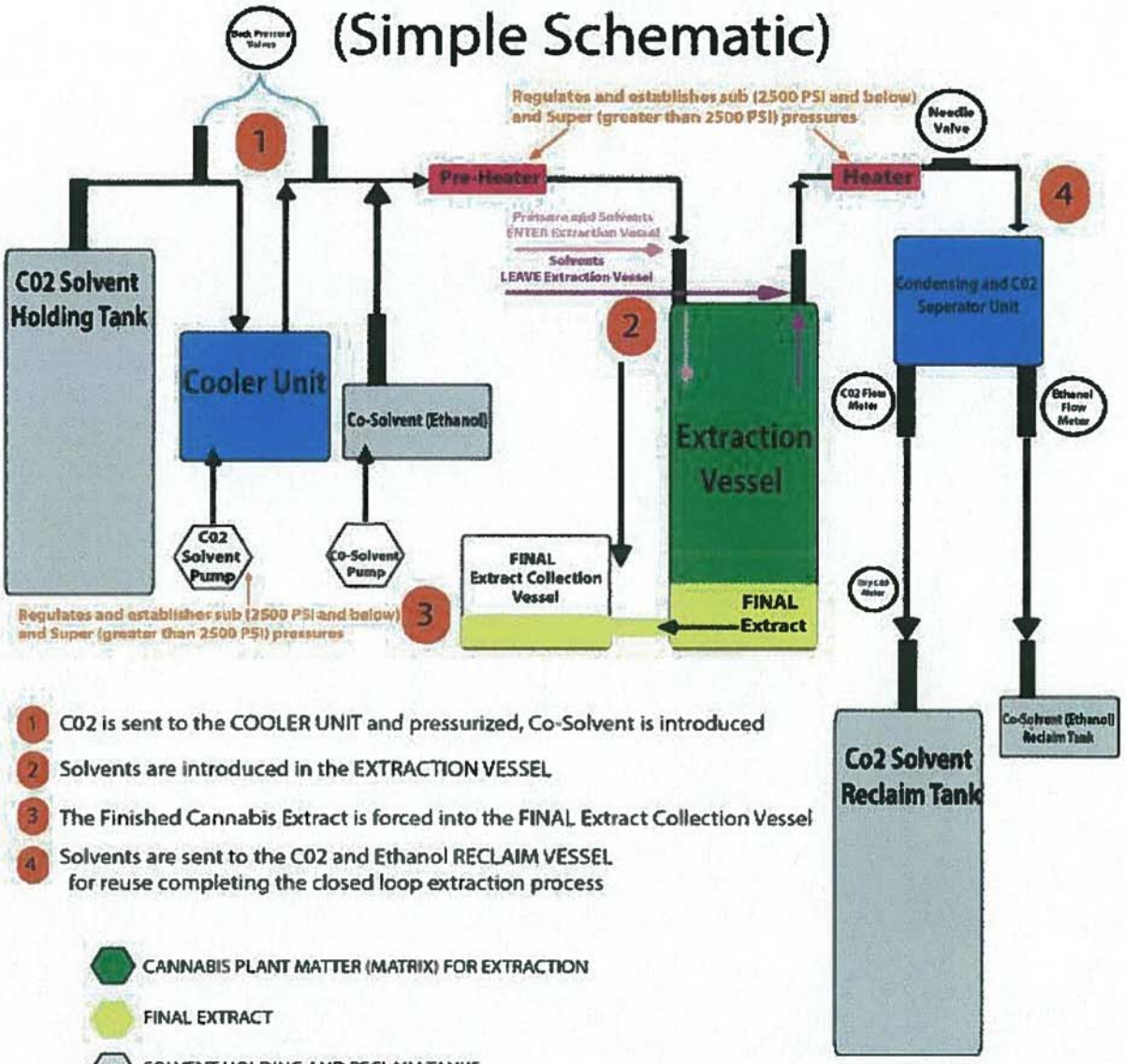
Time Interval to completion of process is related to the percentage (%) of co-solvent introduced of total solvent in system at a temperature range: 40- 50 °C

- 25% / 10%
- 50% / 5%
- 75% / 2%

Extraction Process Yield: Yields utilizing our proprietary CO_2 and co-solvent methods are expected to be greater than **90+%.** The remaining extract potential of the marijuana is subjected to a primary food-grade ethanol solvent rinse to capture all remaining marijuana extract from the plant matter. The extraction equipment schematic is illustrated in **Diagram Two:** First, the liquid carbon dioxide is pumped through a heat exchanger to reach the system at supercritical state. Next, the SC CO_2 is uniformly pumped into the extractor where the dry and ground plant material forms a fixed bed of solid matrix. The extraction can be performed in static (with no follow-through) or dynamic (with follow-through) mode or in a mixed approach. During extraction, the supercritical solvent passes through the plant matrix bed and dissolves the soluble compounds. The mixture solvent-plant solutes are separated in flash tanks (cyclonic and

gravimetric separators) usually changing drastically the solvent power of CO_2 by depressurization or temperature change or both. Then, CO_2 is cooled at liquid state and compressed to return to the extractor.

Closed-Loop Sub/Supercritical C02 Fluid Extractor (SFE) (Simple Schematic)

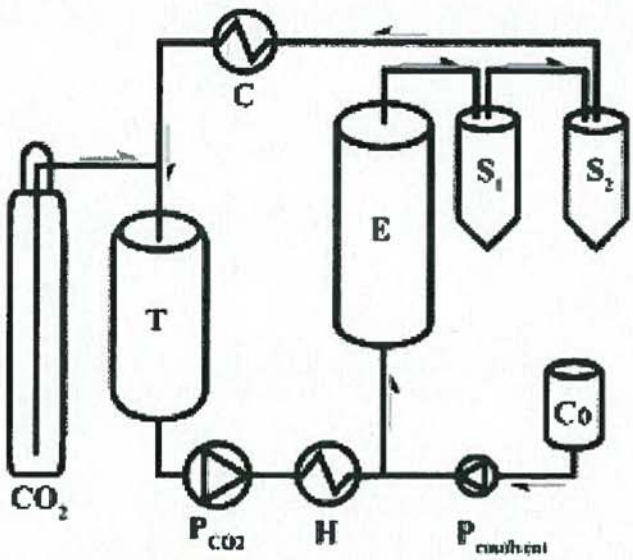


1. C02 is sent to the COOLER UNIT and pressurized, Co-Solvent is introduced
2. Solvents are introduced in the EXTRACTION VESSEL
3. The Finished Cannabis Extract is forced into the FINAL Extract Collection Vessel
4. Solvents are sent to the C02 and Ethanol RECLAIM VESSEL for reuse completing the closed loop extraction process

- CANNABIS PLANT MATTER (MATRIX) FOR EXTRACTION
- FINAL EXTRACT
- SOLVENT HOLDING AND RECLAIM TANKS
- COOLING, CONDENSING AND SEPERATING UNITS
- HEATING UNITS

Diagram Three:

Raw Diagram of the supercritical fluid extraction process:



$$m_{total} = Q \int_0^t Y(H,t)\, dt$$

Legend Descriptor for Supercritical Extraction machine:

(T): Storage Tank

(PCO2): CO_2 Pump

(H): Heat exchanger

(Co): Solvent Pump

(E): Extraction vessel

(S1-S2): Separation cells

(C): Condenser

The versatility of SC CO_2 as extraction technology utilizes the solvent's efficiency through the simple change of pressure and temperature. The range of variation of SC CO_2 density is relatively wide, from 0.2 g cm−3 at 8 MPa and 40 °C to 1.0 g cm−3 at 69 MPa and 50 °C. Furthermore, the increase of temperature leads to reduction of density of supercritical fluids but, on the other hand, the increase of temperature affects the volatility of target compounds. For volatile marijuana oil extraction through SC CO_2, small changes in temperature cause significant changes in solubility with a non-linear relationship. The operative pressure is one of the primary parameters we utilize to influence the fluid density and therefore the solvent power of supercritical fluid and co-solvent. We also utilize the effects of temperature depends on the nature of plant material and has to be determined case by case.

For the analysis of solubility of target compounds and for the design of extraction process, four parameters are extremely helpful in the understanding of solute behavior in supercritical fluids. The miscibility or threshold pressure, that is the pressure at which the solute starts to be transferred into the supercritical fluid; the pressure of maximum solubility of solute; the fractionation pressure range, that is the pressure region between the miscibility and maximum solubility pressures and; the physical properties of the solute, particularly its melting point. The determination of the last two parameters allows us to define the best conditions for solubility and selectivity, because these compounds diffuse better above their melting points and an operative pressure between miscibility and maximum solubility increases the selectivity of extraction.

By closely monitoring, utilizing and adjusting the pressure and temperature during

extraction, the global yield of the marijuana plant matter is determined and maintained. Global yield refers to a single target compound or to the global mixture of compounds. This parameter is closely related to the solubility of the solute in the supercritical fluid. Moreover, the solubility of target compounds can be determined also from the slope of the linear portion of the extraction curve in the stage of constant-extraction rate period (CER).

Beyond the extraction parameters related to the engineering aspects such as pressure, temperature and flow rate, other factors related to the nature of plant material can influence the SFE. The particle size, shape, surface area, porosity, and moisture level of extractable solutes are variables that depend on the nature of the matrix or pretreatment of the plant material. As a rule, the smaller the particle size of the marijuana plant material, the more exposed surface for SC CO_2 penetration and solute heat transfer. However, the excessive grinding of the material might produce an extraction bed extremely thick and the SC CO_2 could find fast tracks inside the extractor (fluid channeling effect), thus reducing the contact with the plant material. This is closely monitored during our extraction phase to negate this occurring since it reduces the overall efficiency of the extraction process.

Moreover, the moisture content of the solid material influences not only the extraction quality and yield but also the fluid dynamics of the solvent. Water can act as co-solvent by interacting with the supercritical solvent and by changing the overall polarity of the fluid. However, extracted water can increase the formation of ice blockages. Therefore, drying the raw material is recommended in order to have a water content of around 4–14%.

Co-solvents act through two hypothetical mechanisms: solute-co-solvent interaction, and matrix swelling which facilitates the contact of the solutes with the solvent. The co-solvents do not have absolute mechanism of action; their effects are related to the type of co-solvent, plant

material and target compounds. Studies about the effects of co-solvents at constant pressure and temperature evaluated the extraction efficiency of different modifiers at increasing percentages for volatile marijuana oil extractions. The addition of ethanol decreases the number of extracted terpenes with respect to pure SC CO_2 but increases the overall "whole plant" being extracted given the polarity of stated co-solvent.

We use co-solvents, especially at high percentages to change the critical parameters of the solvent mixture. Our co-solvent is food grade ethanol added in a percentage that varies from 1% to 15%

4) ADVANCEMENT OF SFE EXTRACTION TECHNOLOGY:

SFE is a technology that allows extraction of a wide range of diverse compounds. Our focus on utilizing, refining and expanding its use insures the best possible medical grade marijuana extracts available in the market.

By focusing our efforts on natural solvents such as CO_2 and food grade ethanol we will continue to provide the most environmentally friendly, medically centered medicinal-grade marijuana extracts to patients. With our focus on "whole plant" extracts we continue to advance the accepted medical focus on the entourage effect, namely that the sum of the plant together offers far more medicinal benefits than a strict isolation and assimilation of any one component of the marijuana plant. Additionally, since SFE adds a new dimension to the pharmaceutical and nutraceutical medicine advancement, its potential technologically and economy provides new, sustainable, and safe marijuana extract based medicine to patients.

STANDARD OPERATING PROCEDURE

PACKAGING OF CO2 OIL

PRODUCT DESCRIPTION

CO2 Oil packaged in child resistant containers

POLICY

To prepare and package CO2 Oil packaged in child resistant containers. All production will be documented.

RESPONSIBILITY

Production Manager or their designee.

RECORDS

Production Log

Inventory Tracking Software

PROCEDURE

1. Before daily processing begins, sanitize work surface with 50-200 ppm sanitizer solution. Mix 5 gallons of water with 1 teaspoon full of sanitizer in a five gallon bucket. Check the bleach solution with tester strips to ensure proper ppm level. Fill Spray bottle with solution and label as 'Sanitizer' Fill a 1 quart sized bucket with sanitizer solution, label as 'Sanitizer' and set a bucket at every workstation. Wipe all work surfaces with sanitizer solution, allow to air dry. Ensure that all utensils are cleaned and sanitized.

2. Assemble filling machine per instructions.

3. Sanitize all containers and droppers. Fill the food grade plastic container with sanitizer solution. Fill perforated insert for food grade plastic container. Fill with containers and caps. Submerge into sanitizer solution for five minutes. After five minutes, remove perforated insert and let drain over plastic container. Move sanitized containers or droppers into dry food grade plastic container and cover with plastic wrap. Place container of sanitized containers, caps or droppers on production line.

4. Sanitize filling machine.

5. Fill an 8 quart container with sanitizer solution and place Small Immersion Blender in sanitizer. NOTE: DO NOT submerge motor.

6. A designated employee shall retrieve CO2 Oil from the secure storage area and bring to the Production Area.

7. Begin the Production Form - The Production Form is a hard copy record that tracks the marijuana extract, approved non-marijuana ingredients, employees involved, quantity produced and verifies multiple quality control inspections of the medical marijuana product during the production process. In addition to this form, Inventory Tracking software will be used to track all medical marijuana products. To begin: print the production form and fill out manually during production run, enter into digital format by end of production day. Assign a Medical Marijuana Product Batch Number to the production run. Fill in remaining information before beginning the production run: Date and Product Name.

8. Use a NTEP approved scale to measure an accurate amount of marijuana concentrate needed for production.

9. Record in the Production Form and Inventory Tracking Software the amount of marijuana extract used per production run.

10. Quality Control Direct Observation of a Production Tech and Production Manager to be performed and recorded on the Production Form throughout the packaging of the marijuana product. Quality Control Direct Observation provides an ongoing and documented inspection of all products being produced to ensure safe and consistent medical marijuana products.

11. Fill CO2 oil vial using the assembled and sanitized Filler. Proper equipment maintenance and operation will ensure an accurate and consistent quantity of marijuana product.

12. Quality Control Direct Observation of the filled containers will ensure proper quantity amounts of each container to provide a safe and consistent marijuana product.

13. Secure and seal child resistant cap. This step seals the marijuana product ensuring no contamination of the product. Perform and document Direct Observation Quality Control that all marijuana products are properly sealed.

14. Turn power on to the Heat Shrink Tunnel. Set speed control to '3' and Heat control to 180F. For CO2 oil vial labeling close top 4 heat tunnel vents, leaving only the bottle 2 vents open. Allow 15 minutes for Heat Tunnel to reach temperature. If applicable turn on exhaust fan to remove hot air from production area.

15. Label with tamper evident, opaque shrink-wrap label. Perform and document Direct Observation Quality Control that labels contain all required information. "Sleeve" the bottled product. -- Place shrink wrap label onto every filled and capped CO2 oil vial by sliding the label over the container and positioning the label properly so that front of label is centered on front of bottle.

16. Run Sleeved product through the heat tunnel. Carefully place each unit onto the conveyor belt so that the CO2 oil vial stays upright. Bottle placement should be so that the front of the bottle faces the left side of the Heat Tunnel. As CO2 oil vial exit the Heat Tunnel each unit should be Quality Control inspected for tearing, wrinkling, stretching, or improper label placement. Adjust Heat Tunnel controls if necessary. Next. Label products with Production Batch Label.

17. Apply the Production Batch Sticker which will contain the following information:

a. Dispensary License Number

b. The date of packaging and "use by" date

c. Production Batch Number

d. Marijuana Concentrate Batch Number

e. The pre-mixed total weight (in ounces or grams) of usable cannabis in the package.

f. A list of cannabinoid content by weight.

18. Final Quality Control Inspection of product includes:

a. proper label applied correctly

b. proper production batch label applied correctly

c. dropper cap is applied correctly

d. package is clean and dry

19. Segregate products found to be damaged and imperfect from the Production Batch. Document the Product Name, Production Batch, Extract Batch, Date, Reason for Disposal, and Quantity of the marijuana product to be disposed of.

20. Once documented, render damaged or imperfect marijuana products unusable and unrecognizable as a marijuana product and dispose of in accordance with state law.

21. Complete the Production Form and enter information into Inventory Tracking Software.

22. Select three products from the Production Batch to be sent to a state certified Testing Lab facility for required cannabinoid and contaminant testing. Select one unit that was produced at the beginning of production, one unit towards the middle of production and one unit at the end of production, to accurately represent the consistency of the Production Batch. Provide samples for testing to Shipping Dept to schedule and deliver samples to the testing lab facility. Final medical marijuana product samples will be submitted to the testing lab facility sealed, packaged and labeled exactly as they will be delivered to a patient from a dispensing facility.

23. Move all final marijuana products to a secure storage area within the Production Area to await lab test results.

24. Upon receiving approved test results for the marijuana product Production Batch, apply a label to the final product providing the cannabinoid profile. All test results will be recorded in Inventory Tracking Software and associated with the Production Batch. Accurate cannabinoid test results ensure marijuana product is safe and consistent.

25. Store the marijuana products in the secure storage area. Products should be stored off the ground, in an organized and clean manner. The secure storage area is to be climate controlled. Use the Refrigerator/Freezer Monitoring Form to record storage area temperature throughout the day.

STANDARD OPERATING PROCEDURE

GENERAL PRINCIPLES OF SANITATION

PURPOSE/POLICY:

The purpose of this policy is to define the general principles of sanitation throughout the marijuana product manufacturing area of the facility. All equipment will be maintained and sanitized in each operating unit at appropriate intervals to prevent malfunctions or contamination that would alter the safety, identity, strength, quality or purity of the medical marijuana product beyond its established specifications. Marijuana and marijuana products will be handled and held in a manner that prevents growth of pathogenic microorganism or formation of toxins. Major equipment will be assigned individual maintenance logs. Written programs will be established and followed for the maintenance of major equipment.

ENVIRONMENTAL HEALTH (EHS) STATEMENT:

"Any person who, by medical examination, the person's acknowledgement, or supervisory observation, is shown to have, or appears to have an infection, communicable disease (including but not limited to: diphtheria, measles, Salmonella enterica serotype Typhi infection, shigellosis), open or draining skin lesion, or any illness accompanied by diarrhea or vomiting, or any other abnormal source of microbial contamination, that could result in microbial contamination of components, packaging components, in-process materials, cannabis, cannabis products, or contact surfaces, shall be excluded from working in any operations that may result in contamination until the health condition no longer exists. Employees are required to report any personal health condition that might compromise the cleanliness or quality of the medical marijuana the employee might handle."

SANITATION SYSTEMS:

1. ProKure-V
2. Puradigm or AirOClean 420 air purification system

RESPONSIBILITIES:

All Facility personnel must be aware of and have a proficient understanding of Company Sanitation policies and procedures:

General Manager

Extraction Manager

Production Manager

Extraction Tech

Production Tech

Sanitation Manager or his or her designee

PROCEDURES:

1. The production facility will include an air purification system appropriate for the size of the room which will be checked daily to ensure it is functioning properly. This system will be employed to kill airborne molds and fungus. (Puradigm or AirOClean 420).

2. Before daily processing begins, evaluate that any person who, by medical examination or supervisory observation, is shown to have, or appears to have, an illness, open lesion, including boils, sores, or infected wounds, or any other abnormal source of microbial contamination for whom there is a reasonable possibility of contact with preparation surfaces for marijuana or marijuana product shall be excluded from any operations which may be expected to result in such contamination until the condition is corrected.

3. All persons working in direct contact with preparation of marijuana or marijuana product shall conform to hygienic practices while on duty, including but not limited to:

i. Maintaining adequate personal cleanliness.

ii. Washing hands thoroughly in an adequate hand-washing area(s) before starting work, prior to engaging in the production of a Marijuana Product and at any other time hands/gloves may have become soiled or contaminated.

iii. Wear company-issued, disinfected, outer-garments (scrubs) in a manner that protects against the contamination of components, packaging components, in-process materials, cannabis, cannabis-derived products, or any contact surface.

iv. Remove all unsecured jewelry and other objects that might fall into components, marijuana products, equipment, or packaging, and removing hand jewelry that cannot be adequately cleaned during periods in which components, packaging components, in-process materials, or cannabis are manipulated by hand. If hand jewelry cannot be removed, it must be covered by material that effectively protects against contamination.

v. Maintain gloves of an impermeable material used in handling components, packaging components, in-process materials, and marijuana in an intact, clean, and sanitary condition.

vi. Wear, where appropriate, hairnets, caps, beard covers, or other effective hair restraints.

vii. Not eat food, chewing gum, drink beverages, or use tobacco products in areas where components, packaging components, in-process materials, cannabis products or any contact surfaces are exposed, or where contact surfaces are washed.

viii. Take any other precautions necessary to protect against the contamination of components, packaging components, in-process materials, cannabis, cannabis-derived products, or contact surfaces with microorganisms, or other extraneous materials, including perspiration, hair, cosmetics, tobacco, chemicals, and medicines applied to the skin.

ix. Take all precautions necessary to prevent unauthorized access to controlled access areas, and to maintain strict control of in-process materials marijuana and marijuana waste.

4. All persons working must ensure there is sufficient space for placement of equipment and storage of materials as is necessary for the maintenance of sanitary operations for production of Marijuana or Marijuana Product.

5. All persons working must ensure that litter and waste are properly removed and the operating systems for waste disposal are maintained in an adequate manner so that they do not constitute a source of contamination in areas where Marijuana or Marijuana Products are exposed.

6. All persons working must ensure that floors, walls, and ceilings are constructed in such a manner that they may be adequately cleaned and kept clean and kept in good repair.

7. All persons working must ensure that there is adequate safety-type lighting in all areas where Marijuana or Marijuana Products are processed or stored and where utensils or equipment

are cleaned.

8. All persons working must ensure that the Licensed Premises provides adequate screening or other protection against the entry of pests. Rubbish shall be disposed of so as to minimize the development of odor and minimize the potential for the waste becoming attractant, harborage, or breeding place for pests.

9. Bi-monthly room sanitation will be performed by fumigation (ie: fogging the room with ProKure-V).

10. Daily sanitation will also include spraying all production and extraction surfaces and equipment with ProKure-V).

11. All persons working must ensure that any buildings, fixtures, and other facilities are maintained in a sanitary condition.

12. All persons working must ensure that all contact surfaces, including utensils and equipment used for the preparation of Marijuana or Marijuana Product shall be cleaned and sanitized as frequently as necessary to protect against contamination.

i. Equipment and utensils shall be so designed and of such material and workmanship as to be adequately cleanable, and shall be properly maintained.

ii. Only sanitizers and disinfectants registered with the Environmental Protection Agency shall be used in a Marijuana or Marijuana Product Manufacturing Facility and used in accordance with labeled instructions.

13. All persons working must ensure that toxic cleaning compounds, sanitizing agents, solvents used in the production of Marijuana Concentrate and other chemicals shall be identified, held, stored and disposed of in a manner that protects against contamination of Marijuana, Marijuana Concentrate or Marijuana Product, and in a manner that is in accordance with any

applicable local, state, or federal law, rule, regulation or ordinance.

14. All persons working must ensure that the water supply shall be sufficient for the operations intended and shall be derived from a source that is a regulated water system.

i. Private water supplies shall be derived from a water source that is capable of providing a safe, potable, and adequate supply of water to meet the Licensed Premises needs.

15. Plumbing shall be of adequate size and design and adequately installed and maintained to carry sufficient quantities of water to required locations throughout the faciity and that shall properly convey sewage and liquid disposable waste from the Licensed Premises.

i. There shall be no cross-connections between the potable and wastewater lines.

16. All persons working must ensure that the Manufacturing Facility is providing its employees with adequate and readily accessible toilet facilities that are maintained in a sanitary condition and good repair.

17. All persons working must ensure that all operations in the receiving, inspecting, transporting, segregating, preparing, manufacturing, packaging, and storing of Marijuana or Marijuana Product shall be conducted in accordance with adequate sanitation principles.

18. All persons working must ensure that Marijuana or Marijuana Product that can support the rapid growth of undesirable microorganisms shall be held in a manner that prevents the growth of these microorganisms.

19. All persons working must ensure that storage and transport of finished Marijuana Product shall be under conditions that will protect against physical, chemical, and microbial contamination as well as against deterioration of any container.

Corrective Action

20. If, after visually inspecting all areas mentioned in the General Sanitary Requirements list, the supervisor finds areas that are not clean or in compliance, all procedures must be repeated until cleanliness is achieved.

21. Record corrective actions on Laboratory or Food Safety Checklist.

STANDARD OPERATING PROCEDURE

CLEANING AND SANITATION OF FILLER

RESPONSIBILITY: Sanitation Supervisor or his or her designee

FREQUENCY: Sanitation to take place immediately before daily operations begin; 2.Filler to be rinsed with water only at each break (mid-morning, lunch, mid-afternoon); 3.Full cleaning and rinsing to take place after each work shift

RECORDS: *Production Kitchen Sanitation Checklist*

PROCEDURE:

1. Before daily processing begins, sanitize filler and all filler parts with 65 p.p.m chlorine solution. Mix 5 gallons of water with 1 teaspoon full of unscented bleach in a five gallon bucket. Check the bleach solution with tester strips to ensure proper p.p.m level. Pour bleach solution into filler. No rinse is necessary.

2. At mid-morning break, during lunch break, and during the mid-afternoon break, use yellow broom and black shovel to remove debris. Use black shovel to scoop debris into inedible waste container.

3. Use yellow mop bucket with mop to remove gross debris and sanitize floor, under filler and adjacent areas, with 200 p.p.m. chlorine solution. Mix 3 gallons of water with 2 teaspoons full of unscented bleach in a 5 gallon bucket. Check the chlorine solution with tester strips to ensure proper p.p.m. level. Pour bleach solution into mop bucket and use mop to remove gross

debris and sanitize floor.

4. At the end of the shift, use yellow broom and black shovel to remove debris from floor. Use black shovel to scoop debris into inedible waste container.

5. Use yellow mop bucket with mop to remove gross debris and sanitize floor, under filler and adjacent areas, with 200 p.p.m. chlorine solution. Mix 3 gallons of water with 2 teaspoons full of unscented bleach in a 5 gallon bucket. Check the chlorine solution with tester strips to ensure proper p.p.m. level. Pour bleach solution into mop bucket and use mop to remove gross debris and sanitize floor.

6. Rinse filler and parts with water from a 5 gallon bucket full of hot water. Remove all filler parts and place into the wash compartment of the three compartment sink for proper cleaning, rinsing, and sanitizing. Mix 5 gallons of water with 2 tablespoons full of High Performance Double-Action Detergent. Pour detergent solution into the wash compartment of three compartment sink. Pour 5 gallons of hot water into the rinse compartment of the three compartment sink. Mix 5 gallons of water with 1 teaspoon full of unscented bleach in a 5 gallon bucket. Check the bleach solution with tester strip to ensure it is at the proper 65 p.p.m. level for sanitizing. Pour bleach solution into the sanitize compartment of the three compartment sink.

7. Dip a green Scotch-Brite Heavy Duty pad into solution and scrub all filler parts. Place all filler parts into the rinse compartment of three compartment sink. Visually inspect all filler parts to ensure all soap has been removed. Place all filler parts into the sanitize compartment of three compartment sink. Let all filler parts sit in bleach solution for one minute. Remove all filler parts from solution and allow to air dry. No rinse is necessary. Visually inspect filler parts for cleanliness. Put away filler parts wearing freshly washed gloves.

8. Ask cleaning crew supervisor to inspect for cleanliness.

Complete *Production Kitchen Sanitation Checklist*

Corrective Action: If, after rinsing, visual inspection by cleaning crew supervisor finds areas that are not clean, cleaning procedures must be repeated until cleanliness is achieved. Record

STANDARD OPERATING PROCEDURE

TESTING

POLICY

To submit medical marijuana for lab testing.

RESPONSIBILITY

Production Manager, Extraction Manager or their designee.

RECORDS

Seed-to-Sale Inventory Tracking System

PROCEDURES

Any medical marijuana sample is tested at the lab for the required cannabinoid profile, contaminants, any pesticide/herbicide/fungicide used during production of the medical marijuana product, and any growth regulator used during production of the medical marijuana product. Test results will be transmitted directly from the Testing Lab to the Extraction Manager. The Extraction Manager will assign the test results to the extraction batch number and document results in inventory tracking software. The accurate cannabinoid profile information will be utilized in the production formulations and standard operating procedures for medical marijuana product production to ensure safe, secure, accurate and consistent cannabinoid dosing and labeling.

1. Post Harvest:

The first phase of quality control consists of visually inspecting the leaves and flowers of harvested and cured marijuana. Upon approved inspection, samples of the leaves and flowers will be sent to a lab to test for potency and contaminants. A medical marijuana "leaves and flowers sample collection" SOP will be followed. Lab test results will be used:

- to compare against post extraction results
- to ensure the cultivated and cured marijuana plants are of consistent quality and thc/cbd concentrations
- to create concentrates of consistent quality.

Uniform and homogenous leaves and flowers samples will be placed within sealed, child-resistant containers. One sample will then be transported directly to a lab testing facility. All standard operating procedures for transportation will be followed to ensure secure and safe delivery of the sample to the testing lab. Remaining samples will be kept securely stored for future testing as required.

2. Post Processing:

The second phase of quality control will test the extract produced from the leaves and flowers of the marijuana plant. A sample from each lot of extract will be tested to ensure appropriate and consistent concentrations of cannabinoids are present and identified, such that the extract may be relied upon.

A uniform and homogenous sample will be placed within a sealed, child-resistant container. The sample will then be transported directly to a lab testing facility. All standard operating procedures for transportation will be followed to ensure secure and safe delivery of the sample to the testing lab.

3. Finished Product:

A number of samples, which accurately represent the production lot of the final medical marijuana product, will be selected for lab testing. Cannabinoid profile and contaminant testing will be performed to ensure appropriate and consistent concentrations of cannabinoids are present and identified, such that the extract may be relied upon.

"Final medical marijuana product samples" will be submitted to the testing lab facility, sealed, packaged and labeled exactly as they will be delivered to a patient obtaining the product at a dispensing facility.

The sample will then be transported directly to a lab testing facility. All standard operating procedures for transportation will be followed to ensure secure and safe delivery of the sample to the testing lab. All final medical marijuana products will be kept secured in a limited access area until approved test results are received. No final medical marijuana product will be shipped to a dispensing facility until approved lab test results are received and the final marijuana product is labeled with test results.

STANDARD OPERATING PROCEDURE

QUALITY ASSURANCE

Possible contamination will be tracked through the use of a Hazard Analysis Critical Control Point (HACCP) Plan. Critical control points will be identified, monitored and preventative procedures recorded throughout the production of marijuana products. The shelf stability of all products will be confirmed. Process controls for water activity, ph levels, and proper packaging will be utilized.

Corrective Action

Corrective actions are detailed within the CCP Hazard Analysis Chart. If contamination is discovered after a Production Lot has shipped then the Product Recall Plan will be used.

Shelf Stability Testing

Shelf stability testing will be conducted on site. Shelf stability is the time that a product will retain throughout its period of storage and use, the same properties and characteristics that is possessed at the time of its packaging. Forms will be tested and approved before production for patients begins.

Shelf stability testing will cover the four areas of concern.

- **Chemical:** The product retains it chemical integrity and potency, within specified limits.
- **Physical:** The original physical properties, including appearance, palatability, odor, and wholesomeness are retained.
- **Microbiological:** Resistance to microbial growth and product safety is retained according to specified requirements overall bacterial growth is maintained within acceptable levels.
- **Toxicological:** No significant increase in toxicity occurs.

Control by Water Activity, pH, Chemicals, and Packaging

Water activity and pH will be directly controlled in all products produced within the Production Area. A combination of controls, rather than relying on only one will be utilized. Inhibitors to growth of microbiological contaminants will be added to the marijuana product in the form of food safe additives or substances such as citric acid, in

needed. In addition, adjustments to the atmosphere of the packaged product using special packaging techniques will be implemented during packaging., if needed. This is because a one-control system carried to the extreme, can be harsh, making food unacceptable to consumers. The use of multiple controls is called the 'Hurdle Concept'. Microbiological controls using pH, water activity, inhibitors, and atmosphere will be described in this section.

pH CONTROL

Every microorganism has a minimum, optimum, and maximum pH for growth. Yeasts and molds can grow at low pH, but 4.6 is generally considered the level that will prevent the growth and toxin production for pathogens. Some pathogens, in particular *E. coli* 0157:H7, can survive acidic conditions for extended periods of time, even if their growth is inhibited. pH is considered primarily a means of growth inhibition and not a method for destruction of existing pathogens. However, at low pH values many micro-organiams will be destroyed if held at that pH for significant time. A pH 4.6 is used as a divider between high-acid and low-acid foods. Some products that are naturally low-acid are processed in a way that makes them a high-acid products. This is called acidification.

Measuring pH

The pH meter will be a two electrode. One is the reference electrode and one is the measuring electrode. When not in use, the electrodes are stored submerged in distilled water or other solutions as recommended by the manufacturer. The instrument must be checked each day of use with two different buffer solutions -- one on either side of the expected equilibrium pH. After calibration, the electrodes should be rinsed off with distilled water and then they can be used for testing. The operation and calibration of the pH meter must follow the meter manufacturer's instructions.

Thermometer Calibration

1. Fill a 2-quart measure with ice.
2. Add water to within 1 inch of top of container.
3. Stir mixture well.
4. Let sit for one minute.

5. Place thermometer in container so that the sensing area of stem or probe is completely submerged over the dimple.

6. Keep the thermometer from touching sides or bottom of container.

7. Let thermometer stay in ice water for 30 seconds or until the dial stops moving.

8. Place the calibration tool on the hex adjusting nut and rotate until the dial reads 32 °F, while in ice water.

9. Some digital stemmed thermometers (thermistors) and thermocouples have a reset button that should be pushed.

10. Repeat process with each thermometer.

pH METER CALIBRATION PROCEDURE AND ANALYSIS:

1. The pH meter is calibrated at least once on the day of use as outlined in section

2. The standard buffers used are pH 4.0, pH 7.0, and pH 10.0. A small amount is dispensed into a smaller container for calibration. Per manufacturers recommendations the standard pH buffers should be used for calibration only one time and disposed after calibration has been finalized.

3. If the final pH of the reagent or medium falls between a pH of 7.0 and 10.0, use the pH 7.0 and 10.0 calibration buffer solutions for the two point calibration.

4. If the final pH of the reagent or medium falls between a pH of 4.0 and 7.0, use the pH 4.0 and 7.0 calibration buffer solutions for the two point calibration.

WATER ACTIVITY CONTROL

Like pH, every microorganism has a minimum, optimum, and maximum water activity for growth. Yeasts and molds can grow at a low water activity, however 0.85 is considered the safe cutoff level for pathogen growth. A water activity of 0.85 is based on the minimum water activity needed for *S. aureus* toxin production. Products above a water activity of 0.85 will

utilize acidification as the barrier to control the growth of pathogens. Products with water activities between 0.60 and 0.85 are classified as intermediate moisture foods. These do not require refrigeration to control pathogens, but have a limited shelf-life because of spoilage, primarily by yeast and mold. For the most part, products with a water activity below 0.60 have an extended shelf-life, even without refrigeration.

PACKAGING

Reduced oxygen packaging is used to prevent the growth of microorganisms in order to extend the shelf-life of the product and keep the integrity of the product intact. Packaging is different from the other methods of control. Although packaging is sometimes used to control microbiological growth, it is limited to the control of spoilage microorganisms. Packaging serves two functions:

1. it prevents contamination of the food or
2. it extends the effectiveness of food preservation methods

QUALITY ASSURANCE
Marijuana Product CCP Hazard Analysis Chart

CCP	Hazard & Source/ Cause	Critical Limit	Monitoring Procedure	Corrective Actions	Record Keeping	Verificatio n
CCP1 – Marijuana Product is moved to Climate Controlled Secure Storage. Marijuana Product is moved	**Microbiological Hazards** -Microbiological growth due to breakdown of refrigeration unit.	Temperatur e of Ingredients must be stored at consistent temperature .	**Who:** Production Manager **What:** monitor temperature of Climate Controlled Secure Storage **How Often:** Twice daily using calibrated thermometer.	Properly discard of Marijuana Product if temperature variance is greater than 20 degrees Fahrenheit	Refrigeration Log Calibration Log	Production Manager reviews and signs off on Refrigeration and Calibration Logs
CCP2 - Proper sanitation of all packaging	**Physical Hazards** -Physical contamination from operator -Foreign body/broken glass/dust contamination from source of origin and/or storage	Any foreign objects present. 50 -200 ppm sanitizer concentrati	**Who:** Production Manager or Sanitation Manager **What:** Properly inspects bottles and caps for physical hazards. Follows sanitation SOP	Discard any broken bottles and foreign objects. Use ppm test strips to for proper	Sanitation Log	Sanitation Manager logs ppm test strip readings in Sanitation Log. Daily sign off by Production

	environment **Chemical Hazards** -Chemical contamination from high ppm of sanitizer.	on	and use testing strips for ppm accuracy **How Often:** As Needed	sanitizer mixture.		Manager.
CCP3 - Use Filling Equipment to fill all packaging.	**Physical Hazards** -Physical contamination from operator -Foreign body/dust contamination from production environment. **Microbiological Hazard** -Microbiological growth due to improper pH levels before filling. -Microbiological growth due to improper temperature monitoring.	Any foreign objects present. Temperature must be consistent and ph of products in filler must be <4.6ph	**Who:** Production Manager **What:** Follow SOP and Hygiene Guidelines. Take ph and monitor temperature. **How Often:** Every Production Batch	re- test for proper pH level after adding citric acid or food safe equivalent. Minimum pH level required is 4.6 or <.	-Staff hygiene policy/program in place with all site staff trained and records of training maintained and retained on personnel files. -Controlled by proper sanitation of production environment. -Proper pH levels are monitored with a properly calibrated pH meter, calibrated with proper pH 4 and pH 7 buffers. -Staff pH policy/training in place with all site staff trained and records of training retained in personnel records. -The critical limit is established at 4.0 or below by the appropriate manufacturer's recommendation. -Staff awareness/training programs in place with records of training retained and filed.	Production Manager logs all ph and temperature readings into Production Log. Calibration of Thermometers and ph tester entered into Calibration Log.
CCP4 – Marijuana Product is	**Microbiological Hazards** -Microbiological	Temperature of Ingredients	**Who:** Production Manager **What:** monitor	Properly discard of Marijuana	Refrigeration Log Calibration Log	Production Manager reviews and

moved to Climate Controlled Secure Storage. Marijuana Product is moved	growth due to breakdown of refrigeration unit.	must be stored at consistent temperature .	temperature of Climate Controlled Secure Storage **How Often:** Twice daily using calibrated thermometer.	Product if temperature variance is greater than 20 degrees Fahrenheit		signs off on Refrigeration and Calibration Logs

STANDARD OPERATING PROCEDURES

EMPLOYEE QUALIFICATIONS AND TRAINING

1. JOB DESCRIPTIONS/QUALIFICATIONS:

A detailed Job Description will be developed for each employment position within the production facility. The following is a list of the initial anticipated employment positions:

General Manager

Extraction Manager

Extraction Techs

Production Manager

Production Techs

Sanitation Associates

Logistics Tech

Quality control designate

Duties, Authority, Responsibilities and Qualifications of Personnel:

It is Company policy to employ individuals who are qualified to properly perform their assigned job responsibilities. These employee qualifications in compliance with applicable State regulations shall be documented in the job description and may consist of age restrictions, formal education, work experience, criminal history background checks, in-house training or combination thereof. Each job description summary will include a list of duties, authority,

responsibilities and qualifications of personnel which will be used to determine employee qualifications for hiring and training purposes.

The Job descriptions will also include a list of the standard operating procedures that position is required to know.

2. FACILITY EMPLOYMENT POLICIES:

The following are general employment qualifications and training policies for the facility:

1) Documentation of each employee's formal education (degrees completed, courses taken, etc.) shall be kept on file.

2) Where appropriate, a summary of previous work experience (i.e. a resume) shall be adequate documentation to demonstrate an employee's qualifications to perform or supervise facility operations.

3) Supervision of Personnel: Given the sensitive nature of the industry it is vital that employees are adequately supervised at all times and in compliance with security protocols (see security plan guide). The Job Descriptions for each position includes identification of the reporting supervisor. The extraction and production manager will be onsite and is responsible for the overall supervision of all employees.

4) Adherence to Confidentiality Requirements: Each Employee and/or agent of the Company will be trained in and required to adhere to the Company's confidentiality requirements. Each employee will be required to sign a Non-disclosure Agreement, as well as a Confidentiality Statement representing their covenant with the Company.

5) Periodic Performance Evaluations and Disciplinary Actions: Performance evaluations will occur bi-annually. The performance evaluations will be written and maintained in the

employee's personnel file. This information will be used to determine compensation and pay increases as well as disciplinary actions and grounds for dismissal.

6)A written record documenting the completed individual training procedures shall be signed by the participants and trainer during each training session.

7) All company employees will attend in-house training conducted by qualified individuals in HACCP, current Good Manufacturing Procedures (cGMPs), general sanitary practices and in the specific Standard Operating Procedures (SOPs) which pertain to their assigned work responsibilities. Such training shall be performed on an ongoing basis to assure the employee is familiar with these procedures and practices. Additionally each employee will supplement their training with review of relevant video educational materials for example:

HACCP Video:

Part 1 - https://www.youtube.com/watch?v=7nbjd_TnU8o

Part 2 - https://www.youtube.com/watch?v=gRJ7q_2Vkrc

Principles of GMP

https://www.youtube.com/watch?v=JHkGgFUuZwE

8) The General Manager/Quality Assurance Manager shall exercise oversight of the organizations practices and procedures and who have documented training and experience in quality assurance and quality procedures.

9) All staff members will be twenty-one (21) years of age or older.

10) All staff members who could potentially come in contact with or handle medical marijuana or medical marijuana products will not include anyone who has been convicted of any felony of sale or possession of drugs, narcotics or controlled substances in accordance with the requirements of section thirty-three hundred sixty-four of the public health law.

11) All staff members who could potentially come in contact with or handle medical marijuana or medical marijuana products will not include anyone who has been convicted of a felony or had a registration or license suspended or revoked in any administrative or judicial proceeding.

12) All staff members who could potentially come in contact with or handle medical marijuana or medical marijuana products shall be subject to a fingerprinting process as part of a criminal history background check in compliance with the procedures established by the Department.

13) Personnel engaged in the manufacture, processing, packing or holding of medical marijuana products shall wear clean clothing appropriate for the duties they perform. Protective apparel, such as head, face, hand and arm coverings, shall be worn as necessary to protect products from contamination.

14) Any person shown at any time to have an apparent illness or open lesions that may adversely affect the safety or quality of a product shall be excluded from direct contact with components, product containers, closures, in-process materials and finished products. All personnel shall be instructed to inform their supervisor of any health conditions that may have an adverse effect on a product. All personnel shall practice good sanitation and health habits.

15) There shall be an adequate number of qualified personnel to perform and supervise the manufacture, processing, packing, holding or shipment of each product. Only personnel authorized by supervisory personnel shall enter those areas of the buildings and facilities designated as a limited-access area. Records shall be maintained identifying those areas individuals are authorized to enter.

16) Consultants advising on the manufacture, processing, packing, holding or shipment of medical marijuana products shall have sufficient education, training, and experience, or any combination thereof, to advise on the subject for which they are retained. Records shall be

maintained with the name, address, and qualifications of any consultants and the type of service they provide.

3. FACILITY TRAINING PLAN:

The training program for all manufacturing employees will include but is not limited to the following areas of focus:

1. Training on Commission Statutes and Rules and Other State and Local Laws and Regulations
2. Training on Company Standard Operating Procedures.
3. Training on Detection and Prevention of Diversion of Cannabis
4. Training on Security and the Company's Security System
5. Training on Hazards and Safety and Emergency Procedures such as a Medical Emergency, Fire, Chemical Spill, Security and a Threatening Event.
6. Training on Inventory Control and Record Keeping
7. Annual training to update and reinforce knowledge in above areas

All employees will attend in-house training conducted by qualified individuals in Current Good Manufacturing Practices (cGMP), general sanitary practices, and in the specific Standard Operating Procedures (SOPs) that pertain to their assigned work responsibilities. Such training will be performed on an ongoing basis to ensure the employee is familiar with these procedures and practices. A written record documenting the completed individual training procedures will be signed by the participants and trainer during each training session. Each SOP will include a section for signature of the employee to indicate they have completed training in the performance of the procedure.

The Department of Human Resources, in coordination with unit directors, is responsible

for the development and execution of employee training. The Human Resources department will work in coordination with Quality Control and the Compliance Department to develop the curriculum for the Company's training system. Human resources and department heads are responsible to the Compliance Department who has the ultimate oversight responsibility for training requirements, and for auditing department training records.

The company shall develop a detailed training manual for the education of manufacturing personnel employed at the facility. In addition to the Company's training manual, additional training materials will be made available such as video presentations, industry guides, and GMP publications and other literature. These will be maintained within the facility in a library of information at all times available to the staff.

The company shall additionally make its training materials and attendance records available at all times, onsite, at our Manufacturing Facility for inspection by the DOH or its authorized representative.

Consultants advising or training on the manufacture, processing, packing, holding or shipment of medical marijuana products shall have sufficient education, training, and experience, or any combination thereof, to advise on the subject for which they are retained. Records shall be maintained with the name, address, and qualifications of any consultants and the type of service they provide.

DOCUMENTATION

Attendance at formal training classes will be mandatory and documented. Additionally, specific training on SOPs, including applicable laws and regulations, will be signed off by both the employee and a supervisor. This documentation will be retained in the employee's personnel file so that it can be audited by the compliance division. Human resource files and training

documentation will be maintained in hard copy and an electronic environment for ease of interaction, retention, and inspection by the commission. Employment contracts will specify attendance at training classes, and in the event the employee does not complete the required training in the specified time, this would be grounds restricting their hours until the training is completed and ultimately dismissal.

2.4.3 Other Information

MEDICAL MARIJUANA PRODUCT DESCRIPTIONS

1. Medical Marijuana Sublingual Tincture

Medical Marijuana Sublingual Tinctures are administered sublingually by the use of a measured dropper. Sublingual tinctures shall contain no more than 100 milligrams of tetrahydrocannabinol (THC). The product will be lab tested for accurate active cannabinoid profile. The droppers have measurement demarcations as to provide safe and easy dosing levels. Sublingual Tinctures offer patients the ability to 'micro-dose' cannabinoids in measurements of 2-3 mg of active cannabinoids. The medical benefits of sublingual Medical Marijuana products have the benefit of a faster onset due to a more direct ingestion method. These products bypass the liver and GI tract and as a result are a great benefit to patients with medical conditions, such as autoimmune diseases and Crohn's disease, which affect the GI tract and/or the liver and kidneys. Medical Marijuana Sublingual Tinctures will be labeled and packaged in ASTM certified child resistant re-sealable dropper caps that will maintain the child resistant effectiveness for multiple openings.

2. Medical Marijuana Infused Capsule

Medical Marijuana Infused Capsules are a blend of active cannabinoids and all natural ingredients within a gelatin capsule. The gelatin capsule dissolves in the stomach of the patient releasing the cannabinoids and ingredients. Each individual Capsule shall contain no more than 10 milligrams of tetrahydrocannabinol (THC). With no more than 100 milligrams of tetrahydrocannabinol per package. Medical Marijuana Capsules will be labeled and packaged in ASTM certified child resistant packaging that will maintain the child resistant effectiveness for multiple openings.

3. Medical Marijuana Infused Sublingual Tablet

Medical Marijuana Infused Sublingual Tablets are designed to dissolve slowly in a patient's mouth making an effective sublingual administered product. Each individual Sublingual Tablet shall contain no more than 10 milligrams of tetrahydrocannabinol (THC). With no more than 100 milligrams of tetrahydrocannabinol per package. The product will be lab tested for accurate active cannabinoid profile. The medical benefits of sublingual Medical Marijuana products have the benefit of a faster onset due to a more direct ingestion method. These products bypass the liver and GI tract and as a result are a great benefit to patients with medical conditions, such as autoimmune diseases and Crohn's disease, which affect the GI tract and/or the liver and kidneys. Medical Marijuana infused sublingual tablets will be labeled and packaged in ASTM certified child resistant packaging that will maintain the child resistant effectiveness for multiple openings.

4. Medical Marijuana Infused Lotion

Medical Marijuana Infused Lotion products are an oil based lotion to be applied directly to the skin, not meant for oral consumption. Infused Lotions shall contain no more than 100 milligrams of tetrahydrocannabinol (THC). The product will be lab tested for accurate active cannabinoid profile. Marijuana infused lotions will be packaged in squeeze tubes with an ASTM certified child resistant resealable cap that will maintain the child resistant effectiveness for multiple opening.

5. CO2 Sub/Supercritical Extraction for Products and Concentrates

A concentrated extract of cannabinoids, including but not limited to THC, CBD, and CBN created using a Closed-Loop Sub/Supercritical C02 Extraction. C02 is a non-polar solvent, which is efficient at extracting the Cannabinoids, Terpenes, and Flavonoids from Medical Marijuana plant matter. This concentrated form of Medical Marijuana can have up to a 90% concentration of cannabinoids. The product will be lab tested for accurate active cannabinoid profile. Labeled and packaged in ASTM certified child resistant packaging that will maintain the child resistant effectiveness for multiple openings.

MEDICAL MARIJUANA WEIGHT EQUIVALENCY

Assessment of the pre-mixed total weight (in ounces or grams) of usable cannabis contained within an extract, oil, or infused product.

The pre-mixed total weight of usable cannabis contained in an extract, oil or infused product is determined by the amount of marijuana plant material used to make the marijuana extract or oil. To determine the amount of usable marijuana in an infused product the additional step of determining the amount of extract or oil used to make an infused product is necessary. Equivalency of marijuana flower or trim to extract, oil or infused product can vary due to several variables;

1. The tetrahydrocannabinol (THC) content of the marijuana flower or trim.
2. The THC content of the extract or oil produced from marijuana flower or trim.
3. The amount of THC infused into the infused product.

The average tetrahydrocannabinol (THCa) percentage of medical marijuana flower ranges from 15 - 19%. THC(A) is the form of THC found within the marijuana plant material. THC(A) is the non-psychoactive bio-synthetic precursor to THC. THC(A) must be decarboxylated to become bioavailable to the human body and is done so in the production of some extracts an oil and with all infused product production. During decarboxylation the THCa loses carbon and oxygen molecules, and about 12.3 percent of its weight. This must be taken into account when determining the usable weight of marijuana found in extract, oil, or infused products.

Extraction efficiency for CO2 Sub/Supercritical Extract and Oil average from an average between 60% - 80%. This range provides an estimated average total of 70% of the total THC milligrams available within the plant will be extracted. The oil or extract is then lab tested to determine the exact amount of active cannabinoids in the product. These lab results are then used to determine how much in weight or volume of the extract or oil is to be used in the infused product formulation. Infused products are measured in activated milligrams of THC. No more than 10 milligrams THC per dose. No more than 100 total THC milligrams per package.

Projected extracted milligrams of THC per gram of plant material based on average extraction efficiencies of yield and THC percentage:

1. Beginning plant material THC % is 15%.
2. Extraction efficiency is 70%.
3. Infused Product is to contain 10 milligrams of active THC

Example: of 1 gram of medical marijuana = 1000mg Total Weight

A. The medical marijuana is 15% THC the total available THC milligrams within that one gram is 150 milligrams. (1000mg X 15% = 150mg)

B. The CO2 Extraction efficiency is equal to 70% total amount of THC milligrams extracted 105 mg THC per gram of plant material.

C. 105 mg of THC will produce 10.5 units of 10 mg THC infused products.

D. 1/10 gram would be the pre mixed total weight of usable cannabis contained within the infused product.

RECORD KEEPING

In addition to business records there are certain other documents that should be maintained with regard to other areas of the Company's operations.

1. Current Employee List – This list must provide the full name and ID number of each employee and all non-employee Owners, who work at a facility.

(2) Personnel records – Including employee contracts, compensation records, job descriptions, performance evaluations, and disciplinary actions.

(3) Secure Facility Information – For its Licensed Premises the Company must maintain the business contact information for vendors that maintain video surveillance systems and Security Alarm Systems.

(4) Licensed Premises – Diagram (s) of all approved Limited Access Areas and any permitted off-premises storage facilities.

(5) Visitor Log - List of all visitors entering Limited Access Areas or Restricted Access Areas.

(6) All financial records normally retained for tax purposes including income tax, sales tax and payroll taxes.

(7) Records related to inventory control such as comprehensive inventory tracking records that account for, reconcile and evidence all inventory activity for marijuana from either seed or immature plant stage until the product is destroyed, salvaged, or sold to a retail marijuana establishment.

(8) Records Related to Transport - The Company must maintain adequate records/manifests for the acquisition, cultivation, transport or loss of all Marijuana Product(s).

(9) Provision of Any Requested Record to Regulatory Agencies. The establishment must provide on-demand access to on-premises records following a request from a Regulatory Agency during normal business hours or hours of apparent operation following a request from a Regulatory Agency.

(10.) Records related to the Company's communication with Regulatory Agencies including loss or theft, transportation accidents, disciplinary actions and resolution, etc.

CannaScore

CannaScore is a real-time compliance software, built to analyze any cannabis facility. This thorough analysis covers medical marijuana dispensaries and production facilities to accurately gauge how compliant businesses are in terms of following all of the arduous rules imposed by states, counties, and local government.

Created by industry leaders, the CannaScore auditing system was produced by those in the industry that have been continuously operating as rules were being implemented. The audit process takes approximately 2-3 hours per license, depending on the type of license and the size of the facility. Robust questioning of all aspects of these businesses involves following every line of state regulations to ensure the licensed facility is operating properly and within the law. Once the audit is completed, each license will receive a score based on their compliance. The CannaScore allows the owner to fix and rectify existing problems to ensure they can avoid fines, closure, or other business setbacks.

The U.S. Department of Justice, on August 29, 2013, issued a memorandum for all United States Attorneys. This memo, written by James M. Cole, laid out specific priorities that are particularly important to the federal government. In order for cannabis businesses and ancillary businesses that work with cannabis businesses to properly follow the "Cole Memo", they must be sure that those they are working with are operating compliantly, lest they be at risk for working with a company that is not following the wishes of the Cole Memo. CannaScore gives cannabis business owners and those doing business with cannabis companies the peace of mind that the businesses are compliant and aren't endanger of running afoul of the law.

With the myriad of rules in that currently effect the cannabis industry, it's common for businesses to make mistakes, but without a system like CannaScore to catch those mistakes, problems can grow exponentially. Cannascore can be used to audit facilities when new regulations are added. CannaScore navigates the complex maze of rules and regulations to provide the serenity that a licensee is compliant.

Each audit performed comes with real time reports, allowing managers to potentially correct problems on the spot. CannaScore also provides a full report so that more complex issues can be identified, diagnosed and changed overtime. Photos of violations and issues are attached to make it quick and apparent what needs to be fixed. CannaScore is set up to have reminders to ensure future audits check to make sure all "problem" areas have been fixed.

Merit Criteria-Question 3

[redacted]

(C) Financial Plan for Operating a Medical Marijuana Dispensary in Hawaii.

KLM believes the summary information as provided in Appendix 3.3 – Financial Projections shows a cautious approach to establishing a Financial Operating Plan noting it has secured the advisory services of several prominent operators (Medicine Man Technologies, Inc., Tree Frog, Inc., Socal and Elemental Management Group) for assistance in creating these outlooks using real experience in emerging markets. Their knowledge, experience, and educational elements are noted in the Merit Criteria – Question 1 discussion.

All monthly revenue projections were estimated based upon revenue projections which were based upon a fraction of the current patient counts for Oahu (October 2015 DOH Source) assuming that one half of one third of that number (approximately 450) would be the initial patient count at the dispensary operations at month one. Additionally, we only expect to achieve a total of 900 patients at the end of the first full year of operations, projected to be YE 2017. We also project that consumption, although allowable up to eight (8) ounces per 30-day period, will likely settle in at about 1.25 ounces of material (flower and extraction based products) per month and have used an initial value for the flower much lower than what existing market conditions yield. Since the State has virtually no legal extractions based projects present, we are also utilizing mature market values on a per 10 milligram dose basis.

All monthly expenses are based upon the real time experience of indoor cultivation operators, manufacturing/production operators, and medical dispensary operators as well as the current prevailing wage rates in Hawaii for skilled team members requiring training.

All capital costs are based upon Hawaii real estate costs related to new construction for our cultivation and production facility and a leased dispensary facility (existing) model. We have recognized the capital cost delta as associated with a robust cultivation operation that will deploy an extraordinarily aseptic and safe approach to cultivation.See the Merit Criteria – Question 2 discussion.

(D) Shown in Appendix 3 is a credit report on Applicant Ivan M. Lui-Kwan evidencing his good credit history.

(E) Shown in Appendix 3 is an affidavit by Applicant Ivan M. Lui-Kwan stating that he has never filed a personal petition for bankruptcy protection, and he has never owned or operated an entity which has filed a petition for bankruptcy protection.

APPENDIX 3-1

SOCAL BUILDING VENTURES LLC

January 29, 2016

Ka Lau Malie, LLC
89-237 Kauwahi Avenue
Waianae, Hawaii 96792

Attention: Ivan Lui-Kwan

Dear Mr. Lui-Kwan:

[redacted]

The funding of the Financing shall be subject to the following conditions:

1. KLM shall be awarded a license to operate a medical marijuana dispensary on the island of Oahu, State of Hawaii (the "Business").

32123 LINDERO CANYON ROAD, SUITE 205, WESTLAKE VILLAGE, CA 91361
(818) 865-1700 PH (818) 865-1711 FX

SOCAL BUILDING VENTURES LLC

2. Elemental HI, LLC shall be admitted as a member of KLM, and shall have approval rights with respect to (a) KLM's business plan, and annual operating budget, (b) the location, design, and construction plans for KLM's production center and retail locations, and (c) KLM's operating procedures.

3. Elemental HI, LLC shall be engaged by KLM to manage KLM's business and operations.

4. The Loan shall be secured by a lien on KLM's assets.

5. The lease and loan documents shall be negotiated in good faith based on the foregoing with customary terms and shall be in a form acceptable to both parties.

If the foregoing conditions are acceptable, please sign a copy of this letter in the space provided below and return the signed copy to us.

Sincerely,

Socal Building Ventures, LLC

[redacted]

Accepted and agreed:

Ka Lau Malie, LLC

[redacted]

32123 LINDERO CANYON ROAD, SUITE 205, WESTLAKE VILLAGE, CA 91361
(818) 865-1700 PH (818) 865-1711 FX

APPENDIX 3-2

LEIGH-WAI DOO
2800 WAIOMAO ROAD
HONOLULU, HAWAII 96816

ESCROW STATEMENT OF LEIGH-WAI DOO

Leigh-Wai Doo hereby states as follows:

[redacted]

2. I am the escrow agent and escrow for an escrow account for and under the control of Ka Lau Malie LLC, a Hawaii limited liability company, pursuant to that certain Escrow Agreement and Undertaking dated October 30, 2015.

[redacted]

4. Those financial resources are and have been since October 30, 2015 under the control of Ka Lau Malie LLC.

Dated: Honolulu, Hawaii, January 25, 2016.

[redacted]

APPENDIX 3-4

elemental

MANAGEMENT GROUP

The information in this brochure is provided to introduce prospective partners to our existing projects throughout the United States.

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MANAGEMENT GROUP

OUR VISION

Our team is a unique hybrid of master growers, super science geeks, and blockbuster retailers with the "secret sauce"

Medical Research

- Improve **patient's quality of life**
- **Educate doctors** on cannabis
- **Collect data** and aggregate across our network of dispensaries to prove the therapeutic truth about cannabis

Cultivation

- **Expand our indoor, outdoor and greenhouse grows** into an agricultural empire

Dispensary

- **Build best in class dispensaries across the nation**
- **Revenues reaching $20-50MM each!**

Processing

- Premium packaging (branding + technology) = competitive advantage

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MANAGEMENT GROUP

GROW TEAM GROW!

- Our strains are **cannabis cup winners**
- We have **Large capacity greenhouses** in Colorado
- Additional greenhouses in development in Washington

WE'VE GOT TASTE!

Our **secret sauce** contains proprietary bio-organic nutrients and the **latest lighting technology** to **increase potency** (+5%), **increase yields** (+20%) and **increase efficiencies** (millions of additional dollars netted!) Our **innovations** are revolutionizing the industry.

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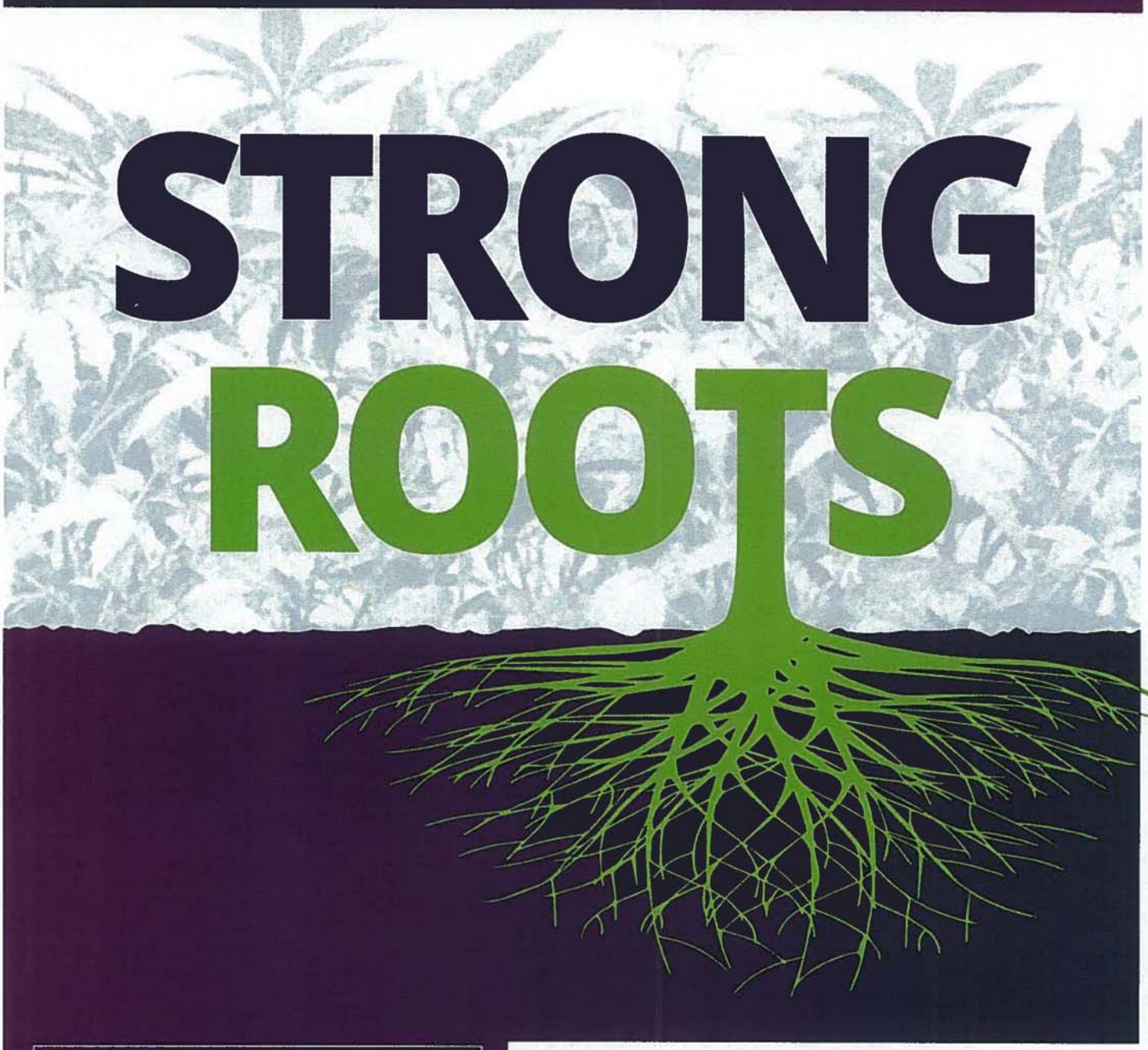
MANAGEMENT GROUP

STRONG ROOTS



We are leveraging the business model of Elemental Wellness founded by Ariel Loveland.

Elemental's proven track record

- **$23 million** annual revenue
- **40,000 members**
- **Voted Best Dispensary** by Weedmaps
- **Bulletproof brand**

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ONE OF THE LARGEST COMMERCIAL GROWS IN COLORADO

Total greenhouse footprint of 180,000 SF the **first of its size** in the industry.

Cultivation Farm in Spokane, Washington

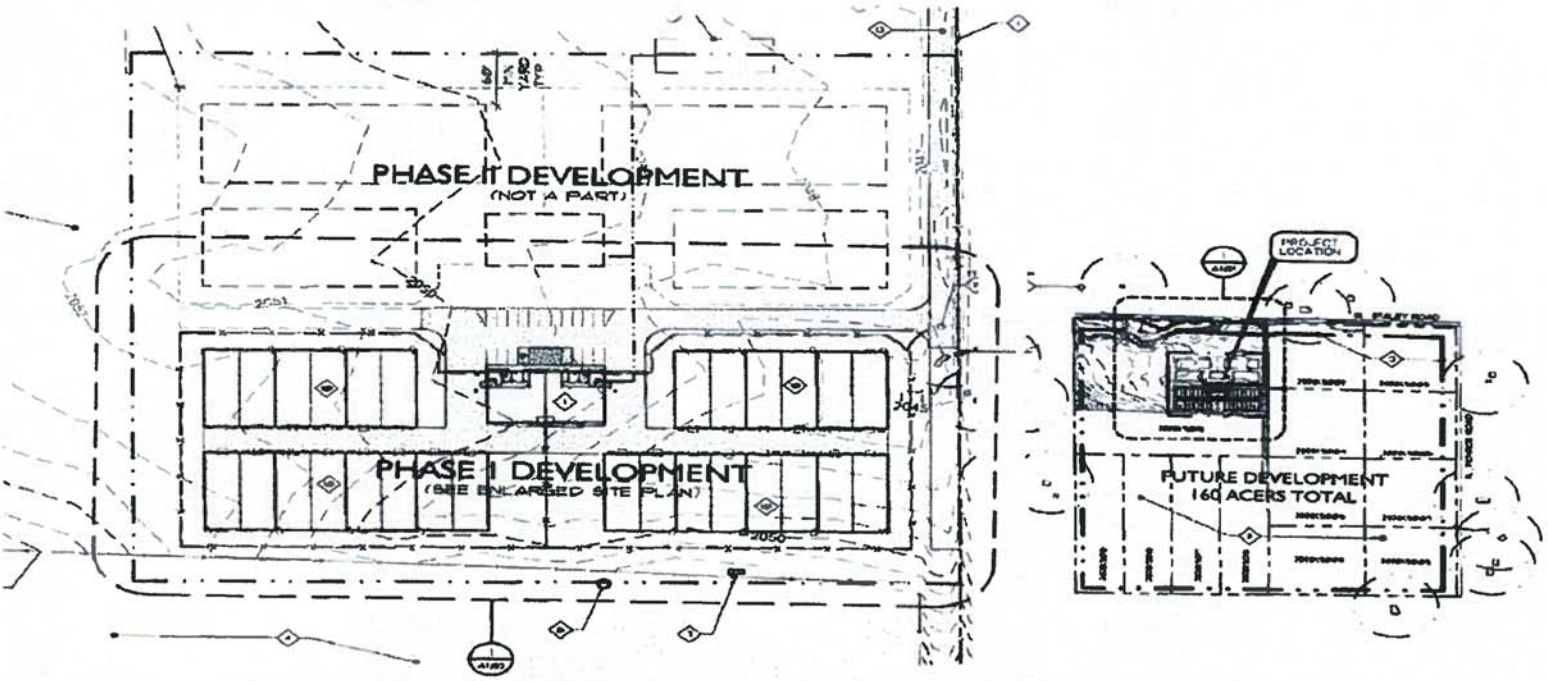
Our 160 acre large campus in Spokane will be equipped with our state-of-the-art greenhouse systems

- The land has **1,200,000 SF** for greenhouses
- Each plot will be leased at **$60/square foot**
- Investment into the project **~$7M**
- Revenue potential is **$75 million/year**

Cultivation Farm in South Park, Colorado

The Group owns and operates a Colorado cannabis farm in South Park Colorado.

- Investment of $2.5M is required to develop **ten (10) industrial-grade greenhouses**
- **Expansion for 34 more greenhouses**



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MANAGEMENT GROUP

THE WHOLE PACKAGE

IT'S OFFICIAL!

The Moses Lake Processing Center was state approved and licensed in September of 2015.

WELL-GROOMED

Moses Lake, Washington

Our state-of-the-art processing center in Moses Lake, Washington serves a large portion of the Washington State cannabis market.

- **Can process 26,000 pounds of cannabis per year (500 pounds per week)**
- **One of the largest state-licensed producers of quality medicine in the state.**

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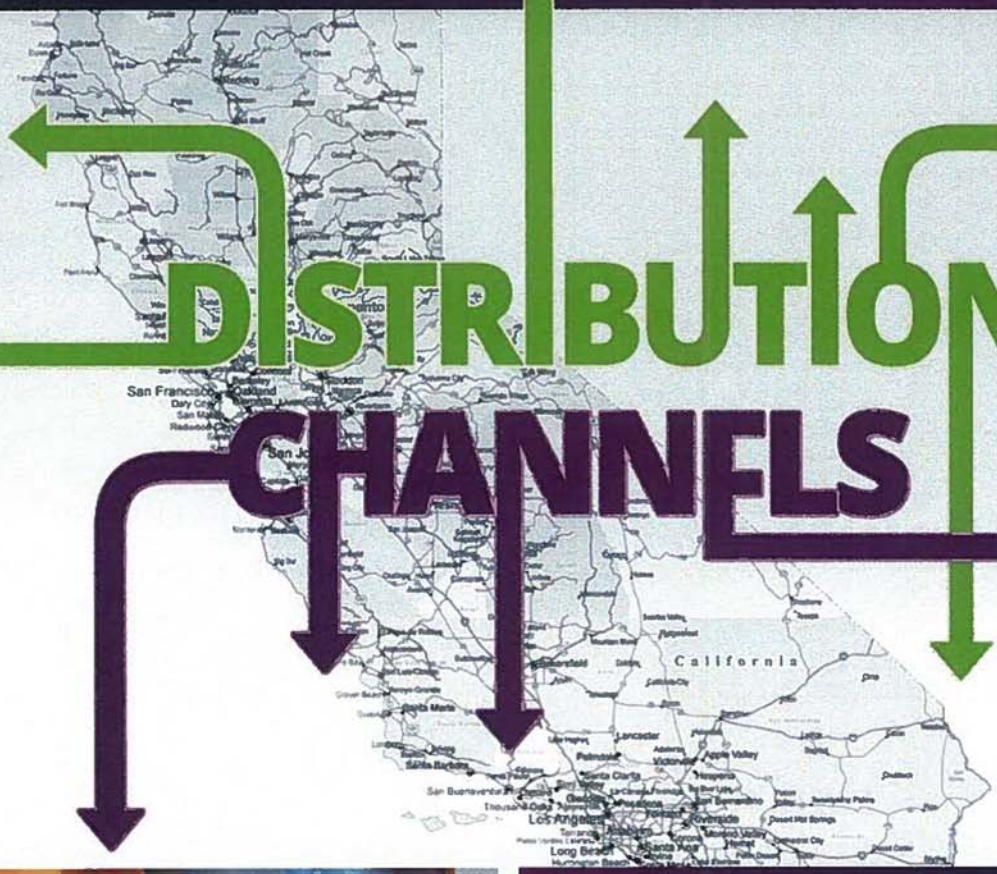
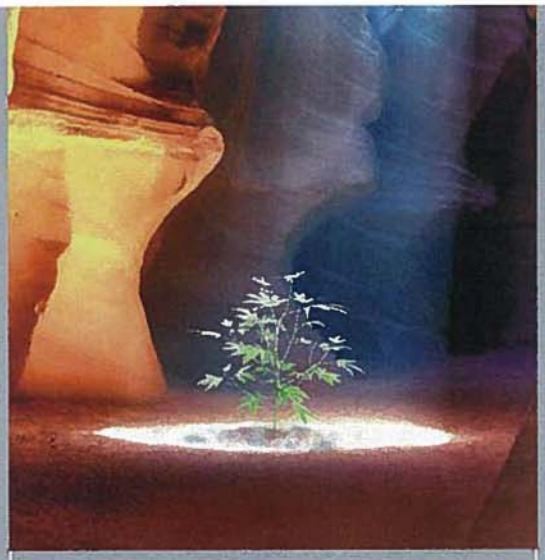
MANAGEMENT GROUP

DISTRIBUTION CHANNELS





CANYON CARE

The Topanga Canyon facility, liceensed in accord with the cannabis regulations of Los Angeles, passed health department safety inspections.

THE DREAM DISPENSARY

Topanga Canyon, California

Our newest wellness center in Los Angeles will open in March of 2016. The $15 million dollar facility will be the first of its kind with a CBD division dedicated to treating patients with a non-psychoactive form of cannabis

- **50,000 SF**
- Growing classes
- **Expo kitchen with cooking classes**
- 100+ parking spots
- High traffic area, commuter hub: **traffic count 371,000**
- **22,000 SF** of canopy with 100,000 SF future capacity

Los Angeles Valley, California

A second $10 million facility in Los Angeles is under construction

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MANAGEMENT GROUP

OPERATIONS

From seed to sale, our experienced team has a fully realized operations plan, and has hit the ground running.

THE BIG PICTURE

- **Economies of scale**
- Finance, Retail, Marketing & MMJ Production talent
- High-quality products
- **Vertically integrated operations**
- Develop a **superior branding** through specialized products maximize **mainstream appeal** through educational outreach
- Secure permits to create new dispensaries

IN THE BAG

- Large-scale outdoor farms
- **High yielding, energy efficient** greenhouses
- Top shelf quality output
- Option and license to build additional **1,000,000 sq. ft of greenhouse**
- One of **NorCal's most successful dispensaries**
- Two state-of- the-art cannabis wellness centers launching in L.A

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MANAGEMENT TEAM

The diversified projects shown in this portfolio are led by a management team with an impressive background in business, financing, cannabis production, and marketing. Every aspect of the cannabis industry is familiar territory to our well-honed, expert management team, and the breadth of our projects, and reach of our ambition is nothing short of impressive.

MEET THE TEAM

Jason Cranford

As the Founder and CEO of the Flowering Hope Foundation, Mr. Cranford is in charge of CBD initiatives and any interaction with research groups and Universities. Mr. Cranford's cultivation experience also makes him a resource for all of the cultivation facilities the group is managing.

Ariel Loveland

Founder and CEO of Elemental Wellness Center. Under Ariel's leadership the flagship dispensary grew to more than $20 million annual revenue. Full-time employment to a dynamic team of 70 employees. As part of his success strategy, Ariel fosters innovation, bringing to market new and emerging products to reach larger audiences. A seasoned entrepreneur, he created two popular restaurants in New York City, and has more than a decade of experience in maximizing sales.

Brad Kayton

An electronics entrepreneur, Brad has co-founded five companies, serving as CEO in three of them. He has raised more than $160 million in equity capital for individual companies, many of them offering leading products and services. At the touted Las Vegas Consumer Electronics Show (CES), Brad won "Best of Show" 8 times. WIRE, a firm Brad co-founded, sold for $600 million, and another firm, 4 HOME, sold for 100% of IRR. Brad developed the specifications for VIEWSTATION, a video conferencing product, and presided over its world-wide launch. It now accounts for more than $3 billion in sales.

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MEET THE TEAM

Nick Friedman

Nick is an intrepid entrepreneur and business owner, with experience in acquiring and growing small companies. When Nick was only 21, he founded Blue Reserve Inc., a sustainable drinking water company in Boston, MA. Within 3 year of operations, Nick grew the company into a national brand serving several thousand clients nationwide. Last year, Blue Reserve Inc., reported a 265% growth in sales, due to aggressive marketing campaigns and successful mergers and acquisitions. As President and CEO of Blue Reserve Inc., Nick has achieved significant operational efficiency gains, pushing the companies profit margins up towards 40%. Nick is responsible for all of our ventures financial models and projections.

Claudio Miranda

Claudio is a seasoned entrepreneur and C-level executive with 15 years of experience in consumer branding, marketing, e-commerce, and sustainable enterprise. Claudio was formerly the co-founder and CMO of two industry leading natural product brands, Organic Bouquet and Organic Style, and most recently founded Givvy Inc. - a social commerce platform for the online gifting industry. Under Claudio's management, Organic Style grew to become a 50 employee company with a $50M IPO valuation on AIM. Claudio has extensive experience in the MMJ industry and has worked in both retail and production since 1994.

Jonas Carlsward

Experienced in the application and licensing process of multiple states across the nation, Jonas brings keen knowledge of the specific attributes particular states are looking for, and how to establish and operate a cannabis venture in full compliance with state laws. Prior to his cannabis experience, Jonas launched and grew a Silicon Valley start-up from 11 to 500 employees in five years. He is acting COO of Mary Pop Management, an online corporate database.

Degan Snyder

As Director of Marketing at Elemental Wellness Center, Degan helped turn the start-up into a multi-million dollar company, using high-concept print advertising, social media, and patient outreach programs. Pivotal to her success in driving new member acquisition is her background in television advertising. She was a head writer for Todd Kessler Productions (creator of Blue Clues) and Senior Producer at A&E Television, where she took a creative approach to promoting new television series and original movies. Her talent lies in identifying what consumers are passionate about, discovering trends in the industry, and then finding unconventional ways to turn these insights into powerful marketing tools that generate millions of dollars in revenue.

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PARTNERSHIPS

Jason Cranford is at the heart of what we do. A leading **CBD pioneer**, researcher, farmer, and crusader for kids with epilepsy. Cranford developed the famous strain of cannabis, **Haleigh's Hope**, named after a little girl whose **seizures stopped** were miraculously reduced by the medicine.

- Georgia passed the Haleigh's Hope Act
- This legalized the strain for patients with epilepsy, Crohn's disease, Multiple Sclerosis, and cancer.
- Jason is Managing Director of our farm - one of the largest in Colorado

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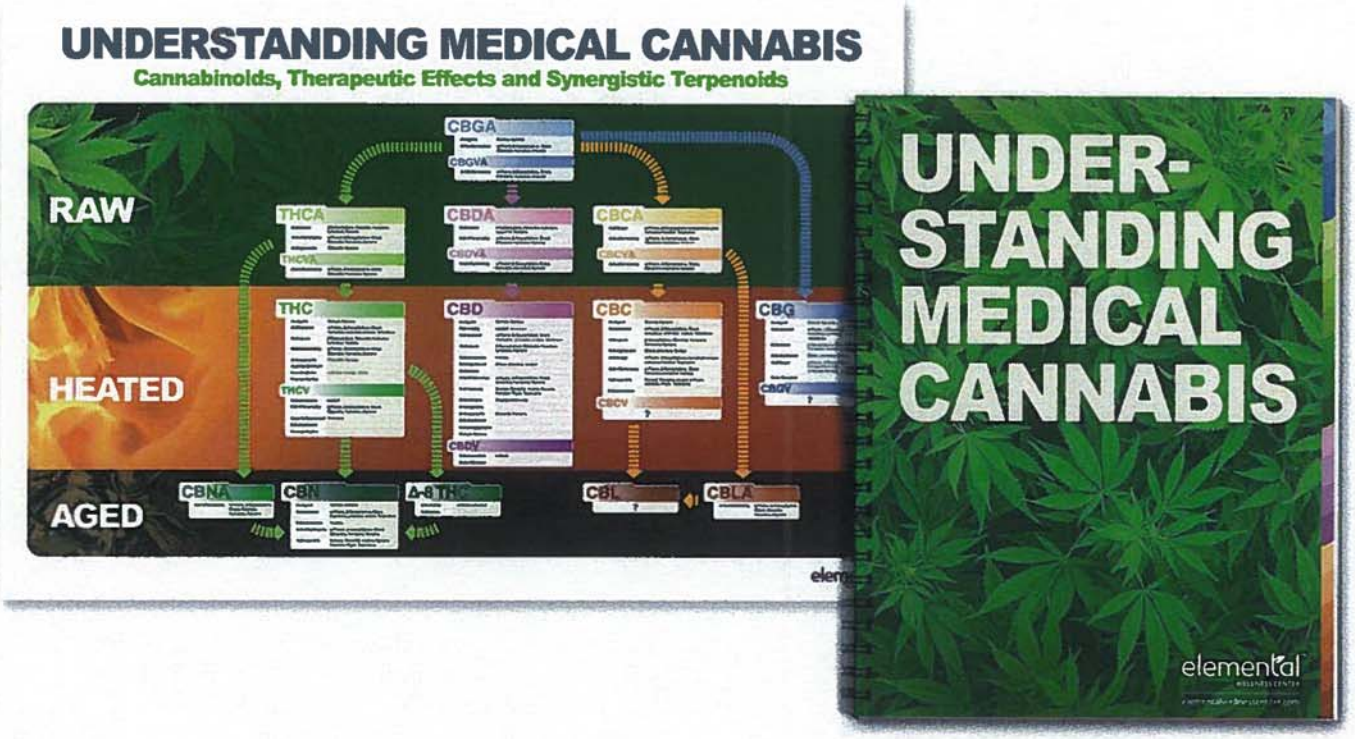
elemental
MANAGEMENT GROUP

MARKETING MOMENTUM

In an emerging industry, our award-winning marketing and design team is uniquely positioned to bring innovative strategies to all of our branding, packaging, and promotional projects

EDUCATIONAL MATERIAL



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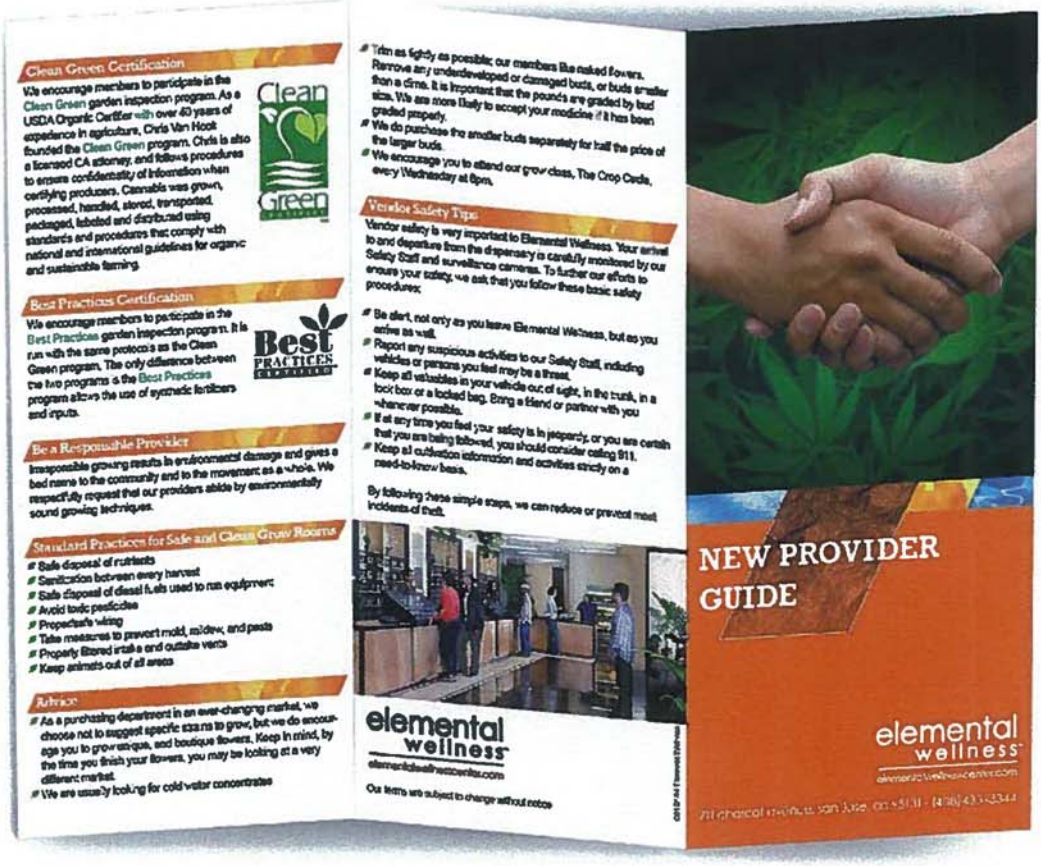
MARKETING BROCHURES



Clean Green Certification

We encourage members to participate in the Clean Green garden inspection program. As a USDA Organic Certifier with over 40 years of experience in agriculture, Chris Van Hook founded the Clean Green program. Chris is also a licensed CA attorney, and follows procedures to ensure confidentiality of information when certifying producers. Cannabis was grown, processed, handled, stored, transported, packaged, labeled and distributed using standards and procedures that comply with national and international guidelines for organic and sustainable farming.

Best Practices Certification

We encourage members to participate in the Best Practices garden inspection program. It is run with the same protocols as the Clean Green program. The only difference between the two programs is the Best Practices program allows the use of synthetic fertilizers and inputs.

Be a Responsible Provider

Irresponsible growing results in environmental damage and gives a bad name to the community and to the movement as a whole. We respectfully request that our providers abide by environmentally sound growing techniques.

Standard Practices for Safe and Clean Grow Rooms

- Safe disposal of nutrients
- Sanitization between every harvest
- Safe disposal of diesel fuels used to run equipment
- Avoid toxic pesticides
- Properly safe wiring
- Take measures to prevent mold, mildew, and pests
- Properly filtered intake and outside vents
- Keep animals out of all areas

Advice

- As a purchasing department in an ever-changing market, we choose not to suggest specific strains to grow, but we do encourage you to grow unique, and boutique flowers. Keep in mind, by the time you finish your flowers, you may be looking at a very different market.
- We are usually looking for cold water concentrates
- Trim as tightly as possible; our members like naked flowers. Remove any underdeveloped or damaged buds, or buds smaller than a dime. It is important that the pounds are graded by bud size. We are more likely to accept your medicine if it has been graded properly.
- We do purchase the smaller buds separately for half the price of the larger buds.
- We encourage you to attend our grow class, The Crop Circle, every Wednesday at 6pm.

Vendor Safety Tips

Vendor safety is very important to Elemental Wellness. Your arrival to and departure from the dispensary is carefully monitored by our Safety Staff and surveillance cameras. To further our efforts to ensure your safety, we ask that you follow these basic safety procedures:

- Be alert, not only as you leave Elemental Wellness, but as you arrive as well.
- Report any suspicious activities to our Safety Staff, including vehicles or persons you feel may be a threat.
- Keep all valuables in your vehicle out of sight, in the trunk, in a lock box or a locked bag. Bring a friend or partner with you whenever possible.
- If at any time you feel your safety is in jeopardy, or you are certain that you are being followed, you should consider calling 911.
- Keep all cultivation information and activities strictly on a need-to-know basis.

By following these simple steps, we can reduce or prevent most incidents of theft.

elemental wellness
elementalwellnesscenter.com

Our terms are subject to change without notice

NEW PROVIDER GUIDE

elemental wellness
elementalwellnesscenter.com

PRODUCTS & INNOVATION

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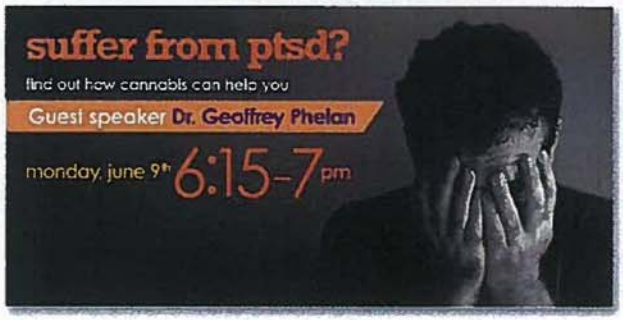
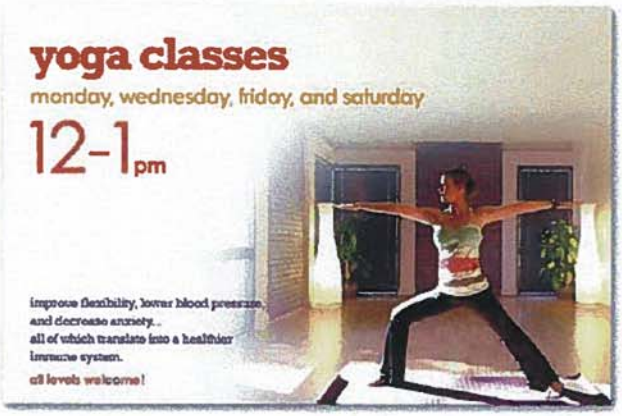
CHARITIES



HOLISTIC SERVICES



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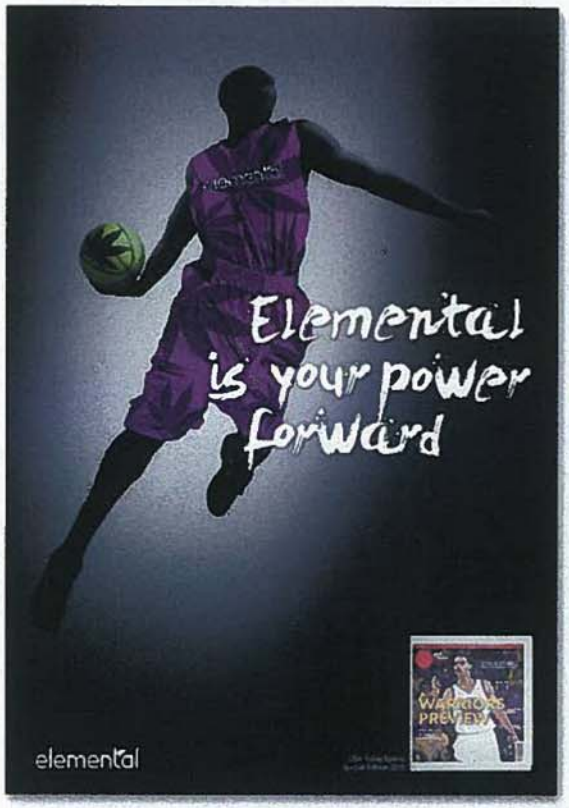
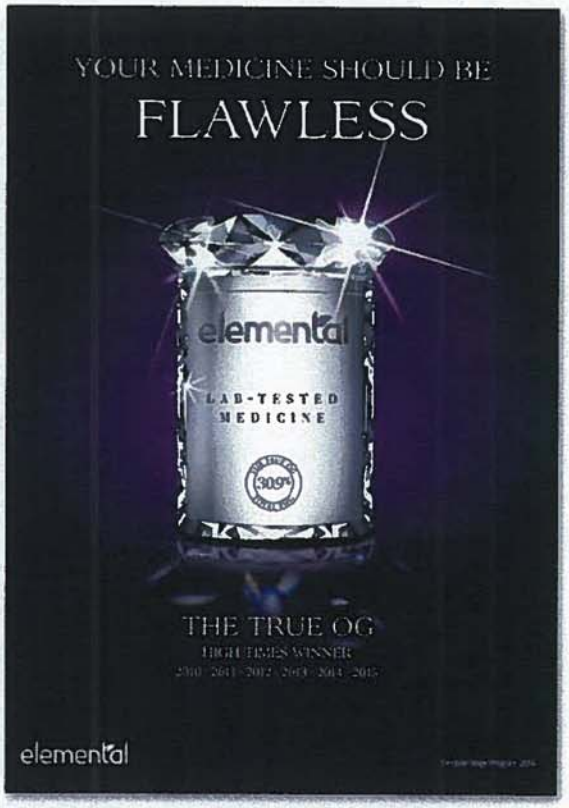
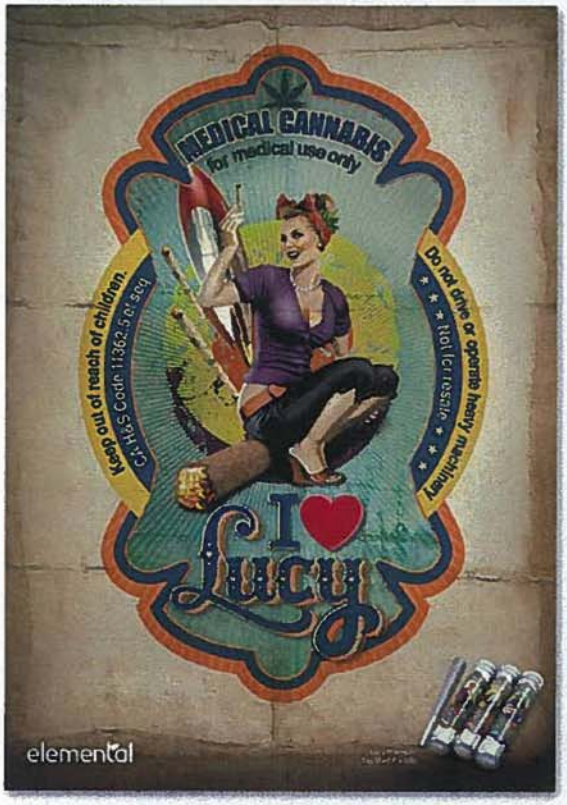
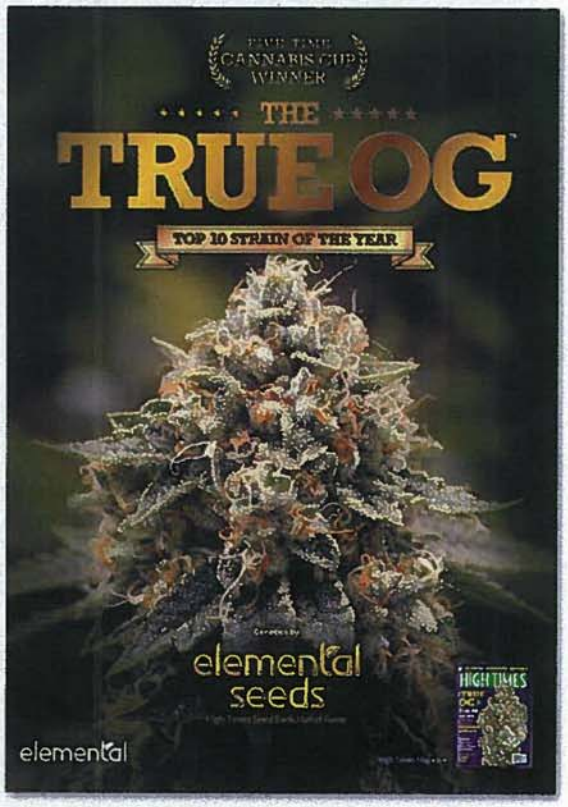
PRINT ADS & PACKAGING









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AWARDS & RECOGNITION

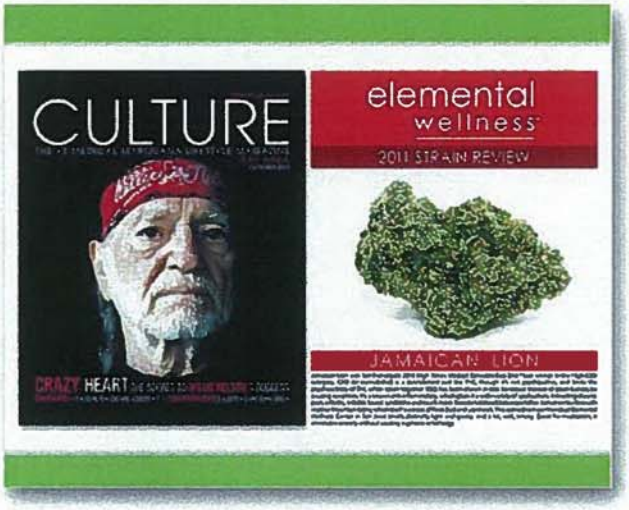
WINNER
THE TRUE OG™
HIGH TIMES
2010 - 2015

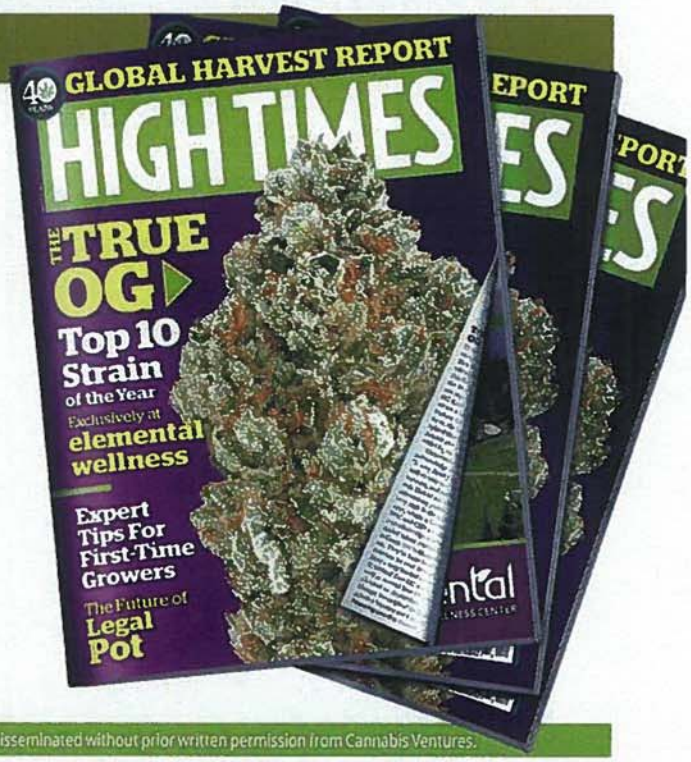
WINNER
HIGH CBD
HIGH TIMES
2010 - 2015

WINNER
BEST NORCAL
COLLECTIVE
WEEDMAPS

WINNER
1st PLACE
METRO BEST
OF 2015

REVIEWS





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APPENDIX 3-6

TransUnion.

Report Created On: 01/26/2016
File Number: 360556002

-Begin Credit Report-

[redacted]

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$3,395
$3,395
$0
[redacted]

014
95,505
$3,440
$3,440
$0
[redacted]

013
05,510
$3,517
$3,516
$0
[redacted]

012
[redacted]

011
[redacted]

as

TransUnion.

TransUnion

TransUnion.

CITY AND COUNTY OF HONOLULU)
) SS:
STATE OF HAWAII)

AFFIDAVIT OF IVAN M. LUI-KWAN

Ivan M. Lui-Kwan, being duly sworn on oath, deposes and says:

1. I have never filed a personal petition for bankruptcy protection.

2. I have never owned or operated an entity which has filed a petition for bankruptcy protection.

Further affiant sayeth naught.

Dated: January 27, 2016.

[redacted]

Subscribed and sworn to
before me this 27th day of
January, 2016.

BERNADETTE A. LEE
NOTARY PUBLIC

[redacted]

[redacted]

APPENDIX 3-8

SOCAL BUILDING VENTURES LLC

Socal Building Ventures, LLC ("Socal") was created to acquire, finance, develop and build various industrial and commercial operations throughout the country specializing in the cannabis industry. The company is involved in cannabis cultivation, manufacturing, distribution, licensing and retail management projects.

Over the last two years, the company and its partners have invested over $50 million dollars in equity capital for legally licensed cannabis projects located in California, Colorado and Washington. These projects include (i) four operating retail medical marijuana dispensary and cultivation and production facilities in California which are between 8,500 square feet to 20,000 square feet. in size, (ii) a 50,000 square foot dispensary, cultivation and production facility in Southern California (which will be opened in April 2016), with over $15 million invested to date by Socal and its partners and an additional $10 million committed to be invested in connection with the buildout and commencement of operations, (iii) a 150,000 square foot operating greenhouse cultivation and production facility in Colorado, with over $5 million invested to date and an additional $10 million committed to be invested), and (iv) a 160-acre greenhouse cultivation and production development in Washington (which will be operational in August 2016) with $2.5 million invested to date and another $30 million committed. The company owns equity interests in each of these projects, with over $15 million of capital invested. The company's management is responsible for site acquisitions, legal structuring and project financing for these projects as well as hiring consultants, contractors, and personnel and overseeing project management.

The company and its partners have committed to invest over $60 million in cannabis projects in the next 24 months. The company has received investment commitments in excess of $9 million for the Ka Lau Malie project.

The company is currently in negotiations to acquire and develop additional cannabis projects in Oregon, Nevada, and Arizona.

The company's management is responsible for site acquisitions, legal structuring and project financing for these projects as well as hiring consultants, contractors, and personnel and overseeing project management.

The Elemental Management Group ("EMG") provides operational and management support for these projects. EMG founded and manages one of the largest dispensaries in California, which is located in San Jose, California. http://elementalwellnesscenter.com/ EMG will be providing operational and management support for Elemental HI, LLC ("Elemental").

EMG, Elemental and Socal have entered into a Consulting and Management Services Agreement pursuant to which EMG and the company will assist and support Elemental in providing management and consulting services to Ka Lau Malie LLC ("KLM") provide their expertise, industry knowledge and experience to Elemental and KLM.

32123 LINDERO CANYON ROAD, SUITE 205, WESTLAKE VILLAGE, CA 91361
(818) 865-1700 PH (818) 865-1711 FX

SOCAL BUILDING VENTURES LLC

KLM and Socal are currently reviewing properties which have existing buildings and infrastructure, which can be used for the cultivation operations. Socal may purchase or lease one of these properties to enable KLM to commence cultivation in 2016, instead of 2017. Socal and EMG have extensive experience in the repositioning and renovating existing buildings into cultivation and production facilities, and are confident that the KLM facility can be completed within six months. SoCal and EMG have successfully repositioned and renovated 8 existing buildings into cultivation and production facilities in the last three years, ranging in size from 8,500 square feet up to 50,000 square feet.

If KLM follows this plan, cultivation operations could begin this summer. Socal and KLM expect to have a property under contract for this use in March of 2016, with plans for the repositioning and renovation to be completed in April 2016. The Kapolei Industrial Park Site currently under contract with KLM could then be used as the second cultivation and production facility, becoming operational in 2017.

32123 LINDERO CANYON ROAD, SUITE 205, WESTLAKE VILLAGE, CA 91361
(818) 865-1700 PH (818) 865-1711 FX

Merit Criteria - Question 5

(5-A) KLM will publish a consumer education brochure for patients outlining the State regulations for use of marijuana and manufactured marijuana products, including guidelines for safe consumption and use of marijuana, as well as storage recommendations to address child and pet safety issues. We will make this available in printed format at our retail dispensing location(s) as well as electronically on our website. All staff will be trained on State and local rules and regulations which will be reinforced with patients at the point of sale. Record of staff education in regard to this training will be retained within an employee file and re-visited on a minimum annual basis or as laws and regulations regarding medical marijuana are updated.

In order to best accommodate personal patient consultations, KLM will provide phone and online scheduling for individual appointments. All patient consultations, regardless of prior scheduling, will not have a time restriction within the retail dispensing location. All patient consultations will be conducted on a one to one basis to ensure the privacy of a qualifying patient. Staff will be trained to spend as much time as necessary with each patient to ensure that the patient is comfortable with the marijuana or manufactured marijuana products, including safe consumption and use of their purchase.

Patient education is particularly important as many consumers may not have had the opportunity to interact with various delivery methods. Each patient has unique circumstances. They require information about dosages, absorption, delivery methods, psychoactive effects, strains, and types which have the best indications for their condition so that they can make informed decisions, and practice safe consumption.

We have developed comprehensive educational materials that include product-specific literature, such as product-safety inserts, as well as a patient-education guide containing

information about medicinal aspects of various cannabinoids, and the relative benefits of various delivery methods. In addition, we reference the educational website www.CannabisIsSafe.com as a means to educate the public and dispensary staff.

Since each form provides its own unique terpene and cannabinoid profile, the following are examples of the type of guidance given to the patient so they can choose the right type of medical marijuana based upon their medical condition.

- Indica Products and Extracts: Utilizing Indica dominant genetics will be particularly helpful with those health conditions that relate to the body. This will be useful to treat conditions recognized by the state such as: chronic or debilitating diseases or a medical condition that results in the patient being admitted into hospice or receiving palliative care; Post traumatic stress disorder (PTSD); Seizures; Severe or persistent muscle spasms; Severe or Chronic Pain.
- Sativa Products and Extracts: Utilizing Sativa dominant genetics will be targeted at conditions that involve increased energy and appetite stimulation. These have demonstrated success in conditions such as; Cachexia or wasting syndrome; Severe or Chronic Pain; Severe nausea and Glaucoma.
- CBD Dominant Products and Extracts: Utilizing CBD dominant genetics will specifically target: Seizures; Post traumatic stress disorder (PTSD); Severe or persistent muscle spasms.

For additional medical marijuana components, please see Appendix 5.1 - Cannabinoids.

Choosing the right delivery system (please see Appendix 5.2 - Product Descriptions):

- Transmucosal (Sublingual): Tincture (Takes effect in 5-30 minutes, effects last 1-6 hours)

- Oral Mucosal: Tincture, Concentrates (Takes effect in 5-30 minutes, effects last 1-6 hours)
- Gastrointestinal: Tincture, Capsule, Tablet, Concentrates (Takes effect in 1-2 hours, effects last 6-8 hours)
- Transdermal: Lotion (Takes effect in varying times, effects last for varying times)

Delivery methods also target specific conditions and needs. For example, if a patient has nausea-related conditions, a sublingual delivery method would be preferable because it circumvents the digestive system and directly targets the bloodstream.

For safety educational brochure, please see Appendix 5.3 - Safety Insert.

We will maintain a printed and electronic resource library within the retail dispensary which will be made available to staff, qualifying patients, and approved visitors. This may include, but not limited to books related to pharmacology, routes of administration, cultivation and/or production, as well as industry magazines and periodicals covering educational topics such as: information about medical studies relating to medical marijuana for health conditions, determining dosage and tolerances, side effects, dependence, withdrawal symptoms and signs, drug interactions, how to keep medical marijuana secure, unlawful distribution, driving, operation of mechanical equipment, child care or making important decisions while under the influence of medical marijuana, medical marijuana laws and regulation highlights.

(5-B) Serving qualified patients by supplying and maintaining enough marijuana to meet their needs is of paramount interest for KLM within the City and County of Honolulu. Through the adoption and deployment of our partner Medicine Man's Variable Capacity Continuous Harvest (VCCH) approach, as well as through the implementation of an aseptic, risk-averse production and manufacturing environment, we will be able to produce safe, high-quality and

consistent marijuana to qualified patients. Our storage and replenishment room will allow us to store product in an environment similar to our dry and cure room. The use of light-tight and air-tight storage containers will be implemented to preserve and protect the product and aid in further curing. This room will be well maintained and cleaned daily to prevent pathogen outbreaks. Access will be limited to specific employees and management in order to prevent cross-contamination from within the production center.

(5-C) As mentioned, our market research indicates that medical marijuana patients seek safe and accessible retail dispensing locations. Aside from the physical security systems discussed in response 4, anticipated day-to-day operation at the retail dispensing location ensures that staff and security personnel are doing everything under their power to ensure the safety of patients and the surrounding community. Please see Appendix 5.4 - Day to Day Retail Dispensary Operations Summary.

If a qualifying patient would like to receive assistance in escort to their vehicle, they may request such service through a member of the retail dispensary staff and will be accommodated as soon as possible by an on duty security guard. To further facilitate the mobility of qualifying patients and patrons with limiting or debilitating medical conditions, KLM retail dispensary facility will be ADA-compliant inclusive of walkway ramps and bathrooms as well as the availability of electronic and information technology to patrons. Additionally, KLM will seek to establish and maintain strong ties and open communication lines with local law enforcement to ensure police and/or emergency medical assistance is available to staff and patrons in the event of a serious adverse event.

(5-D) Patient education and customer satisfaction are the core focus of the retail dispensing facility. Being able to measure and improve customer satisfaction is critical for both

our long-term business growth as well as ensuring that consumers are provided with the safest, most consistent experience possible. We plan to measure and improve customer satisfaction in a variety of ways. Our customer experience strategy will be comprised of the following: a secret shopping program, including on-site secret shops as well and recorded phone call secret shops; customer satisfaction surveys to include point-of-sale surveys, mobile feedback surveys as well as an online feedback platform; an employee satisfaction and engagement survey; customer intercept and exit interviews; and the creation of an anecdotal patient feedback repository.

(See Appendix 5.5 - Customer Satisfaction Program Details)

We will use Customer Experience (CX) metrics to benchmark, measure and improve upon the customer experience through all customer touchpoints and interactions. This will help us to identify any gaps in training, improve patient education, ensure we are responsible vendors of medical marijuana and provide patients with the information they need to make informed health decisions. We will closely monitor online review sites and set up company Google Alerts to make sure we are promptly responding to any online customer feedback we might receive. We commit to continually optimizing and prioritizing our company's customer experience strategy for constantly improving our customers' experience, and patient and community safety.

5.1 - Cannabinoids

CANNABINOIDS

The Cannabis plant contains on average 70 types of cannabinoids. These are the chemical compounds created by the cannabis plant that are used to treat conditions from pain and epilepsy to cancer and nausea. They mirror the endocannabinoids that our bodies naturally produce illustrating our close relationship with the cannabis plant. There are three types of cannabinoids: phytocannabinoids (found in plants), synthetic cannabinoids (produced in the lab) and endocannabinoids (produced in the human body). Simply, they modulate communication between cells, and also help when a deficiency or problem with our endocannabinoid system exists. These cannabinoids bind to receptor sites throughout our brain (CB1 Receptors) and body (CB2 Receptors). Different cannabinoids have different effects depending on which receptors they bind to. For example, THC binds to receptors in the brain whereas CBD (cannbidiol) has a strong affinity for CB-2 receptors located throughout the body.

CB1 receptors are found primarily in the brain. They are also present in both the male and female reproductive systems. CB1 receptors are absent in the medulla oblongata, the part of the brain stem responsible for respiratory and cardiovascular functions. Thus, there is not the risk of respiratory or cardiovascular failure that can be induced by some drugs. CB1 receptors appear to be responsible for the euphoric and anticonvulsive effects of cannabis.

CB2 receptors are predominantly found in the immune system, with the greatest density in the spleen. CB2 receptors appear to be responsible for the anti-inflammatory and other therapeutic effects of cannabis.

THC or tetrahydrocannabinol is well known for its psychoactivity. Effects include: psychoactive, euphoria, sensory enhancement, anti-cancer, anti-nausea, pain relief, improves appetite, help for glaucoma, muscle relaxant, help for autoimmune disorders, and anti-inflammatory.

CBD or cannabidiol is not psychoactive, yet it modifies the effects of THC. CBD has great medical potential, and effects include: anti-depressant, anti-cancer, anti-nausea, anxiolytic, pain relief, mitigates spasms, improves blood circulation, help for autoimmune disorders, and bone stimulant.

CBG or cannabigerol is not psychoactive. It is commonly found in large quantities in fiber hemp. Certain medical strains have considerable CBG, which has promise for its anti-tumor qualities. Effects include, promising as an anti-cancer agent, lowers blood pressure, anti-inflammatory, and bone stimulant.

THCV or tetrahydrocannabivarin is not psychoactive, but moderates some of the effects of THC. THCV is present in certain strains of cannabis, notably ones originating from Southeast Asia or South Africa. Effects include: decreases appetite, mitigates seizures, bone stimulant, and may help with diabetes.

CBN or cannabinol is primarily a decomposition product of THC from exposure to heat or light, and very little CBN is found in fresh plants. CBN has only mild psychoactivity, and effects include relief from pain, causes drowsiness, mitigates spasms, help for glaucoma, and anti-inflammatory.

CBC or cannabichromene is not psychoactive. Effects include: anti-cancer, antibacterial, antifungal, anti-inflammatory, analgesic, and bone stimulant.

Anandamide, or AEA, is one of the endocannabinoids found in the human body, and has a chemical structure unlike the phytocannabinoids found in cannabis. Anandamide regulates the functions of our central nervous system and our immune system. AEA regulates appetite, memory, sensations of pleasure and pain, our immune system, and sleep patterns. It also inhibits certain cancers, such as breast cancer in humans.

THC Δ9, THC delta 9 or tetrahydrocannabinol is well known for its psychoactivity. Effects include: psychoactive, euphoria, sensory enhancement,anti-cancer, anti-nausea, pain relief, improves appetite, help for glaucoma, muscle relaxant, help for autoimmune disorders, and anti-inflammatory.

THCA Δ9, Tetrahhdyocannabinolic Acid is the acidic precursor to THC, which actually exists in only minute quantities in the living plant. In the live plant THCA is the most abundant cannabinoid. After harvest THCA begins to naturally convert to THC

THC Δ8, THC delta 8 is an analogue of THC 9 with antiemetic, anxiolytic, appetite-stimulating, analgesic, and neuroprotective properties and binds to the cannabinoid G-protein coupled CB1 receptor.

CBCA, Cannabichrome carboxylic acid (CBC-A), passes through the CBC synthase, or the enzymes that get the specific process underway. Over time, or quickly if exposed to heat, the CBC-A will lose a molecule of CO_2; at this point it is considered CBC.

CBGA, Through different forms of biosythesis, Cannabigerolic acid (CBGa) becomes THCA, THC, CBDA, CBD, CBCA, CBC and CBG providing many of the medicinal elements of cannabis.

CBDA, Cannabidiolic Acid is not psychoactive. Initial research suggest that CBDA offers anti-emetic and anti-proliferative effects, making it ideal for fighting cancer it also offers anti-inflammatory and anti-bacteria) properties.

CBDV, Cannabidivarin is similar to cannabidiol (CBD) and has anticonvulsant effects. Plants with relatively high levels of CBDV have been reported in feral populations of C. indica (= C. sativa ssp. indica var. kafiristanica) from northwest India, and in hashish from Nepal.

5.2 - Product Descriptions

1. Medical Marijuana Sublingual Tincture

Medical Marijuana Sublingual Tinctures are administered sublingually by the use of a measured dropper. Sublingual tinctures shall contain no more than 100 milligrams of tetrahydrocannabinol (THC). The product will be lab tested for accurate active cannabinoid profile. The droppers have measurement demarcations as to provide safe and easy dosing levels. Sublingual Tinctures offer patients the ability to 'micro-dose' cannabinoids in measurements of 2-3 mg of active cannabinoids. The medical benefits of sublingual Medical Marijuana products have the benefit of a faster onset due to a more

direct ingestion method. These products bypass the liver and GI tract and as a result are a great benefit to patients with medical conditions, such as autoimmune diseases and Crohn's disease, which affect the GI tract and/or the liver and kidneys. Medical Marijuana Sublingual Tinctures will be labeled and packaged in ASTM certified child resistant re-sealable dropper caps that will maintain the child resistant effectiveness for multiple openings.

2. Medical Marijuana Infused Capsule

Medical Marijuana Infused Capsules are a blend of active cannabinoids and all natural ingredients within a gelatin capsule. The gelatin capsule dissolves in the stomach of the patient releasing the cannabinoids and ingredients. Each individual Capsule shall contain no more than 10 milligrams of tetrahydrocannabinol (THC). With no more than 100 milligrams of tetrahydrocannabinol per package. Medical Marijuana Capsules will be labeled and packaged in ASTM certified child resistant packaging that will maintain the child resistant effectiveness for multiple openings.

3. Medical Marijuana Infused Sublingual Tablet

Medical Marijuana Infused Sublingual Tablets are designed to dissolve slowly in a patient's mouth making an effective sublingual administered product. Each individual Sublingual Tablet shall contain no more than 10 milligrams of tetrahydrocannabinol (THC). With no more than 100 milligrams of tetrahydrocannabinol per package. The product will be lab tested for accurate active cannabinoid profile.The medical benefits of sublingual Medical Marijuana products have the benefit of a faster onset due to a more direct ingestion method. These products bypass the liver and GI tract and as a result are a great benefit to patients with medical conditions, such as autoimmune diseases and

Merit Criteria – Question 6

Pursuant to Chapter 11-850, Sections 329D-7, 329D-12, and 846-2.7, HRS, KLM will be fully compliant with all criminal background check requirements set forth by the State of Hawaii and the Department of Health. KLM intends to implement strict adherence to background checks for all required individuals and parties with current or future association to ensure our organization is a model for the eight medical marijuana license holders in the State of Hawaii. With regard to the initial dispensary license application, KLM has ensured that the following parties have fulfilled their criminal background check requirements: individual applicant and KLM member, Ivan M. Lui Kwan, KLM member Kamaki Kanahele and James Townsend (the Sole Member of Elemental HI, LLC, which is a member of KLM).

Upon award of a license from the State of Hawaii, KLM will ensure that the following parties fulfill their criminal background check requirements: each employee of the medical marijuana dispensary, KLM manager and officers each subcontracted production center and retail dispensing location employee, as applicable, and all officers, directors, shareholders with at least twenty-five percent ownership interest or more in a subcontracted production center or retail dispensing location.

Additionally, no person shall intentionally or knowingly enter or remain upon the premises of our medical marijuana retail dispensing or production center location pursuant to section 329D-15(a) (4) or 329D-16 (3) without having previously fulfilled their criminal background check requirements. For approved visitors, KLM shall keep an accurate record of each person's first and last name, date and times upon entering and exiting our dispensary facility, their purpose for entering, and the identity of our escort. This will be kept on file and made available to the department or law enforcement as requested or for the purpose of inspection. KLM understands

that the department will need to approve a list of visitors and that this list shall be effective for one year from the date of approval. KLM also understands that unauthorized access to our production center and retail dispensing locations is a class C felony.

KLM will develop a detailed SOP to ensure strict compliance with Criminal Background Check Requirements and Facility Access Authorization as mandated by Hawaii State Regulations. The provisions of our SOP will include, but not be limited to the following:

Responsibility: The Compliance Department and Human Resources Department will share the overall responsibility to ensure KLM has documented its compliance with background check and restricted access regulations and that this documentation is at all times available to the DOH for inspection. Employee Files, Approved Contractor Files, and the Authorized Access List will be audited periodically by the Compliance Department to ensure current and complete documentation is on file. Any discrepancies will be immediately resolved and will be reported to senior management.

Policy:

Principals: All principals must comply with state background check requirements and documentation will be retained by the Compliance Department. Principals may be defined as: individual applicant, officers, directors, shareholders with at least twenty-five percent ownership interest or more, members, and managers.

Employees: Employee Job Descriptions and Employment Contracts will include the provision that individuals must successfully pass a criminal background check as required by the state as a prerequisite condition for employment. Human Resource employee files will contain documentation of criminal background check compliance.

Independent Contractors and Other Approved Vendors:

1. KLM will identify and compile a list of all individuals who will require access to the licensed facility. All persons on this list will provide KLM any and all documentation as required by the state with regard to background check compliance.
2. The persons on this list must be approved by the state. The state approval information and other evidentiary materials documenting criminal background checks will be retained by the compliance department.
3. All individuals who have successfully met all requirements will be included on KLM official list of authorized visitors (on KLM letterhead). This certified list will be retained at the entrance to the licensed facility.
4. There is one single, secure public entrance to the facility. All visitors will be required to enter through this door and must obtain a visitor badge prior to entering the facility. Information with regard to their name, the purpose of their visit, the time they arrived and the time they left will be entered into a log book prior to issuing a visitor badge. At this time the visitor will be confirmed to be on the department's approved list. This log-book will be maintained at the entrance to the facility. KLM has strict security measures and no visitors shall enter the premises through any other entrance and must be accompanied by an agent of KLM during their visit.
5. If at any time an individual is observed in the facility who is not an employee and who does not have a "visitor badge" all KLM personnel are aware that this must be reported to a supervisor.

APPENDIX 6-1

[redacted]

Merit Criteria – Question 7

In order to comply with the state of Hawaii's selection of BioTrackTHC as the seed-to-sale inventory tracking software system for its medical marijuana initiative, KLM has engaged BioTrackTHC for their preliminary application support. BioTrackTHC has sent KLM their support document to assist us in becoming compliant with the requirements set forth in Chapter 11-850 and Section 329 and 329D, HRS for inventory tracking, security, and dispensing limits for qualifying patients. BioTrackTHC's commercial software will provide seamless data exchange integration between KLM and Hawaii's medical marijuana tracking system. There will be integration via the application program interface (API) between KLM's BioTrackTHC enterprise system and the state interface utilized by the Hawaii DOH. This will allow data to be sent in real time, not only from KLM to the Hawaii DOH, but it will allow KLM to retrieve transferred data by the Hawaii DOH.

The BioTrackTHC system is comprised of several components all of which are designed to seamlessly integrate with one another. The BioTrackTHC producer, processor and retail tracking components are completely interoperable with one another. Whether the tracking requirements include plants, trimmings, waste, conversion, dispensing or anything in between the BioTrackTHC system, in concert with its unique inventory typing system, can currently track all Hawaii DOH requirements.

The BioTrackTHC System issues a globally unique, non-repeating 16-digit identification number to each plant. At every stage in the product lifecycle where something needs to be differentiated, the System issues a new "child" identifier (e.g., separating flower from stems during the harvest process, the creation of new clones or seeds from a mother plant). The System issues the identifier to prevent accidental or intentional identifier duplication by the user, and the

16-digit identifier ensure scalability and longevity—the System could generate 1,000,000 identification numbers per second for over 317 years.

Every identifier is associated with a quantity that is measured in either discrete units or a weight depending on the item's classification; for example, plants, seeds, and manufactured marijuana products are measured in discrete units, whereas, bulk flower and stems are measured in continuous weight. This creates an unbroken audit chain. Select any identification number and both the State and the registered organization can backwards-trace the medical cannabis product's lineage all the way back to the plant from which it came, and also forwards-trace every gram to where it is still in inventory, where it has been dispensed, to whom it was dispensed, and where it was destroyed.

As an example, if 100 grams were harvested from plant 98765: in this case, 2 grams were consumed by the testing laboratory, 8 grams were dispensed to patient "Smith", 15 grams were dispensed to patient "Jones", 55 grams are still in inventory, and 20 grams have been destroyed.

Laboratory testing is built-in and tied directly into the inventory typing system. This allows for very complex or very simple rules on what needs to be tested, what the testing requirements are, the pass/fail limits, etc. This testing paradigm provides a model for ensuring that only properly tested product may be sold to a patient. The system's integrated features can be setup to prevent the sale or transfer of product that has not passed state mandated laboratory tests, if necessary. In order to maintain a record of clear and unbroken custody at all stages, this will include full tracking during the transport of inventory between dispensary facilities (production center, retail dispensary facility) and between a dispensary facility and a State-certified laboratory.

KLM will use the Software to generate shipping manifests that will be sent with each outgoing shipment from the production facility to the dispensary. The state will be able to see what product or products are in route between facilities, with timestamps and dates on when the product was checked out of production, is in route, and when it arrives to the retail dispensary. We will use this BioTrackTHC transportation manifest to monitor and reconcile all products that arrive to the retail dispensary. We will inspect the physical shipment and compare to the transportation manifest for accuracy. After checking the product in and determining accuracy, we will utilize BioTrackTHC on the retail dispensary side of the business to enter the product into inventory.

KLM will track the plant through each phase of its lifecycle beginning with a clone, through early, mid and late vegetative phases, flower, trim, dry, cure and storage. We will have the ability to readily track plants within the BioTrackTHC system should we at any time need to physically locate a plant within our production center. An example of this would be a plant affliction which escapes the attention of the cultivation team but is detected by a trimmer; utilizing BioTrackTHC would allow the team to track the precise flowering room location. The cultivation team can immediately go to that room and check all other plants, and treat them for afflictions if necessary, in order to prevent future outbreaks or allowing other plants to pass through with pathogenic afflictions. We will be able to easily report to the State of Hawaii at any time the number of plants we have in our facility, where these plants reside in the lifecycle process, and in which room a plant or plants reside.

At the point of sale within our retail dispensary, KLM will be able to assist and consult a patient and their needs. The POS will have BioTrackTHC loaded on the terminal. The POS is equipped with a monitor, a till or register, a label maker, a scanner, a receipt printer and a

biometric thumb scanner (See Appendix 7 - Section 7.2 - BioTrackTHC Operational Photos). The retail dispensary staff member will first scan their thumb into the biometric reader to alert BioTrackTHC which employee is signed onto the register. This information will be recorded with date and time stamp and will be viewable on the related report run through BioTrackTHC. KLM will be able to pre-set certain security rights and privileges to staff members depending on their job status. For example, a manager will have the security clearance required to take cash pulls from the register should too much cash reside in the till. Once the employee has serviced the employee and completed the transaction, the patient's name will be automatically removed from the queue.

Utilizing the BioTrackTHC system will also allow us to keep our focus on patient safety. With our ability to electronically track all sales of our marijuana and manufactured marijuana products to qualified patients and their primary caregivers, we have the ability to ensure that no sales are authorized in excess of the legal limits which have been set forth in section 329D-7. Using this system will ensure that patients would not have the ability to purchase products in excess of the legal limits and that those limits can not be overridden manually. Within "Sales Limits" a BioTrackTHC user can regulate the permissible quantities allotted to a patient or caregiver. The system stores patient purchases and cross-references with any Department defined limits. As the system will be recording every transaction, this data can be parsed, filtered and reported against at any time. The system can also issue stop purchase alerts it a patient attempts to exceed said defined limits and disallow the completion of such a sale. In the event that a patient has exceeded their purchasing limit, the retail dispensing location will be notified within the Tracking System that the patient has exceeded their sales limit; in response, the System will

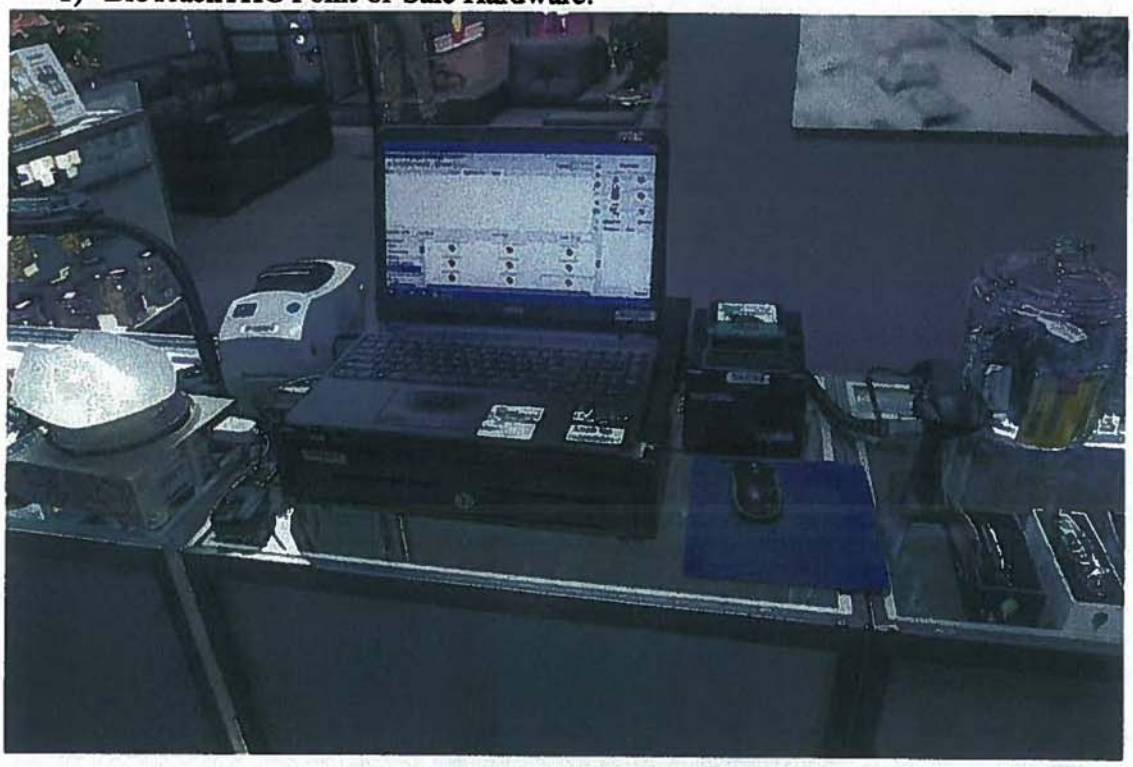
issue a stop purchase alert. The System does not allow for a retail dispensing location to transact with a patient that has exceeded his/her pre-defined sales limit.

While using the BioTrackTHC system we will also be prepared to deal with a breach or failure of the tracking system. We will have written into our protocols that should such a breach or failure occur within the system, we will suspend all of our operations until the system is fully operable again. If this should ever occur, we would notify the department immediately upon the breach or failure, and again when it resumes operations. In the event of a loss of internet access, BioTrackTHC has the ability to operate in Offline mode. While operating in Offline mode a facility may continue to process sales with an on-site server, even if the internet connectivity goes down. When service is restored, all changes made in Offline mode will be updated and synced within the system (see Appendix 7 - Section 7.1 – BioTrackTHC Inventory POS Hardware and Tracking Functionality).

APPENDIX 7-1

7.1 – BioTrackTHC Inventory POS Hardware and Tracking Functionality (File Photos Similar)

1) BioTrackTHC Point-of-Sale Hardware:



Complete Point-of-Sale Terminal Setup

Futronic Thumb Scanner™, courtesy of Futronic Technology Company Limited

Laptop as part of the POS, courtesy of Hewlett-Packard™

Weigh Scale, Courtesy of A&D Company Limited

VeriFone™ Credit Card Reader and PIN pad, Courtesy of VeriFone Holding Inc.

TPL 2824 Plus ™ Barcode Label Printer, Courtesy of Accurate Systems Labeling

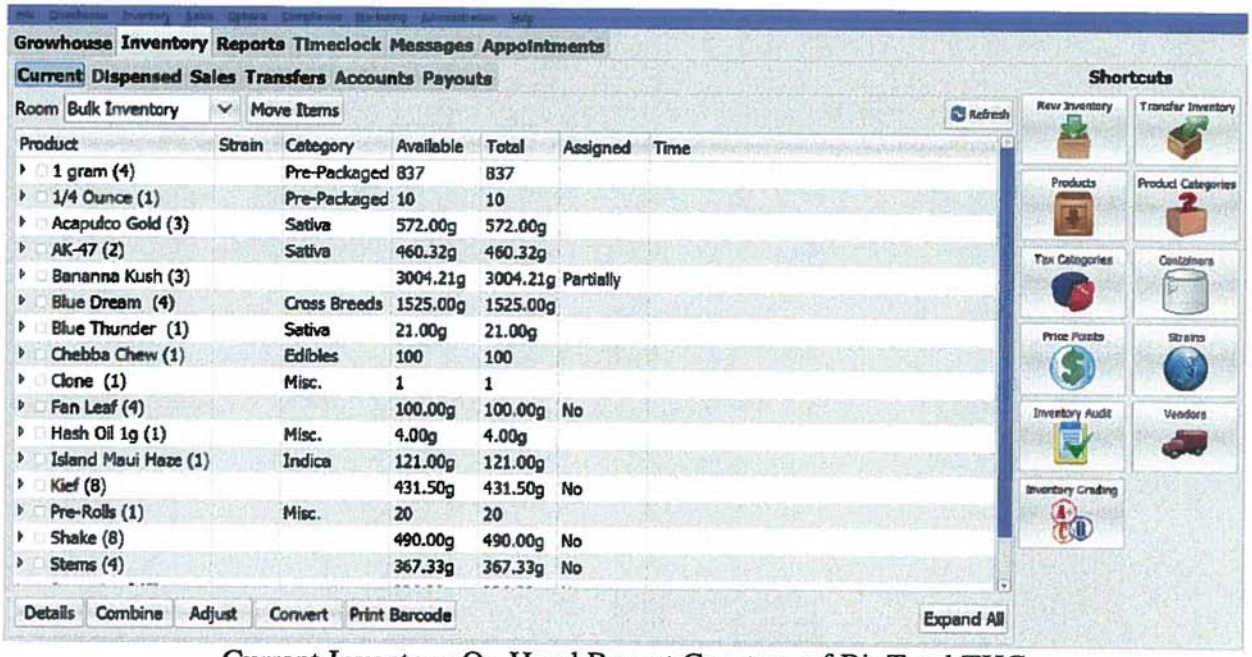
Thermal Receipt Printer, Courtesy of AsiaScan™

Honeywell Voyager 1200G Barcode Scanner

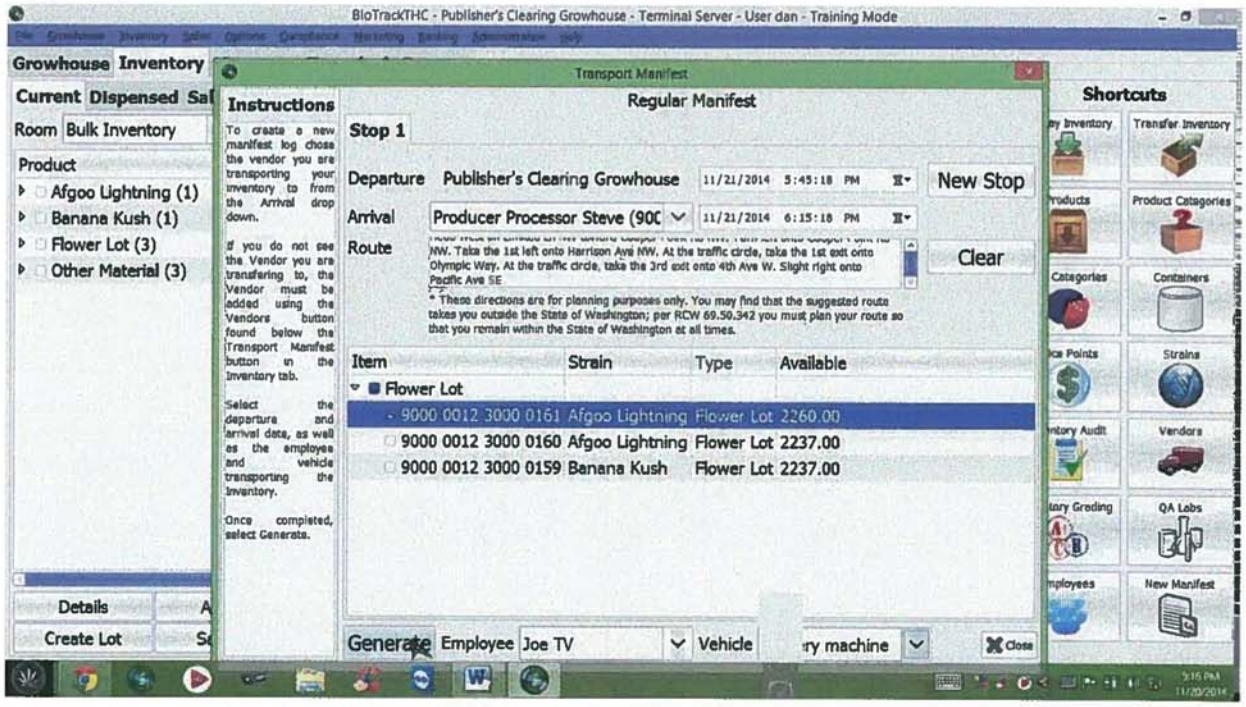
Cash Drawer Series 100

2) BioTrackTHC Production Inventory Tracking and Medical Dispensary POS Tracking Screenshots:

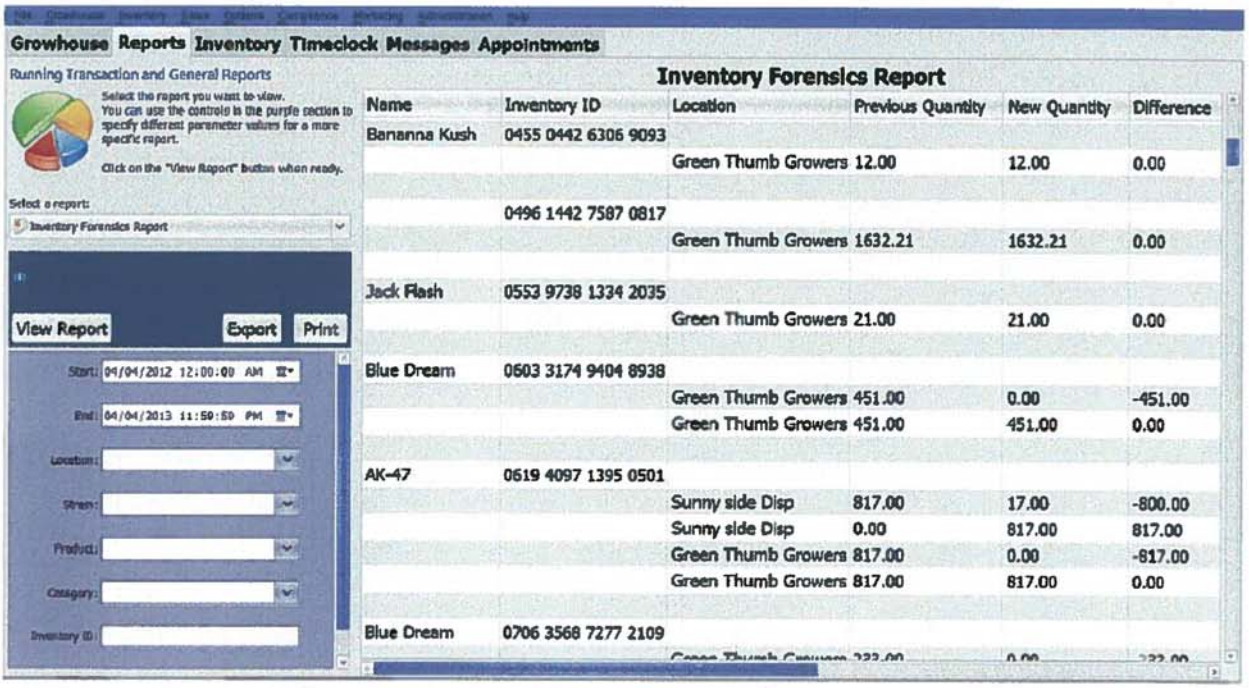
Production Inventory Tracking Functionality:



Current Inventory On Hand Report Courtesy of BioTrackTHC



Shipping Manifest Tracking Report Courtesy of BioTrackTHC



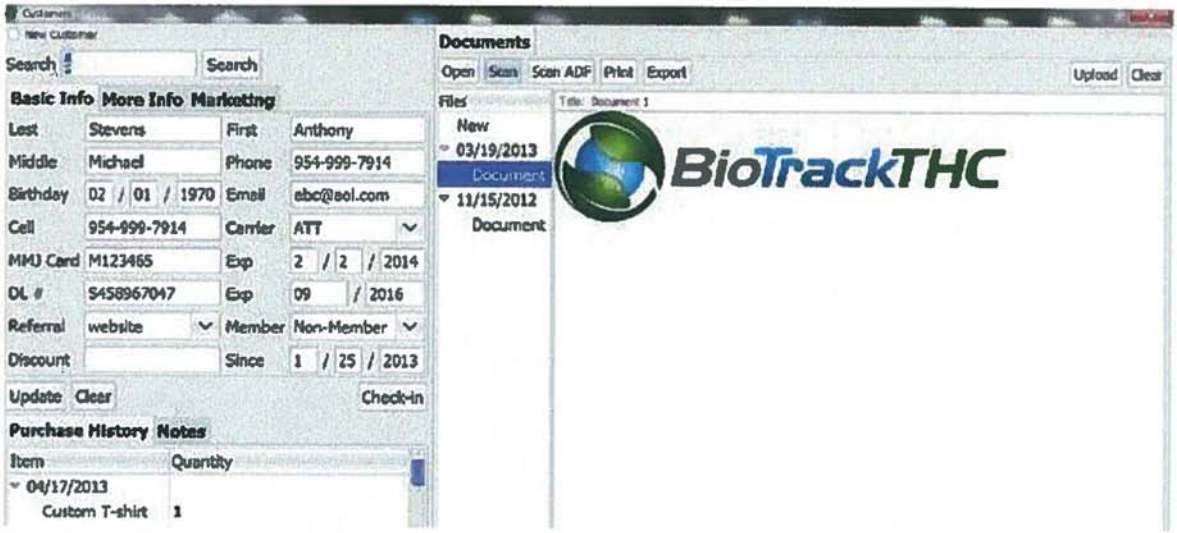
Inventory Forensics Report Courtesy of BioTrackTHC

Capturing Trim Wet Weights Tracking Screenshot Courtesy of BioTrackTHC

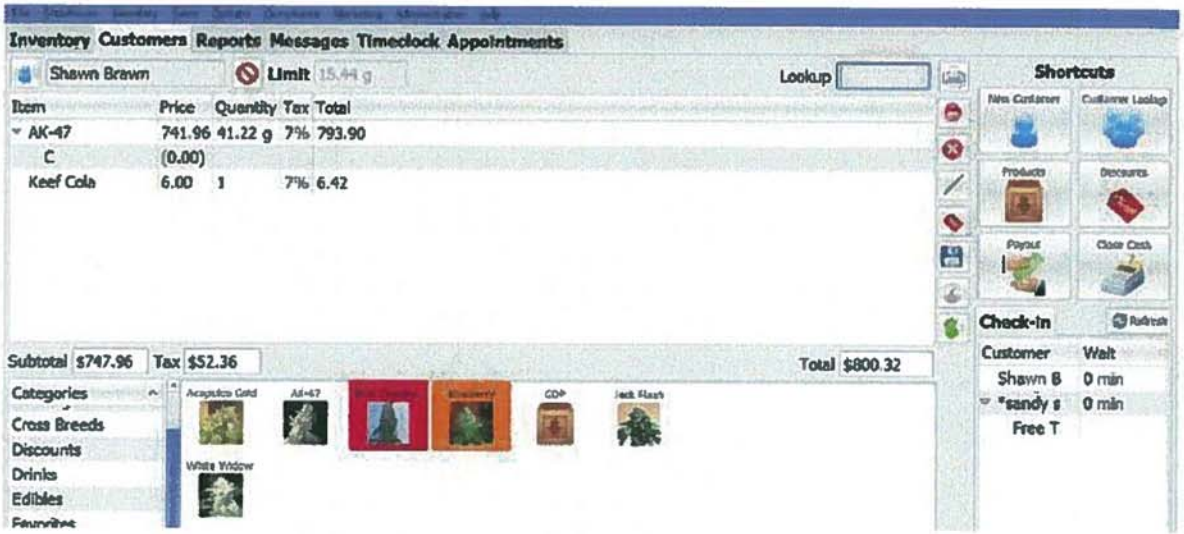
Strain	Wet Weight	Bud Weight	% Loss	Avg % Loss	Trim	Stems	Sugar Leaf	Shake
Acapulco Gold	166.67	140.33	15.80	40.01	84.33	84.33	84.33	0.00
Acapulco Gold	100.00	82.00	18.00	40.01	46.60	46.60	0.00	0.00
Acapulco Gold	100.00	82.00	18.00	40.01	46.60	46.60	0.00	0.00
Acapulco Gold	798.22	321.33	59.74	40.01	85.00	141.22	0.00	11.00
Acapulco Gold	118.50	171.50	0.00	40.01	49.50	49.50	46.00	49.50
Acapulco Gold	118.50	171.50	0.00	40.01	49.50	49.50	46.00	49.50
Acapulco Gold	227.00	70.50	68.94	40.01	66.50	5.00	5.00	5.00
Acapulco Gold	316.00	118.00	62.66	40.01	0.50	0.50	0.00	0.50
Acapulco Gold	316.00	118.00	62.66	40.01	0.50	0.50	0.00	0.50
Acapulco Gold	166.67	140.33	15.80	40.01	84.33	84.33	84.33	0.00
Acapulco Gold	100.00	82.00	18.00	40.01	46.60	46.60	0.00	0.00
Acapulco Gold	166.67	140.33	15.80	40.01	84.33	84.33	84.33	0.00
Acapulco Gold	227.00	70.50	68.94	40.01	66.50	5.00	5.00	5.00
Acapulco Gold	100.00	82.00	18.00	40.01	46.60	46.60	0.00	0.00
Acapulco Gold	100.00	82.00	18.00	40.01	46.60	46.60	0.00	0.00
AK-47	249.00	50.86	79.57	41.03	4.40	51.20	25.00	4.60

Tracking Plant Yields Tracking Screenshot Courtesy of BioTrackTHC

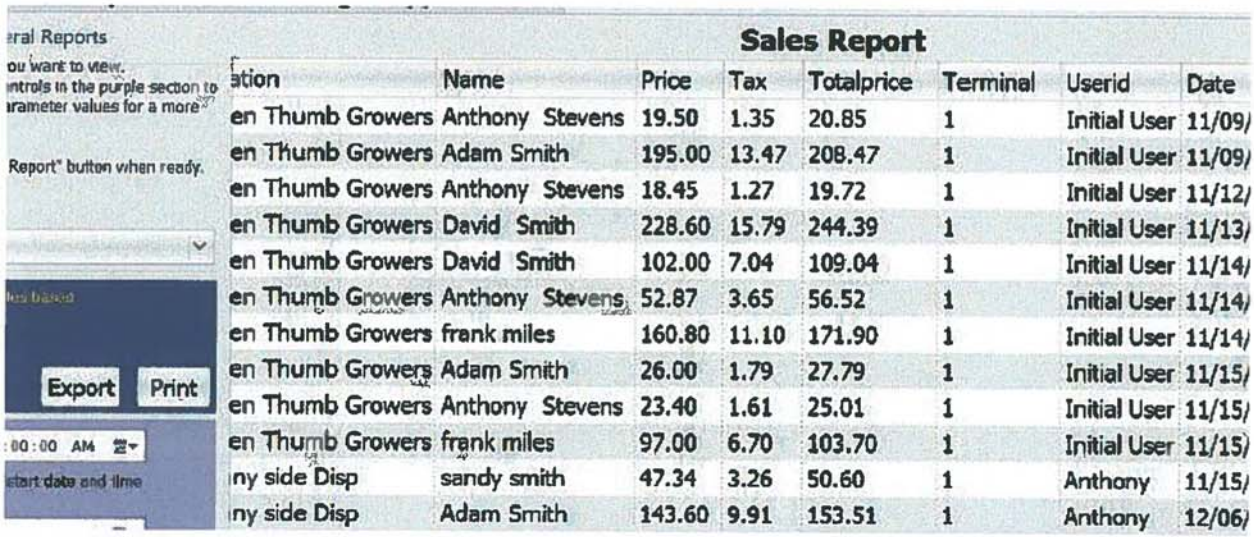
Medical Dispensary Inventory Tracking Functionality:



Patient Information Screenshot Courtesy of BioTrackTHC



POS Customer Transaction Screen Courtesy of BioTrackTHC

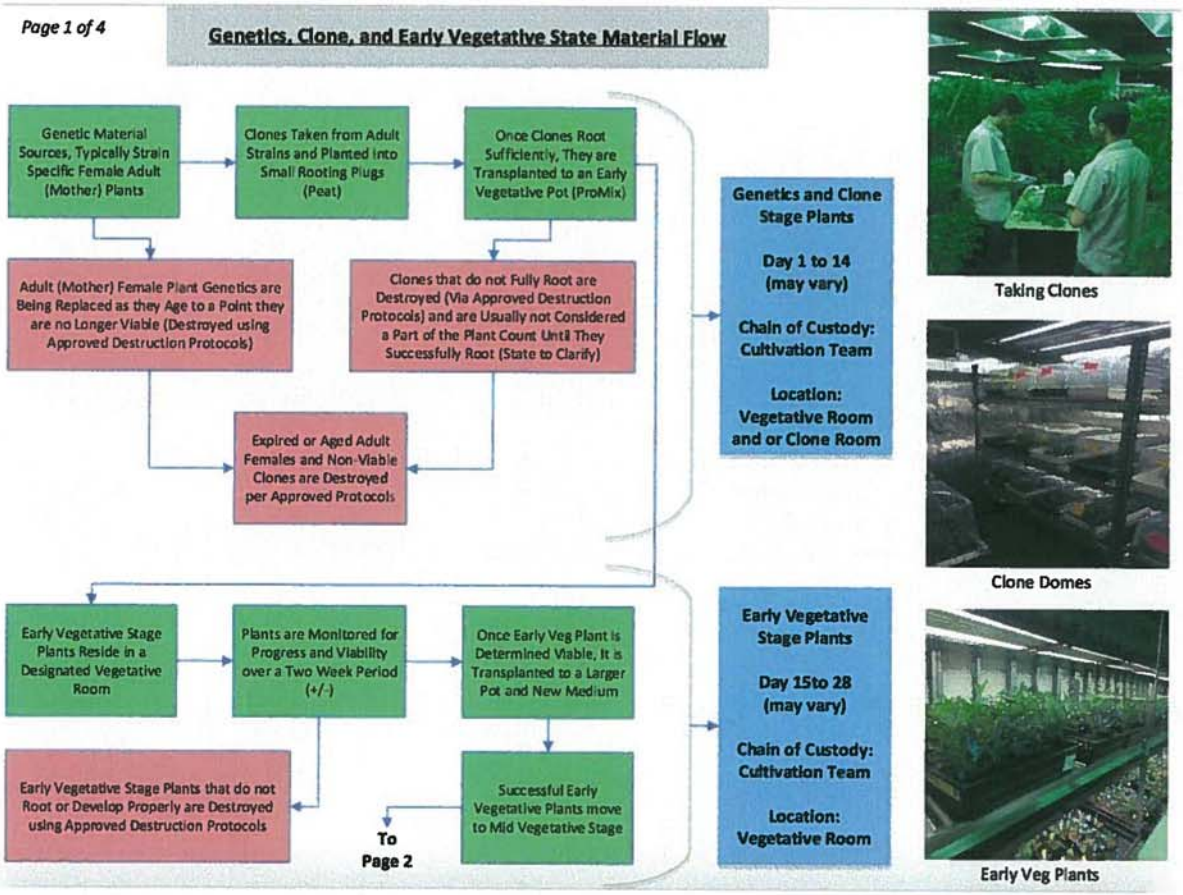


Sales Report

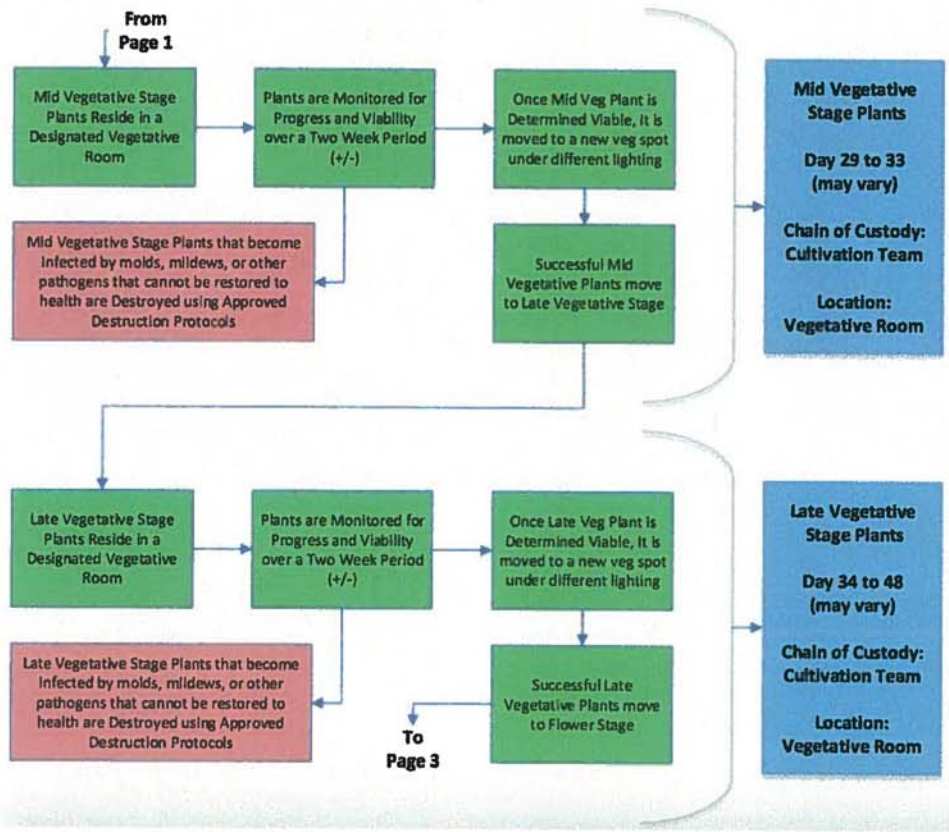
ation	Name	Price	Tax	Totalprice	Terminal	Userid	Date
en Thumb Growers	Anthony Stevens	19.50	1.35	20.85	1	Initial User	11/09/
en Thumb Growers	Adam Smith	195.00	13.47	208.47	1	Initial User	11/09/
en Thumb Growers	Anthony Stevens	18.45	1.27	19.72	1	Initial User	11/12/
en Thumb Growers	David Smith	228.60	15.79	244.39	1	Initial User	11/13/
en Thumb Growers	David Smith	102.00	7.04	109.04	1	Initial User	11/14/
en Thumb Growers	Anthony Stevens	52.87	3.65	56.52	1	Initial User	11/14/
en Thumb Growers	frank miles	160.80	11.10	171.90	1	Initial User	11/14/
en Thumb Growers	Adam Smith	26.00	1.79	27.79	1	Initial User	11/15/
en Thumb Growers	Anthony Stevens	23.40	1.61	25.01	1	Initial User	11/15/
en Thumb Growers	frank miles	97.00	6.70	103.70	1	Initial User	11/15/
ny side Disp	sandy smith	47.34	3.26	50.60	1	Anthony	11/15/
ny side Disp	Adam Smith	143.60	9.91	153.51	1	Anthony	12/06/

Dispensary Sales Report Tracking Summary Screenshot Courtesy of BioTrackTHC

7.2 – Production Center Chain of Custody Overview



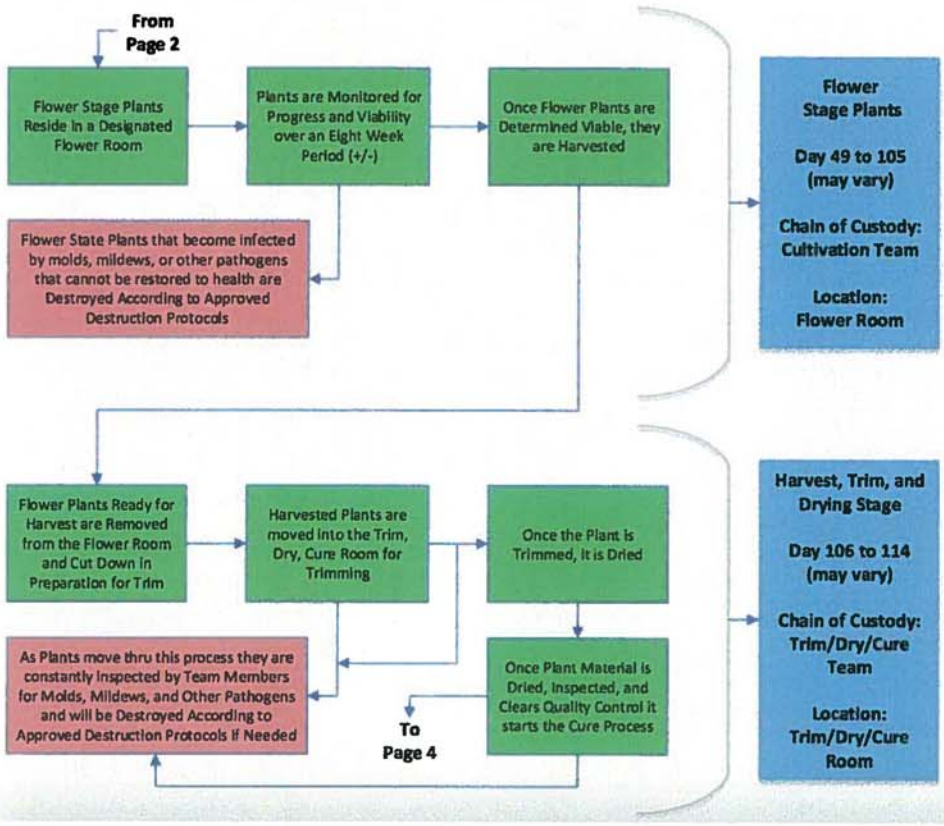
Mid and Late Vegetative State Material Flow



Mid and Late Veg Room

Mid Veg Plants

Flower and Harvest/Trim/Dry Stage Material Flow



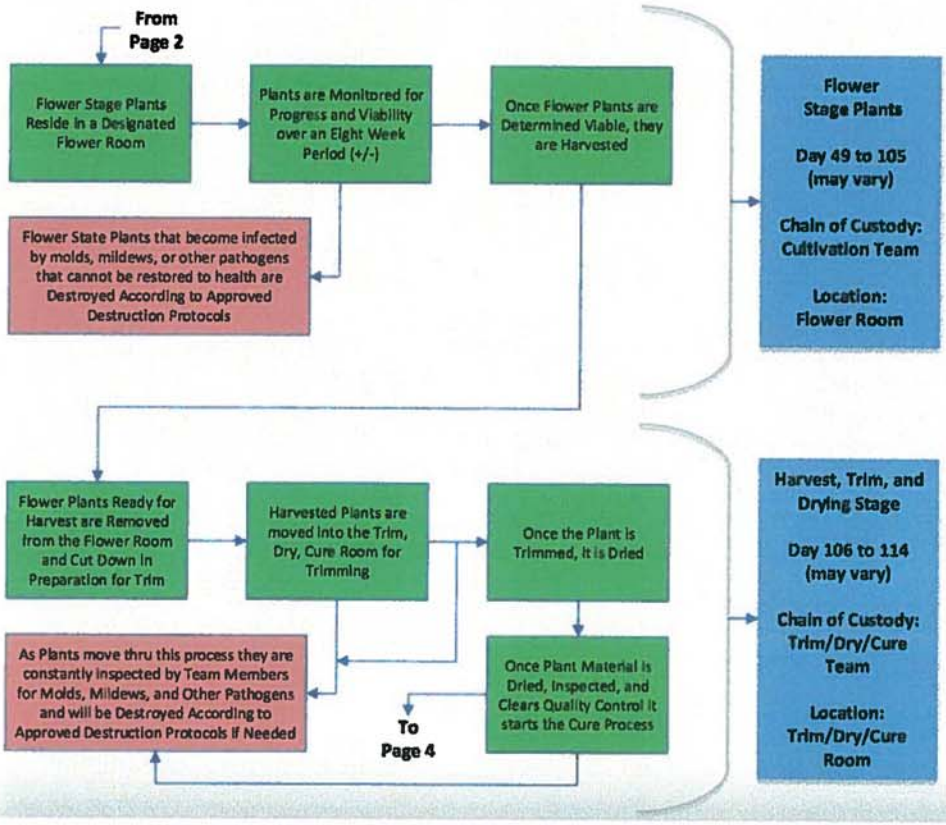
Flower Room

Flowers or Buds

Drying Racks

Trimmed Plants

Flower and Harvest/Trim/Dry Stage Material Flow



Flower Room

Flowers or Buds

Drying Racks

Trimmed Plants

Merit Criteria – Question 8

Policy to be Set by Our Chief Medical Officer

Confidentiality policies will be put in place from the outset and will be overseen by Dr. Terry Shintani, KLM's Chief Medical Officer (CMO) who is a licensed medical doctor and a lawyer by training. KLM's CMO currently operates the integrative medicine clinic that is affiliated with the Department of Complementary and Alternative Medicine of the University of Hawaii. He has also conducted research for a pharmaceutical company as well as his own research at the University, and as a Professor of Medicine taught medical ethics in the context of classes for the PhD program in Clinical Research. Dr. Shintani has also commenced writing a Publication on the applications of medical marijuana. As a result, he has extensive experience in the legal and ethical requirements of privacy policy in both clinical and research settings and will be able to write and implement our confidentiality policies and adjust them as may be necessitated by changes in business practices and changes in the law.

Confidentiality Training

Confidentiality training will be required of any employee who handles or has access to patient information whether face-to-face or in the handling of records and data. The confidentiality training will be modeled after any state or Federal requirements of any clinic in Hawaii so that any inquiries on the legitimacy of our policies may be easily answered. The confidentiality training will include for example, the following:

I. Overview: Privacy and confidentiality

    a. Why are privacy and confidentiality important?

    b. Potential Consequences

II. Protecting privacy

   a. Ways to protect patient privacy

   b. Case Studies

III. Confidential Information

   a. How is patient information used?

   b. Who is authorized to see information?

   c. Authorization

   d. Helping patients understand their rights

IV. Typical ways to protect confidentiality

   a. Ways to protect patient confidentiality: Using records and other information

   b. Case Studies

V. Electronic confidentiality protections

   a. Methods for protecting electronic information

   b. Using e-mail on the job

   c. Passwords

   d. More steps for protecting electronic information

   e. Case Studies

   f. Helpful hints to use when working with computers

VI. Exceptions to the rules

   a. There are some exceptions to confidentiality

   b. Seven reasons for releasing confidential information

   c. Understanding your role

d. Reporting violations

VII. Summary

Confidentiality Agreements

After training is completed, employees will be required to pass a test of knowledge of the policy. In addition, a confidentiality oath will be required of any employees who may use or be in contact with any protected information of patients or clients. In addition, a statement of policy will be given to any patient or client whose information we may collect and if possible, they will be required to sign an agreement to our privacy policies including any reasonable exceptions.

Confidentiality Architecture

Confidentiality will also be considered in the construction of any facilities that may serve patients so that there are structural barriers to unintended exposure of patients' information. For example, a private consultation area may be provided for the discussing of any sensitive information at the point of dispensing any marijuana product.

Merit Criteria – Question 9

In order to ensure a high quality, safe, consistent supply of marijuana for our patients we understand the critical nature of testing our marijuana and manufactured marijuana products before they are sold to qualified patients. Testing provides patients with specific, relevant information about the quality and strength of their medicine and ensures that patients who may already have compromised health do not consume contaminants such as heavy metals, solvents, pesticides or any type of microbial impurities.

We propose not only to follow and comply with the state mandated 3rd party laboratory testing guidelines, as laid out in accordance with Hawaii Administrative Rules, Subchapter 7, Section 11-850-61 through 11-850-86, but we will also be prepared to set up an in house marijuana testing laboratory to ensure the marijuana and manufactured marijuana products we produce meet or exceed the highest possible quality safety standards set for our patients.

In order for KLM to be compliant with DOH rule 11-850-82, we intend to implement standard operating procedures (SOPs) and practices (see Appendix 9 - Section 9.3 - Recommended List of Standard Operating Procedures (SOPs) in order for KLM to hold the required laboratory certification, independent from all dispensary licensees, employees and all other persons and entities with a financial interest in a dispensary licensee using accredited standards equivalent to the ISO 17025. KLM will also establish SOPs that include chain of custody for samples being transferred to the laboratory for testing. KLM will also meet all of the criteria for laboratory certification in accordance with Chapter 7.

In order for KLM to be compliant with DOH rule 11-850-83, we intend to provide all necessary fees and documents required by the Department accompanying and our application so that we can test our marijuana and manufactured marijuana products. All required documentation will be available immediately upon request from the Department. We will be available for an on-site inspection to demonstrate capacity and proficiency to test marijuana and manufactured marijuana products so that the Department can verify that we meet all requirements set forth in Chapter 7. KLM intends to renew and provide documentation to the Department to continuously hold all certifications required for laboratory testing of marijuana and manufactured marijuana products adhering to the requirements set forth in Chapter 7.

In order for KLM to be compliant with DOH rule 11-850-84, we plan to display our certification in a prominent location. We will establish SOPs detailing each step of the procedure including, but not limited to, documentation, sample preparation, reagent preparation, instrument set up and usage, acquisition of data and applicable calculations. We will be in communication with the Department if our accreditation is in jeopardy in any way.

In an effort for KLM to be compliant with DOH rule 11-850-85, we intend to implement SOPs that reflect ISO standards in testing a statistically representative sample from each batch of marijuana or manufactured marijuana products and will secure a similar sample from the same batch for verification testing. KLM will test and analyze samples according to SOPs based on scientifically validated methods according to Chapter 7, rule 11-850-85. KLM will also provide a certificate of analysis for each batch of marijuana and manufactured marijuana products tested for that dispensary and only

report on the things for which we are certified to do so (see Section 9.2 – Potency Testing in Appendix 9). In order to remain compliant, procedures for the tests will be based on validated published methods (see Section 9.4 and Section 9.5 of Appendix 9).

All microbial tests conducted will be validated using the FDA approved methods from April 2015 in their document, Guidelines for the Validation of Analytical Methods for the Detection of Microbial Pathogens in Foods and Feeds (see Section 9.1 of Appendix 9). If a batch does not meet acceptance criteria (defined by the Department) for any of the tests above, it will be quarantined and retested. If the retest is still a failure, the batch will be destroyed. We will be prepared to do additional testing at the discretion of the Department. As a KLM policy, we will create and retain all testing records for a minimum of five years including all provisions in Chapter 7, 11-850-85.

In an effort for KLM to be compliant with DOH rule 11-850-86, we intend to follow all rules and regulations set forth in Chapter 7. In case we do not, we are aware of the reasons our laboratory certification may be revoked, as set out in section 11-850-86, including what the laboratory shall do upon revocation of the certification.

In order to be compliant with DOH rule 11-850-87, we intend to follow all of the rules set forth in this section for reconsideration of certification, including all explanations of why we may feel the revocation was improper in the timeline requested.

We would like to reiterate that if only 3rd party testing is allowed by the State we have a full understanding of these regulations and are prepared to follow all such procedures. Should the state allow for both in-house as well as 3rd party testing, we will be fully equipped and able to institute either protocol.

Appendix 9.1 – Microbial Testing Overview

Scope

This document will provide general procedure including- time requirements, sample size, storage and disposal- for in house microbial testing of flower and concentrates.

General Process

Note: SOPs and Methods to be provided at a later date if requested.

1) Weigh sample into whirl-pak bag. Record weight.
2) Add appropriate amount of dilutent
3) Massage bag for 1 minute
4) Set up serial dilutions
5) Plate onto petrifilm or Ecoli/Salmonella tests
6) Analyze/Report results after 24-60 hrs
7) Store/dispose of extracts and samples

Chemicals Needed

Note: The local fire department will need to be consulted regarding the storage of chemicals and chemical waste

1) 70% Ethanol- To be used for cleaning only

No other flammable chemicals are used in the microbial testing process

Sample Size Requirements

Sample Type	Sample Size (minimum)
Flower, bud, trim	1 gram
Concentrates (extract oil, wax, etc.)	1 gram

Sample Time Requirements

Process	Time requirements
Sample Prep	5 minutes (per sample)
Sample Dilutions	10 minutes (per sample)
Sample Plating	3 minutes (per sample)
Sample run time	24-60 hours (per sample) can do up to 350
Sample Analysis Time	5 minutes (per sample)

Sample Capacity

Process	Capacity
Sample Preparation	25-40 samples per day per person
Incubator Capacity	480 petrifilms per day (including QCs) 50-100 Ecoli and Salmonella tests per day (including QCs)

Storage

Sample Type	Storage Time
Sample (flower, concentrate, etc.)	3 months
Sample extract	1 week

Disposal

This may depend on final State regulations but we have provided a suggested protocol as noted Merit Question Response 11.

Testing Frequency

This may depend on final regulations, but recommendations are as follows:

- 2% of every strain of flower harvested
- 2% of every batch of oil produced

9.2 – Potency Testing

Scope

This document will provide general procedure including- time requirements, sample size, storage and disposal for in house potency testing of flower and concentrates.

General Process

Note: SOPs and Methods to be provided at a later date if requested.

8) Weigh sample into conical vial. Record weight.
9) Add appropriate amount of extraction solvent
10) Sonicate
11) Dilute with extraction solvent (to make sure extract is within quantifiable range)
12) Run sample extract on UPLC to determined % potency
13) Analyze/Report results using UPLC software
14) Store/dispose of extracts and samples

Chemicals Needed

NOTE: The local fire department will need to be consulted regarding the storage of chemicals and chemical waste.

1) Methanol

2) Chloroform

3) Formic Acid

4) Ammonium Formate

5) Acetonitrile

6) HPLC grade Water

7) Reference Standards for each cannabinoid to be analyzed

Sample Size Requirements

Sample Type	**Sample Size (minimum)**
Flower, bud, trim	0.200 grams
Concentrates (extract oil, wax, etc.)	0.0500 grams

Sample Time Requirements

Process	**Time requirements**
Sample Weighing	1 minute (per sample)
Sample Extraction	30 minutes per batch of samples (~25)
Sample Dilution	1 minute (per sample)
Program Sequence on UPLC	15 minutes per sequence (can be up to 288 samples)
Sample run time on UPLC	5 minutes (per sample)
Sample Analysis Time	3 minutes (per sample)
UPLC/PDA Sample Capacity	288 samples per day

Sample Capacity

Process	Capacity
Sample Preparation (Extraction)	100 samples per day per person
UPLC/PDA Sample Capacity	288 samples per day (including QCs)

Storage

Sample Type	Storage Time
Sample (flower, concentrate, etc.)	3 months
Sample extract	1 week

Disposal

This may depend on final State regulations but we have provided a suggested protocol as noted Merit Question Response 11.

Testing Frequency

This may depend on final regulations, but recommendations are as follows:

-Sample from each 10 pounds of harvest (~25 samples per 250 lbs. of the same strain)

-A sample from each production batch that will be given to a patient

9.3 – Recommended List of Standard Operating Procedures (SOPs)

Scope

This document will provide a list of recommended SOPs for use in Microbial testing, Potency Testing and General Lab procedures.

1) Micro Sample Preparation
2) Plating-Aerobic Count
3) Plating- Total Yeast and Mold

4) Plating-Coliform/Enterobacter

5) Cell Count

6) Ecoli Testing

7) Salmonella spp. Testing

8) Aspergillis spp. Testing

9) Mycotoxin Testing

10) Autoclave Operation and Maintenance

11) Biohazard Waste

12) Documentation of experiments and results

13) Media Preparation

14) Organism Maintenance

15) Laboratory Notebook Procedure

16) Sample Receipt, Handling, Storage and Disposal

17) Training Procedure

18) Method Validation Procedure

19) Potency Extraction

20) Potency Analysis

21) Moisture Content Determination

22) Calibration, Maintenance and Use of pH Meters

23) Glassware Washing and Cleaning

24) Oven Operation and Maintenance (if Moisture Content Determination is required)

25)Moisture Content Determination (if Moisture Content Determination is required)

9.4 – Validated Procedures

Test Type	Equipment	Validation Based On
Chemical Profile	UPLC(HPLC)/UV Detector	FDA/GLP Guidelines
Heavy Metals	ICP-MS	EPA
Pesticides	LC-MS/MS	EPA
Solvents	GC-FID	US Pharmacopeia Chapter 467
Visible foreign and extraneous material	Microscope or visual	FDA
Moisture Content	Oven	ISO Method
Total Viable Aerobic Bacteria, Total Yeast and Mold, Total Coliforms, and Bile-Tolerant Gram Negative Bacteria (Enterobacter)	3M petrifilm plates specific to the species of interest	AOAC
E. coli (also called STEC or EHEC), Salmonella spp.	ELISA based screen tests	AOAC and FDA
Aspergillus spp. of mold (Niger, Fumigatus, Flavus)	Morphology and microscopic examination	FDA approved media from the Bacteriological Analytical Manual

9.5 – Equipment List Notes

We will provide part numbers and suppliers for each item as this minimizes ambiguity when ordering, recognizing this is the easiest way to ensure the correct products are ordered. Thomas Scientific will be engaged based on this company's record of delivering value services.

Potency/Chemistry

For the big ticket items, purchasing most of the equipment used will be a more cost effective approach. Quotes usually take about a week to finalize with used equipment. For the equipment lists, new prices typically give a general sense of the upper end of cost.

UPLC recommendation

Using the Water UPLC/PDA is recommended as this system is the most reliable if it is not consistently being run on a daily basis. Waters has also provided very good customer service. The method that we will use on this can be validated based on FDA guidelines which are some of the strictest for analytical assays.

For Micro

While qPCR is a very powerful tool in detecting DNA from microbial species, it has some flaws that can make testing a headache. It can detect "dead" DNA, meaning the organism might be dead on the sample and therefore harmless to human consumption but its DNA can still be isolated and detected, giving a false positive result. Also the consumables and tools used in qPCR are expensive and require an experienced hand in processing samples. Presently, Salmonella species and STEC Ecoli are the only tests that can be done on PCR with accuracy. The maintenance required on a regular basis can also decrease cost effectiveness if there are periods where testing samples will not be used.

Medicine Man has suggested assays for STEC Ecoli and Salmonella that are protein type assays. They require the organism to be alive and do not require expensive instruments or an

experienced hand to process or analyze results. Medicine Man also suggested using pre-made rapid plating tests that reduce prep time and give accurate results faster than regular plating methods. These pre-made plates are also easy for colony counting and easy to use.

In summary, Medicine Man has chosen different assays that eliminate these issues for your testing requirements. All are accredited by the AOAC (**association of analytical communities**) which requires rigorous validation studies across multiple labs.

General Lab Equipment

Category	Item	Supplier	Part number	Cost	Unit	Quantity	Total Cost
Personal Protective Equipment	Lab coats	Thomas Scientific	1232H94	$ 33.34	Each	10	$ 333.40
	Lab coat hooks	Amazon	Command hooks will work				$ -
	Wall mount for gloves-Acrylic	Thomas Scientific	1222K05	$ 70.95	Each	1	$ 70.95
	Gloves Nitrile-Small	Thomas Scientific	5761R17	$ 187.00	Case (1000)	1	$ 187.00
	Gloves Nitrile-Medium	Thomas Scientific	5761R21	$ 187.00	Case (1000)	1	$ 187.00
	Gloves Nitrile-Large	Thomas Scientific	5761R27	$ 187.00	Case (1000)	1	$ 187.00
	Gloves Nitrile-Extra Large	Thomas Scientific	5761R46	$ 187.00	Case (1000)	1	$ 187.00
	Wall mount for glasses	Thomas Scientific	1215X12	$ 172.00	Each	1	$ 172.00
	Safety Glasses	Thomas Scientific	1199D35	$ 2.53	Each	10	$ 25.30
	Ear Plugs	Thomas Scientific	1216Z69	$ 47.30	200	1	$ 47.30
Safety/ Medical	Emergency Eye Wash	Thomas Scientific	1224B27	$ 52.55	3	1	$ 52.55
	Chemical Spill Kit	Thomas Scientific	8238N05	$ 186.76	1	1	$ 186.76
	First Aid Kit	Thomas Scientific	1233T96	$ 163.45	1	1	$ 163.45
	Fire Extinguisher						$ -
	Emergency Shower						$ -
Glassware	Media Bottles-100mL	Thomas Scientific	1395-100	$ 93.17	Case (10)	1	$ 93.17
	Media Bottles-500mL	Thomas Scientific	1395-500	$ 123.66	Case (10)	1	$ 123.66
	Media Bottles-1000mL	Thomas Scientific	1395-1000	$ 151.84	Case (10)	1	$ 151.84
	Media Bottles-2000mL	Thomas Scientific	1395-2000	$ 399.89	Case (10)	1	$ 399.89
	Beaker-100mL	Thomas Scientific	1531H76	$ 191.26	Pack (12)	1	$ 191.26
	Beaker- 500mL	Thomas Scientific					$ -
	Beaker-1000mL	Thomas Scientific	1531J51	$ 86.28	Pack (6)	1	$ 86.28
	Erlenmeyer Flask-125mL	Thomas Scientific	4907F23	$ 98.16	Pack (12)	1	$ 98.16
	Erlenmeyer Flask-500mL	Thomas Scientific	4907F35	$ 55.84	Pack(6)	1	$ 55.84
	Erlenmeyer Flask-1000mL	Thomas Scientific	4907F41	$ 94.23	Pack(6)	1	$ 94.23
	Volumetric Flask-10mL	Thomas Scientific	0319B48	$ 285.38	12	1	$ 285.38
	Volumetric Flask-50mL	Thomas Scientific	0319U75	$ 36.67	1	5	$ 183.35
	Volumetric Flask-100mL	Thomas Scientific	0319B45	$ 330.52	12	1	$ 330.52
	Volumetric Flask-500mL	Thomas Scientific	0319W81	$ 60.50	1	3	$ 181.50
	Volumetric Flask-1000mL	Thomas Scientific	0319B41	$ 72.81	1	3	$ 218.43
	Graduated Cylinder-50mL	Thomas Scientific	3557B73	$ 21.34	Each	3	$ 64.02
	Graduated Cylinder-100mL	Thomas Scientific	3557B77	$ 25.11	Each	3	$ 75.33
	Graduated Cylinder-500mL	Thomas Scientific	3557B85	$ 56.84	Each	3	$ 170.52
	Graduated Cylinder-1000mL	Thomas Scientific	3557B89	$ 70.69	Each	3	$ 212.07
	Graduated Cylinder-2000mL	Thomas Scientific	3557B93	$ 115.11	Each	3	$ 345.33
General	Kimwipes- Small (4.4x8.4)	Thomas Scientific	2904F24	$ 8.74	Box (280)	5	$ 43.70
	Kimwipes-Large (11.8x11.8)	Thomas Scientific	2904F39	$ 9.59	Box(196)	5	$ 47.95
	Parafilm	Thomas Scientific	1222K01	$ 73.48	4"x250ft	2	$ 146.96
	Sharpie Markers	Amazon					$ -
	Label Tape	Thomas Scientific	1209D22	$ 49.55	Case (12) 500"	1	$ 49.55
	Spatulas-Various	Thomas Scientific	1232X12	$ 82.85	7 assorted	3	$ 248.55
	Spatulas-Scoop	Thomas Scientific	1195R87	$ 32.03	Pack(12)	1	$ 32.03
	BenchMixer Vortexer	Thomas Scientific	1227U58	$ 235.00	Each	2	$ 470.00
	Timer	Thomas Scientific	9371W52	$ 32.48	Each	2	$ 64.96
	Lab Notebooks	Scientific Notebook Company	2001HC	$ 19.00	Each	5	$ 95.00
	Wash Bottles	Thomas Scientific	1186Z39	$ 28.60	Pack (5)	1	$ 28.60
	Thermometer	Thomas Scientific	9313A86	$ 25.14	Each	4	$ 100.56
	Tweezers	Thomas Scientific	1199N87	$ 9.49	Each	4	$ 37.96
	Lab benches						$ -
	Chairs	Uline	H-1375	$ 209.00	Each	2	$ 418.00
	MSDS Safety Sign						$ -
	Fire Extinguisher Safety sign	Thomas Scientific	1190R19	$ 10.60	Each	2	$ 21.20
	3 bay sink						$ -
	Eye Wash Safety Sign	Thomas Scientific	1215U10	$ 13.56	Each	1	$ 13.56
	Solvent Transport Containers						$ -
Waste	Glass disposal Boxes	Amazon	1236E00	$ 102.85	Pack(6)	1	$ 102.85
	Organic Waste Carboys						$ -
Cleaning	Alconox (soap)	Thomas Scientific	2902G05	$ 36.62	4lb Box	2	$ 73.24
	Cleaning Brushes	Thomas Scientific	1929M10	$ 65.04	Pack(10)	1	$ 65.04
	Glassware drying rack	Thomas Scientific	1193Q84	$ 384.00	Each	1	$ 384.00
Storage	Glassware/Supply storage cabinets	Uline	H-3109	$ 455.00	Each	2	$ 910.00
	Flammable Solvent Cabinet	Thomas Scientific	0501A00	$ 1,328.89	Each	1	$ 1,328.89
Pipettes	Pipette 2-20uL	Thomas Scientific	1226R09	$ 361.00	Each	1	$ 361.00
	Pipette 20-200uL	Thomas Scientific	1226R12	$ 361.00	Each	1	$ 361.00
	Pipette 100-1000uL	Thomas Scientific	1226R14	$ 361.00	Each	1	$ 361.00
	Pipette Tips 2-20uL	Thomas Scientific	*Note: We can probably get pipettes and tips as a package deal				$ -
	Pipette Tips 20-200uL	Thomas Scientific					$ -
	Pipette Tips 100-1000uL	Thomas Scientific					$ -

Microbial Testing Lab Equipment

Category	Item	Supplier	Part number	Cost	Unit	Quantity	Total Cost
General	Cell counter (hemocytometer)	Amazon	634-6310	$ 160.00	Each	2	$ 320.00
	Balance to 0.01g	Thomas Scientific	1218V30	$ 3,706.00	Each	1	$ 3,706.00
	Pipettes p10,p200,p1000	VWR	89133-288	$ 1,178.31	set	1	$ 1,178.31
	Pipette tips for above						
Plating	Incubator 35	Thomas Scientific	1187Q10	$ 3,549.00	Each	1	$ 3,549.00
	Incubator 25	Thomas Scientific	1187Q10	$ 3,549.00	Each	1	$ 3,549.00
	4 deg fridge for organisms*	Thomas Scientific	8050H12	$ 2,181.36	Each	1	$ 2,181.36
	Autoclave	Thomas Scientific	1213N94	$ 7,886.00	Each	1	$ 7,886.00
	Colony counter with backlight	Thomas Scientific	1199K33/1199K34	$ 2,413.30	Each	1	$ 2,413.30
	Pipetteman	Thomas Scientific	1203G40	$ 144.22	Each	1	$ 144.22
	Magnetic stir/heat blocks	Thomas Scientific	8613L22	$ 952.20	Each	2	$ 1,904.40
	BSL II hood (Laminar Flow)	Thomas Scientific	1204H29	$ 17,445.00	Each	1	$ 17,445.00
	Microscope (10x)	Thomas Scientific	1195A23	$ 574.00	Each	1	$ 574.00
Mycotoxins	8 channel pipettor	Thomas Scientific	1221U36	$464.40	Each	1	$ 464.40
	Microwell reader	Romer	EQOLE4700	2,500.00	each	1	$ 2,500.00
	Magic Bullet small silver with cups	Amazon		39.99	each	1	$ 39.99

*Should be small stand alone fridge

Note: Quantities are rough estimates and will vary based on the size of the lab and lab staff

Microbial Testing lab Consumables

Category	Item	Supplier	Part number	Cost	Unit	Quantity	Total Cost	
General	Whirl Pak Bags	Thomas Scientific	1303N38	$ 187.05	250/bx	1	$ 187.05	
	Buffered Peptone Water	Thomas Scientific	C941F21	$ 53.63	500g	1	$ 53.63	
	Butterfield's Buffer	Thomas Scientific	1756U70	$ 108.84	72/pk	1	$ 108.84	
	1ml pipette tips	Thomas Scientific	1195D88	$ 46.35	768/pk	1	$ 46.35	
	Salmonella typical	Microbiologics	0901P	$ 150.00	2 sticks	1	$ 150.00	
	Salmonella atypical	Microbiologics	01054P	$ 150.00	2 sticks	1	$ 150.00	
	STEC Ecoli	Microbiologics	01204P	$ 150.00	2 sticks	1	$ 150.00	
	Ecoli	Microbiologics	0495P	$ 150.00	2 sticks	1	$ 150.00	
	Yeast	Microbiologics	0332P	$ 150.00	2 sticks	1	$ 150.00	
	Colliform	Microbiologics	0839P	$ 150.00	2 sticks	1	$ 150.00	
	Mold	Microbiologics	0178P	$ 150.00	2 sticks	1	$ 150.00	
	Dextrose	Thomas Scientific	C979Y90	$ 115.20	500g	1	$ 115.20	
	Agar	Thomas Scientific	1223G90	$ 127.13	500g	1	$ 127.13	
	Ferric Ammonium Citrate	Thomas Scientific	C993Z36	$ 38.24	100g	1	$ 38.24	
	Peptone	Thomas Scientific	C992F05	$ 75.70	500g	1	$ 75.70	
	Gentamycin	Thomas Scientific	C000R58	$ 136.10	5g	1	$ 136.10	
Reusable Supplies	Stir bars	Thomas Scientific	1207P99	$ 10.15	Each	4	$ 40.60	
	Thermometer	Thomas Scientific	9313A86	$ 25.14	Each	4	$ 100.56	
	flame sterilizer (alcohol lamp)	Thomas Scientific	2077G85	$ 76.33	Each	1	$ 76.33	
	plate spreader for RYM	Carolina	824105	$ 8.50	Each	5	$ 42.50	
	Plate spreader for all other	Carolina	824100	$ 7.50		5	$ 37.50	
Organism Detection Supplies	Rapid salmonella test	Romer Labs	7000190	$ 882.00	100 tests	1	$ 882.00	
	ImmunoCard Stat, EHEC, for the detection of Shiga toxins	Hardy Diagnostics	751630	$ 1,300.00	30 tests	1	$ 1,300.00	
	RYM Petrifilm	Thomas Scientific	1185X02	$ 137.71	50/box	1	$ 137.71	
	Rapid Aerobic Petrifilm	Thomas Scientific	1185X20	$ 96.92	50/cs	1	$ 96.92	
	*Entero/coliform Petrifilm	Thomas Scientific	1185X10	$ 117.94	50/cs	1	$ 117.94	
Mycotoxin Detection Supplies	Methanol-ACS Grade	Thomas Scientific	C989T82	$ 593.00	4x4L	1	$ 593.00	also noted in Chemistry-can borrow
	Whatman 1 paper	Thomas Scientific	4712B45	$30.92	100/pk	1	30.92	
	reagent boat	Thomas Scientific	1228K19	$115.70	200/cs	1	$115.70	
	AgraQuant® Total Aflatoxin assay	Romer Labs	COXAQ1000	310	96 well	1	$310.00	
	AgraQuant® Ochratoxin Assay	Romer Labs	COKAQ2000	310	96 well	1	$310.00	
	MycoSep112 column	Romer Labs	COCMY2112	135	25/pk	1	$135.00	
	Filter funnel	Thomas Scientific	5207H41	56.52	2	1	56.52	

Note: Quantities are rough estimates and will vary based on the size of the lab and lab staff

Merit Criteria - Question 11

Upon award of a Hawaii dispensary license and prior to handling of any marijuana, KLM shall apply to the department of public safety narcotics enforcement division (NED) and obtain a certificate to possess and handle marijuana and manufactured marijuana products. Ultimately, KLM intends to destroy or dispose of unused, unsold, contaminated, expired, or mishandled marijuana or manufactured marijuana products by a means prescribed by the department of health or the department of public safety narcotics enforcement division administrator in accordance with Hawaii Administrative Rules, Subchapter 3, Section 11-850-43, Disposal or Destruction. Upon approval by the NED, KLM will establish written policies and procedures to be followed by all employees in regard to destruction and disposal of all unused, unsold, contaminated, expired, or mishandled marijuana and manufactured marijuana products as part of it's standard operating procedures.

To ensure the secure destruction and disposal of marijuana and manufactured marijuana products, KLM intends to implement a robust disposal protocol at our production center(s). These locations will serve as the primary point of destruction and disposal for waste products, typically in the form of stalk, stems, unrooted clones, dry and dead leaves, topped, pruned and de-fanned pant matter, generated from production and cultivation of marijuana, manufacturing of marijuana products and expired, contaminated, unsold or mishandled products from our retail dispensing locations.

Any unused, unsold, expired, or mishandled marijuana and manufactured marijuana products returning to the production center from one of our retail dispensing locations shall be subject to the transportation protocols outlined in Section 329D-6, HRS (see Appendix 11 - Section 11.2 – Disposal of Manufactured Marijuana Product). This includes, but not limited to

tracking identification issued by the tracking system, the identity of the person transporting the marijuana or manufactured marijuana products, and the make, model, and license number of the vehicle being used for transport.

All forthcoming destruction and disposal procedures will be performed by an approved full time staff member in the presence of a manager to ensure double verification of the process. In addition, security systems will monitor the process in its entirety, limiting the potential for diversion within the interior or exterior of the production center.

All wasted material will be deemed not only unusable, but also unrecognizable prior to leaving KLM facilities in accordance with the following procedures:

Procedure 1: KLM will assure proper waste inventory tracking;

- KLM will maintain accurate and comprehensive records regarding any waste material produced through the trimming or pruning of a medical marijuana plant prior to harvest, which must include weighing and documenting all waste. Records of waste produced prior to harvest will be maintained on the premises of KLM. Waste produced prior or subsequent to harvest will be disposed of in accordance with this policy and made unusable and unrecognizable.
- KLM will ensure its marijuana waste materials are identified, weighed and tracked while on the premises of KLM until they have been disposed. This includes the amount of waste produced by each plant at harvest and any by-products as a result of the cultivation, production, or manufacturing of marijuana.
- KLM will weigh all marijuana waste before it leaves the KLM premises. The scale used to weigh medical marijuana waste will be licensed and calibrated in accordance with Hawaii regulations.

- KLM will maintain accurate and comprehensive records regarding waste material that accounts for, reconciles, and evidences all waste activity related to the disposal of medical marijuana and manufactured marijuana products and will be made available to the department or law enforcement upon request.

Procedure 2: Grinding and incorporating the cultivated marijuana waste products via an electronic grinder, chipper, shredder or mulcher, including unviable plants, plant stalks, plant stems, and plant fan leaves, with non-consumable, solid wastes listed below such that the resulting mixture is at least fifty percent non-marijuana waste including:

- Paper waste;
- Cardboard waste;
- Spent soil waste (dirt);
- Grease or other compostable oil waste;
- Bokashi, or other compost activators; or
- Other wastes approved by the NED that will render all medical marijuana and manufactured marijuana product waste unusable and unrecognizable.
- All wasted marijuana and manufactured products to be destroyed shall be mixed so that at least fifty percent of the total mixture is composed of items listed above and treated with an environmentally friendly sanitizing agent to substantially diminish the remaining tetrahydrocannabinol (THC) content.

Procedure 3: The resultant sanitized mixture will be placed within opaque and odor-limiting waste bags in order to limit the visibility of the finished mixture.

- KLM will dispose of these medical marijuana and manufactured marijuana product waste bags in a secured waste receptacle inside the production center.

- KLM will assure that any waste receptacle is secured inside the locked enclosure until is it scheduled to be picked up by a third-party authorized by the NED.

Or, the resultant sanitized mixture will be placed within a compost dumpster destined for a sanitary landfill application on the exterior of the production center. KLM will work with the DOH and NED to determine the preferred final methodology.

Procedure 4: KLM will maintain a contract with a Hawaii-licensed waste disposal company authorized by the department or NED in the handling of marijuana waste disposal.

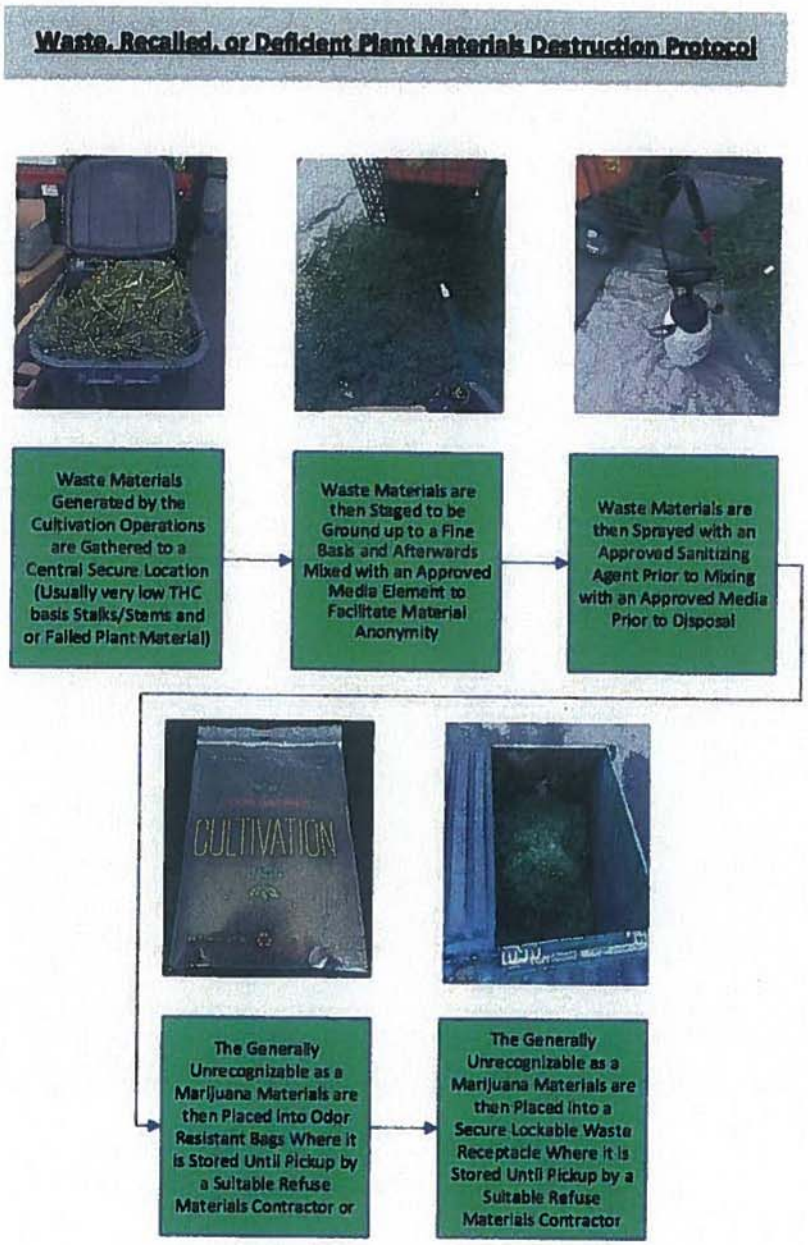
- KLM will designate a manager to monitor the current contract to be sure it is current and on record for inspection by the department as necessary.
- KLM manager will meet the third-party waste disposal agent and validate their authority to remove marijuana waste that has been rendered unusable and unrecognizable.
- KLM manager will document the waste pick up in the inventory tracking system.
- Records will be maintained on premise for a minimum of six years.
- KLM will maintain an independent log of such disposal that will be kept at the production center for inspection by department officials or law enforcement as required.

For a summary flowchart and representative photos please see Appendix 11 - Section 11.1 - Destruction and Disposal Process Flow and Photos.

Our recommended destruction and disposal process will ensure that wasted marijuana by-products and inventory does not become available to unauthorized persons and will be documented as subtracted from inventory via BioTrackTHC. The BioTrackTHC tracking system will track and report on all disposal of marijuana and manufactured marijuana products within a licensed facility. The system allows for the adjustment of inventory quantities as the result of both non-sales operational activities (such as disposal, wastage, moisture loss, mistakes, and

inventory audits) and external factors (such as theft and seizure by law enforcement). Data related to disposal information may include but is not limited to: the amount disposed, reasons for disposal, day/time of disposal, identity of the employee(s) conducting the disposal, and manner of disposal in addition to all product-related data such as inventory classification.

11.1 – Destruction and Disposal Process Flow & Photos (File Photo Similar)



Page 1 of 1

11.2 – Disposal of Manufactured Marijuana Product

If it is determined that a product or substance at any stage within the manufacturing process containing marijuana does not meet quality standards, is outdated, damaged, deteriorated, misbranded, adulterated or whose container or package has been improperly or accidentally opened, it may be determined to be disposed of in accordance with KLM's waste-disposal policies and procedures and regulatory requirements.

The SOP will include:

1. Segregation - Location within facility designated for waste storage. Access will limited to authorized personnel.
2. Disposal by authorized personnel - Supervisory approval will be required on all medical-cannabis waste and products designated for disposal. These segregated inventories are clearly identified with a label that includes signature of supervisory personnel.
3. Render substance unusable - Clear description of waste-handling procedures including protocols for rendering substance unusable prior to disposal. This will include mixing waste with non-consumable solid-wastes such that the resulting mixture is at least 50-percent non-cannabis waste.
4. Procedures performed in view of video surveillance security equipment with multiple people involved to provide a witness.
5. Documentation of disposal in inventory-control system - Supervisory sign-off will include certifying waste has been entered into inventory-control.
6. Location of disposal - Identification of solid waste site and disposal facility.
7. Documentation retained for 6 years.

This production facility shall not dispose of marijuana waste in an unsecured waste receptacle not in possession and control of the production facility within the waste disposal area.

Only authorized employees will have the access level to destroy product and ensure the destroyed weight and the reason for destruction are recorded in Inventory Tracking Software. Inventory Tracking Software can generate reports on the number and/or weight of destroyed material at any point in the process. Every action will be recorded with a date/timestamp and the username of the employee performing the action.

Marijuana and marijuana infused product waste must be made unusable and unrecognizable prior to leaving the Licensed Premises. Marijuana and marijuana infused product waste shall be rendered unusable and unrecognizable through grinding and incorporating the marijuana waste with non-consumable, solid wastes listed below such that the resulting mixture is at least 50 percent non-cannabis waste:

1. Paper waste;
2. Plastic waste;
3. Cardboard waste;
4. Food waste;
5. Grease or other compostable oil waste;
6. Bokashi, or other compost activators;
7. Other wastes approved by the Department of Health that will render the marijuana waste unusable and unrecognizable as marijuana; and
8. Soil. The facility shall utilize inventory tracking software to ensure its post-harvest waste materials are identified, weighed and tracked while on the Licensed Premises until disposed of.

All cannabis waste must be weighed before leaving any Licensed Premises. The facility is required to maintain accurate and comprehensive records regarding waste material that

accounts for, reconciles, and evidences all waste activity related to the disposal of cannabis. After the marijuana and marijuana infused product waste is made unusable and unrecognizable, then the rendered waste shall be:

1. Disposed of at a solid waste site and disposal facility that has an appropriate approval from the Department of Health;
2. Deposited at a compost facility that has an appropriate approval from the Department of Health; or
3. Composted on-site at a facility owned by the generator of the waste and operated in compliance with the regulations pertaining to solid waste sites and facilities in the Department of Health.

Merit Criteria - Question 12

Product safety is paramount for business best practices, ensuring that all marijuana and manufactured marijuana products are safe for use or consumption by qualifying patients. KLM will fully comply with Hawaii Administrative Rules, Chapter 11-850-75, concerning quality control, health, safety and sanitation standards as well as Sections 329D-8, 329D-10, and 329D-11, HRS. The six principles of product safety are quality assurance, environmental control, integrated pest management, cleaning and sanitation, consistent execution of all SOPs, and rigorous laboratory testing for potency, microbials, residual solvents, heavy metals, and toxins. As required within Chapter 11-850-71, Product and Product Standards, KLM intends to establish and maintain a written policy and procedure that includes:

1. Safe and appropriate use of equipment;
2. Effective training and monitoring of employees and subcontractors who participate in the production of marijuana and manufactured marijuana products;
3. Adequate protocols for laboratory testing of marijuana;
4. Safe and appropriate storage and disposal or destruction of marijuana at all stages of production and sale, ensuring there is no diversion to unauthorized persons.
5. State compliant packaging and labeling

Quality control is necessary in every level of plant husbandry from propagation within a production center to being sold in the dispensary. The cultivation team will be our first line of defense with their daily "scouting" duties. With clone propagation and management, the cloner is looking daily for molds, mildew or other pathogenic afflictions. Through the plant life-cycle from early, mid and late vegetative stage and on through flowering, the cultivation staff will always have eyes on the plant. While performing the various tasks of feeding, transplanting,

topping, de-fanning, pruning, and netting, human eyes provide the best initial source of identifying afflictions. Through daily scouting, cultivators will actively look for molds, mildews and other pathogenic outbreaks in order to be proactive with regard to the medical marijuana crop, instead of reactive. As the plants are harvested and transferred to trim, dry and cure, each department is actively looking for afflictions to the plants that may have escaped the notice of the cultivation team. Should an issue be discovered, the plant will be segregated and reported to the cultivation team who will, through BioTrackTHC, locate the flower room from which the plant came and look for any other issues in that room to treat and quarantine before it may spread throughout the production center.

Within the production center, KLM will strive to maintain complete control over all environments containing marijuana or manufactured marijuana products. Controlling the environment is critical to the overall health of the facility. Deploying Stulz Air Technology HVAC Systems, or a similar cleanroom atmospheric control equipment, will aid in the creation of a nearly aseptic, exceptionally clean environment. These systems will provide all elements necessary to successfully creating and managing a controlled environment, including human management of temperature, humidity, and carbon dioxide levels.

Through adoption of a proper Integrated Pest Management (IPM) protocol, KLM can mitigate or eliminate several potential production center issues (see Appendix 12 - Section 12.1 - Integrated Pest Management and Environmental Monitoring). IPM should only utilize organic, oil-based treatments that contain no harsh toxins that could potentially harm the cultivation team or ultimately a qualifying patient. Actively scouting for issues is by far the most important part of IPM. Scouting involves having trained human eyes on the plants, actively looking for pests, molds or other afflictions and quickly treating the plants.

Cleaning and sanitation of the facility and all equipment is another critical element with regard to product safety and maintaining a safe work environment both in the production center as well as retail dispensing facility (see Appendix 12 - Section 12.2 - Production Center Cleaning and Sanitation Practices). Wash stations, lockers and work clothing will be provided. Daily cleaning checklist will be used by staff to ensure compliance with regard to Chapter 11-850-75, quality control, health, safety, and sanitation standards.

Rigorous health, safety, and sanitation standard will also apply to staff or any other persons who may come in contact with medical marijuana and medical marijuana products while at the production center or retail dispensing facility. KLM intends to ensure all licensed facilities are well-equipped to provide sanitary working conditions for staff, addressing all requirements set forth within Chapter 11-850-75. This includes but is not limited to excluding contact from staff and persons with illness, open lesion or wounds, or any other source of contamination, providing ample hand washing facilities and hand cleaning preparations, and requiring all staff to conform to hygienic best practices while on duty. Additionally, no animals will be permitted within the facilities, except for service animals in accordance with section 34702.5, HRS. Additionally, KLM will not alter marijuana or manufactured marijuana products to change their appearance, flavor, or smell in a way that would appeal to minors.

A clean and sterile facility is a healthy facility. All floors, walls, and ceilings will be adequately cleaned and kept sanitary. Adequate screening will be installed to protect against the entry of pests and other pathogens. All litter, waste, and rubbish will be removed and disposed of to minimize the development of odor or attract pests or vermin. KLM plans to maintain any environmentally friendly cleaning compounds, sanitizing agents, and bait traps in a manner that is in accordance with local, state, and federal law. In addition, KLM will maintain an MSDS for

every hazardous chemical on premise and make them available to employees as part of our Right-to-Know provisions – which says employees have the right to know about the chemicals to which they are exposed. The other key responsibilities we have are:

- Maintaining a hazard communication program detailing the plans in place for the safe handling of chemicals;
- Maintaining a written chemical inventory of every hazard chemical in the facility to which employees are exposed;
- Maintaining proper labels and warning signs associated with said chemicals;
- Training employees on chemical hazards and necessary precautions.

Retail dispensary staff will be required to use nitrile gloves whenever in contact with medical marijuana, to ensure there is no contamination between staff and the medical marijuana or manufactured marijuana products (see Appendix 12 - Section 12.3 - Retail Dispensing Location Cleaning and Sanitation Practices). KLM will ensure dispensary agents maintain proper cleaning and equipment maintenance logs in a secured file to be readily available to the department of health or law enforcement for inspection as necessary. A cleaning checklist is an effective tool to ensure no essential cleaning and sanitation tasks are overlooked. KLM will generate maintenance logs to be used within all licensed facilities and kept on file for inspection. A janitorial service will be called in nightly for thorough vacuuming and sanitation.

In order to assure product safety in regard to laboratory testing KLM shall maintain testable product samples in a secure tamper-proof manner for verification testing as directed by the department of health. A certified laboratory will test and analyze a statistically representative sample from each batch of marijuana or manufactured marijuana product according to standard operating procedures prepared by the laboratory and approved by the department. KLM shall

ensure and verify that each sample is tested and analyzed for each of the items laid out in subsection (c) of Chapter 11-850-85, and may obtain results from different laboratories for different items if a laboratory cannot perform all the tests. Internal testing for chemical, microbiological, or other testing, as necessary to augment independent third party testing will help in the effort to provide safety to all involved parties. Using BioTrackTHC also ensures product safety, as after a testing laboratory has entered sample test results into the BioTrack system, the licensee retrieves the testing laboratory results and the System applies those results to the original lot from which the sample came. Only if the inventory item has a status of "Passed QA" can it be placed on a manifest. A registered organization user cannot, under any circumstances, place an item on the transportation manifest if that item requires testing and does not have a "Passed QA" status (e.g. not yet tested or failed testing). (see Merit Criteria - Question 9 and Appendix 9 - Section 9.1 - Microbial Testing Overview).

As an overarching precaution in the event a qualifying patient experiences any unwanted side-effect or adverse effects, KLM will have a product alert and recall protocol in place (see Appendix 12 - Section 12.4 - Marijuana & Manufactured Marijuana Product Alert & Recall).

12.1 - Integrated Pest Management and Environmental Monitoring

Regular environmental monitoring (EM) ensures the growing environment remains optimized, and helps detect potential problems early on to allow correction before they become serious or damaging. A history of EM data exposes causal factors related to environmental, disease, or pest problems. It can indicate if the environment control systems (such as the HVAC) have sufficient capacity to control the internal environment even when significant inter-seasonal fluctuations are happening in the outside environment. Regular data collection also reveals the effect of an environmental adjustment on the plants.

A critical element to EM is "scouting" for pests and pathogens. Scouting is by far the most critical element to Integrated Pest Management (IPM). Scouting is the process of actively inspecting each plant for afflictions or other alerts. During the vegetative stage of the plant lifecycle, including mother plants, daily watch for any alerts during cloning, watering, topping and transporting. Scouting by cultivation staff allows a production center to operate proactively versus reactively in regard to plant afflictions including pests and pathogens.

As with any other intensely cultivated and selectively bred agricultural crop, medical marijuana is beset by a number of pathologies that require immediate intervention to avoid serious or catastrophic crop losses, and the possible loss of valuable or rare genetic strains. Some marijuana strains have spent their entire existence in completely artificial environments, and after several decades there have been significant selective pressures on pests and disease organisms to adapt. The consequences of this are now being seen in the form of highly resistant types of red spider mites and powdery mildew fungus.

A modern integrated holistic approach to prevention and control of plant pathologies is

Integrated Pest Management (IPM). IPM programs combine cultural and environmental controls, regular EM and disease scouting, application of organic pesticides and fungicides, and application of treatment for established diseases and high pressure situations. The focus of an IPM program will largely depend on the options that are realistically available to the cultivator.

Resistance buildup can be avoided or delayed with proper treatment rotation, and residual levels in the product will be at (or preferably below) the EPA's residuals limits for hops and food crops. Hops is a reasonable parallel due to its close relation to the marijuana plant. All incoming plants must be quarantined for at least two weeks to ensure any diseases or pests they may have cannot spread into the production center. Quarantined areas must be under strict contamination control and monitored by trained staff.

Integrated Pest Management – Mother Plants and the Vegetative Phase

Scouting is the most important part of IPM. During scouting, a cultivator is looking for any potential afflictions such as mold, powdery mildew, bug infestations or other pathogenic outbreaks. Scouting should be performed during cloning, watering, feeding, topping, transplanting and shuffling. The key is to identify a plant issue before it become an epidemic within the production facility. The culture that should be engendered is that of being proactive instead of reactive.

KLM will establish the use of safe, organic, oil-based treatments. Chemicals and other heavy pesticides should never be used as they pose a danger to both cultivators as well as the end medical marijuana patients. The FDA has not made a position on IPM with regard to medical marijuana as it is considered a schedule 1 controlled substance at the federal level. As such, only State approved organic oil-based treatments will be implemented.

12.2 - Production Center Cleaning and Sanitation Practices

Equipment that will typically come in contact with medical marijuana plants are pots, vegetative racks, transplanting tables, wheeled transport racks, flowering systems, trays, machine trimmer, scissors, drying racks and cure buckets. All these items need to be properly sterilized and disinfected prior to reuse. This is important as much to prevent the contamination of the equipment as it is for plants to not get contaminated through contact. Pots are reused once a plant has been harvested and removed from the pot. The old grow medium is removed from the pot and used to mix with discarded plant matter that is then sterilized as part of the destruction protocol. It must be rendered unusable and unrecognizable. The pot will be cleaned and sanitized to remove the salt-based nutrient sediments that form at the bottom of the pot through several months of nutrient feedings.

Vegetative racks house plants for eight to ten weeks and will have contamination built up through feeding runoff and pesticide, miticide, and fungicide management. Once the plants on the vegetative racks have moved on from this phase of their life-cycle to the flowering phase, these racks will have to be cleaned and sterilized. The transplanting tables that are used for repotting from a clone dome to a 1-gallon to a 5-gallon pot will likewise require cleaning and disinfecting.

When a flowering system is harvested, and prior to repopulation, the tables will need to be rigorously cleaned and disinfected. All screen of green (ScrOG) material, trellis netting, bell wire and plant matter will need to be removed from the harvest. Transporting racks that port the plants from late vegetative stage to a flowering system will need to be cleaned between transport.

All scissors that are used to hand trim the plant into its basic byproducts will need to be disinfected with 90% isopropyl alcohol after trimming and before starting a new plant trim. The

trimmed product goes into large aluminum trays that will then be taken to the dry/cure department to dry for a week to 10 days. Once the trimmings have fully dried and have been stored or packaged, the aluminum trays can be reused once they have been thoroughly cleaned and disinfected. The machine trimmer will need to be cleaned each day after use. It is crucial that plants with powdery mold or mildew never go through the machine. Sticky resins will need to be removed and thoroughly sanitized prior to running plants through the next day.

The wire hanging racks will also be cleaned after the removal of fully dried flower and prior to repopulation. All cure buckets are used for the batching and curing of product. The product will cure in a bucket anywhere from two weeks to two months. After product is done curing and prior to repopulation, the buckets must be cleaned and disinfected. Sticky resins can form on the inside of the container and must be removed. A record of all cleaning should be maintained daily and weekly and should be held for six years.

KLM will ensure cultivation staff maintain proper cleaning and equipment maintenance logs in a secured file to be readily available to the Department of Health for inspection as necessary. Everything in the facility needs to be cleaned with a State-approved sanitizing agent, including but not limited to: tables, racks, floors, walls, lighting hoods, fans, trays, buckets, pots, HVAC equipment, glass, and water system equipment to mitigate the risk of crop loss due to pests, molds, mildews and other airborne contaminants. Some larger equipment and mechanical units will require cleaning on a monthly, quarterly, biannual, or annual basis.

12.3 - Retail Dispensing Location Cleaning and Sanitation Practices

As part of the standard operating procedure, KLM will maintain the highest standard of cleanliness of any building or equipment used to store or display medical cannabis. A clean and sterile facility is a healthy facility. Floors will be swept and mopped every day and a janitorial

service or in-house maintenance team will be called in weekly for thorough vacuuming and sanitation. Soap, water, rubbing alcohol and other sanitizing solutions will be used when cleaning. The person cleaning will also wear clean clothing, protective gloves and goggles and will be required to spray down with an alcohol spray solution prior to entering rooms in which medical marijuana is stored.

The equipment that will typically come in contact with medical marijuana and manufactured marijuana products within a retail dispensing facility are, but not limited to: display jars, chopsticks/tongs, scales, weighing trays, and holding containers. All of these items need to be properly sterilized and disinfected prior to reuse. This is important as much to prevent the contamination of the equipment as it is for the medical marijuana to not get contaminated through contact. Larger pieces of equipment and furniture, like display cases and furniture within the patient waiting area, will also be cleaned regularly by a professional cleaning service to ensure the utmost sanitation within the dispensary. Retail dispensary staff will be required to use nitrile gloves whenever in contact with medical marijuana and manufactured marijuana products to ensure there is no contamination.

12.4 - Marijuana and Manufactured Marijuana Product Alert & Recall

KLM has a drafted a marijuana and manufactured marijuana product alert and recall protocol in the event of a serious adverse event experienced by a qualifying patient.

Stage 1: Upon serving notice to a staff member of the retail dispensing facility by a qualified patient or authorized caregiver of a particular and specific negative effect (ex: persistent debilitating headaches) thought to be the result of ingestion of an approved marijuana or manufactured marijuana product, the Dispensary Manager shall note the effect in a common

log format (logs to be maintained and shared by the Dispensary Manager and the General Manager) as well as the batch and other control information related to the suspect product.

Stage 2: Upon the second notice to a member of the retail dispensing facility by a qualified patient or authorized caregiver of a particular and specific negative effect (ex: persistent debilitating headaches) the Dispensary Manager shall note the reoccurrence of the same effect in log format, immediately notify the General Manager of the second similar occurrence, and ensure that the batch (or lot) present in the dispensary is quarantined in a separate secured location in a secured area. The General Manager (or in the absence of access to the General Manager, an approved member of the Management Team) shall immediately notify the supplied network of General Managers, Dispensary Managers, and/or Clinical Directors to quarantine the suspect batches (or lots) and shall cause a random sampling of two products within the suspect batch (or lot) to be submitted for immediate (expedited if available) third party laboratory testing for contamination of any kind.

If the testing results for both samples come back with no contamination indicators, the products under quarantine shall remain in quarantine for an additional five business days to insure there are no further reports of similar effects experienced by other qualified patients or authorized caregivers. Once the five business day period has passed with no similar reports, the product may be moved back into active inventory provided it can still meet the shelf life requirements mandated by the State guidelines.

Should the test result for either sample come back showing a positive test result for contaminants then recall procedures would begin immediately. Through the use of the POS tracking system all qualified patients and authorized caregivers would be identified and all means necessary to contact said patients and authorized caregivers would be made via email,

texts, and voicemail to ensure the return of the recalled product until all such products are returned or verified as having been consumed.

Stage 3: Upon serving notice to a member of the retail dispensing facility by a qualified patient or authorized caregiver of a third particular and specific negative effect (ex: persistent debilitating headaches) thought to be the result of ingestion of an approved marijuana or manufactured marijuana product, the Dispensary Manager shall note the effect in a common log format, immediately notify the General Manager of the third similar occurrence, and ensure that the batch (or lot) present in the dispensary is quarantined in a separate secured location. Upon this third incident, all products within the reference batches (or lots) shall be subject to an immediate recall notice to all qualified patients and authorized caregivers through use of the POS tracking system database to identify the aforementioned patients and authorized caregivers and will continue to follow up via email, texts, and voicemail to ensure the return of the recalled product until all such products are returned or verified as having been consumed.

Our seed to sale software provider, BioTrackTHC, has specifically designed elements within its software to assist as well as manage the overall recall process. KLM will be relying upon these sales records for management of the process.

Merit Criteria – Question 13

Ka Lau Malie LLC members, Ivan Lui-Kwan and Kamaki Kanahele both have demonstrated throughout their lives solid and absolutely clean records of regulatory compliance and responsible stewardship of duties entrusted to them. There has not been any revocation of business license or censure with respect to any of the roles performed by Ivan Lui-Kwan or Kamaki Kanahele including but not limited to those listed below in government, law, education, health and other governance.

Kamaki Kanahele has never been presented with any regulatory complaint in his many roles of stewardship which have been entrusted to him including the following government and healthcare roles:

- Director of Education Division for the National Endowment for the Arts, Washington, DC. Including appointments from 4 U.S. Presidents.
- Trustee and Administrator for Office of Hawaiian Affairs.
- Director, Hawaii Community Development Authority.
- Founder, Past Chair and current Chair Emeritus of the Sovereign Councils of the Hawaiian Homelands Assembly with membership of approximately 73,000 native Hawaiians.
- Director of the Dr. Agnes Kalaniho'okaha Cope Traditional Hawaiian Healing Center.
- Past Director of the Kupuna Council.
- Founder of Hale Makana, low income housing project in Nanakuli.
- Founder of the Nanakuli Shopping Center with an 1,800-seat community center & theater.

- Chair Emeritus, Hokupili Foundation, majority member of Hokukahu LLC (super 8(a) SBA-certified company).
- President of Nanakuli Hawaiian Homestead Community Association.

Mr. Lui-Kwan has been licensed in Hawaii to practice law for approximately 45 years. His license has never been revoked. There has never been any complaint to authorities regarding Mr. Lui-Kwan's license to practice law. Mr. Lui-Kwan's record as a lawyer has been exemplary across the following service roles:

- Service for 16 years on the Disciplinary Board of the Hawaii Supreme Court.
- Founding member of the Friends of Judiciary Center, which established the Judiciary History Center in the mid-1970's.
- National Board of Directors of the American Judicature Society, and current service as Vice Chair of the American Judicature Society (a Hawaii organization).
- 2015 Best Lawyers in America "Lawyer of the Year" in Honolulu.
- Partner for nearly 24 years with Carlsmith Ball Law Firm.
- Director for over 9 years with Starn O'Toole Marcus & Fisher Law Firm.
- Director of Budget and Fiscal Services, City and County of Honolulu with the roles of Chief Finance Officer, Chief Budget Officer and Chief Procurement Officer.
- Current Finance Chairman and Past Board Chairman, Honolulu Authority for Rapid Transportation (HART) Board of Directors.
- Ambassador to the United States for the Maori King Tuheitia and the Tribes of Aotearoa.
- Past Director, Hawaii Community Development Authority.

- Manager of Senator Akaka's U.S. Senate Campaign in 1990 and Political Director of Senator Akaka's U.S. Senate Campaign in 2006.
- Executive Vice-President and Chief Operating Officer of The Queen's Health Systems.
- Chairman and CEO of Queen's Development Corporation.
- Vice Chairman of The Queen's Health Systems Board of Trustees.
- Chairman of the Board, Queen's Health Technologies.
- Director, Chamber of Commerce of Hawaii.
- Chairman, March of Dimes, Hawaii Chapter.
- Director, St. Francis Residential Care Community and St. Francis Development Corp.
- Chair Emeritus for the St. Andrew's Schools with service on the board of trustees for nearly 20 years. He has never been presented with any regulatory complaint.

Mr. Lui-Kwan record is one of laudatory recognitions as shown by:

- 2015 St. Andrew's Schools Queen Emma Award.
- 2014 Lifetime Achievement Award by Pacific Edge Magazine.
- 2011 Hawaii Maoli "Spirit of the Hawaiian" Award.
- 2010 St. Joseph School Outstanding Leadership Award.
- 2015 Order of the Taniwha in the First Class presented by King Tuheitia in a class of knighthood of only two other individuals and the only non-Maori.