

DISPERSA LABS

PROJECT DESCRIPTION

Introduction

Dispersa Labs Inc (FEIN: 81-2880904; CA Corporate#: C4058231) is seeking a Conditional Use Permit to convert ~7,500 ft² portion of leased warehouse space at 1655 (1651) Abram Ct, San Leandro, CA 94577 (APN: 79A-338-1-17) to Cannabis Manufacture. The site is favorably situated in an industrial area cul-de-sac, consistent with its use (Zoning District: Industrial General) and proximate to all proper infrastructure. It is distant and isolated from residential, educational, childcare, recreational, and community areas as well as other sensitive land uses by major roadways bordered by Interstate 880, Marina Blvd, Merced St, and Williams St. Based on studies conducted by the company and accompanying this application, the facility's operation will not generate significant noise or traffic impacts. The company will be applying for medical California Type 6 Manufacturer 1 permit using non-volatile solvents.

Company

Dispersa Labs (DL) is a biotech startup and innovator that develops and commercializes inhalation products based on engineered dry powders.

Dispersa Labs was conceived in early 2014 and formally incorporated two years later in May 2016 in the state of Delaware. Prior to incorporation it was incubated by Flurry Powders LLC a Florida based R&D Company specializing in engineered powders and primarily working with pharmaceutical companies. Flurry Powders has been operating in this capacity since 2012. DL's planned cannabis manufacturing facility in San Leandro would be its first.

Dispersa Labs is applying rigorous pharmaceutical science and technical expertise to medical cannabis. Our lead product, DL001, is a dry powder inhaler (DPI) system for cannabinoids, which is being prepared for launch in the California medical cannabis market in late 2017. It is designed to enhance the therapeutic benefits and experience of cannabis by making dosing and timing of activation more predictable, safer, and more discreet.

DL001 is a breathable powder based on proven pharmaceutical drug delivery technology enabling a new alternative for cannabis consumption and representing a new category in the market. It is dispensed from a prepackaged capsule, loaded into a simple and discreet, breath-actuated device.

We developed DL001, because we believe cannabis has great therapeutic potential and there is a better, healthier, and more appealing way to consume it. We also believe the cannabis market offers an advantageous space to launch the first consumer DPI.

By *better* we mean efficient and fast-acting, providing patients the relief they need when they need it - with predictable effect in potency and duration. By *healthier* we mean a product that avoids the serious dangers of the smoking/vaping paradigm and also reduces the chance of accidental overconsumption that comes with edibles. By *appealing* we mean quick, simple, convenient, odorless, and discreet, with consistent effect and experience.

Dispersa Labs is run by its two entrepreneurial founders: a pharmaceutical engineer and a consumer market researcher. We've spent 3 years developing our IP, product, and establishing our company. We've raised more than \$1 million from angel investors, mostly in Silicon Valley, to launch our product in the San Francisco Market.

DL will operate under a wholesale business model manufacturing its product to supply DL001 initially to medical dispensaries in the Bay Area and over time across California.

Product

DL001 is made using a proprietary formulation and process (patent pending) that, aside from the small amount of Cannabinoids, includes only three other plant derived substances that are approved pulmonary delivery by the FDA.

Small amount of cannabinoids is not hyperbole. Limited tests indicate a dose of less than 1 mg delivered in DL001 is approximately equivalent to 10 to 20 mg consumed by conventional methods. DL001 uses cannabis concentrates sourced from licensed extractors and manufacturers as a formulation ingredient. We estimate just 1 kg of concentrate would be sufficient for 1 month of production, significantly reducing risks related to delivery, storage and security.

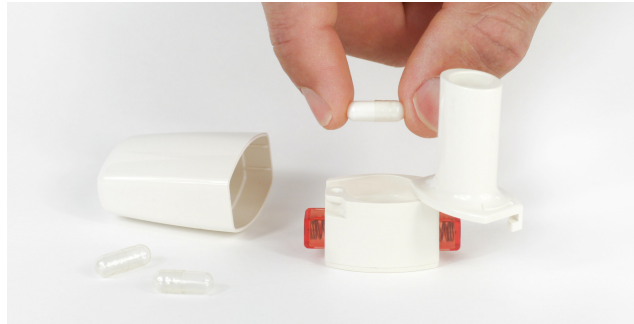


Figure 1. DL001 capsule and inhalation device

Manufacture

The manufacture of DL's products is based on controlled water and oil emulsions that are then spray dried into the final powder. The powders are then filled into vegetable based capsules using commercial capsule filling machines. A diagram of the manufacturing steps is shown in Figure 2. They use light, small footprint, durable pharmaceutical grade equipment. They are low impact manufacturing processes. Monthly facility electric demand for manufacturing and general uses is estimated at 400-600 kWh; and monthly water consumption at less than 3000 gallons. The equipment utilizes pressures below 120 psi and temperatures below 140 C.



Figure 2. DL001 manufacturing steps

DL employs pharmaceutical quality production under stringent cGMP compliance standards, going beyond current California standards set for cannabis products and assuring the identity, strength, quality, and purity of the product. A critical part of cGMP covers testing of incoming inputs as well as finished products and DL will develop internal analytical methods to guarantee the safest and consistent quality to the medical cannabis market. DL will also subject powders to 3rd party testing and make those tests available to the public.



Figure 3. Manufacturing Equipment: Spray Dryer (left), Capsule Filler (right)



Figure 4. Modular Clean Room

Very little waste is generated from DL's manufacturing processes. Because we do not operate extraction units, we will not have risks associated with high pressure and solvent based manufacturing operations. Any exhaust will be filtered to meet emissions regulations, but no nuisance odors are transmitted in the process. Minimal water is used for manufacturing, amounting to approximately 500 liters per month. Powder production involves the use of d-Limonene on a ratio of approximately 300 g of d-Limonene used in the production of each kg of powder. Peak monthly powder production is forecast to be 8 kg, which amounts to 2.4 kg of d-Limonene per month. Other solvents used sparingly include isopropyl alcohol for cleanup and methanol for analytical methods. Waste that is generated, is reclaimed in the process, reused where advisable and allowable, or disposed of according to best practices.

The chosen site is more than ample for our operation. Our initial requirements are 3,000 to 5,000 ft². At 7,500 ft² the chosen site also provides potential for future expansion. Minimum power required for our plant is 200 amps 3-phase. DL will strive to supply as much of that power using installed solar as is feasible.

SECURITY/SAFETY

Security at the manufacturing site will be modeled on bank grade security and have a dual role of providing security (internal + external) as well as aid DL's operational monitoring and regulatory compliance/inspection. A more detailed draft security plan has been submitted as a separate supporting document to the Conditional Use Permit application

EMPLOYMENT

Initial employment openings will be for 4 to 5 highly skilled, senior positions with the requisite education and experience in development and manufacture of dry powder inhalers. For less skilled available positions, DL will strive to employ members of the local workforce and provide living wage compensation and training to build skill sets that are translatable into future biotechnology or pharmaceutical roles. DL will assure safe and healthful working conditions by setting and maintaining standards and providing training, education and assistance where necessary to comply with all cGMP and Cal/OSHA requirements. Staffing needs at the facility is estimated at 3-6 people per shift. While initial work will largely be done by highly skilled workers, over time it is assumed that 20-30 percent of work will be transferred to low skilled workers.

MANAGEMENT

DL's founders, Andreas and David, play an active role in the management, conduct, and culture of the company. Their expertise and long established backgrounds in Pharmaceutical Development, Management, Research and Consumer Insight will provide strong leadership and decision making on the ground at DL's manufacturing facility.

Andreas Boeckl, Founder - CEO

In his 20 years of engineering experience, Andreas has held various positions in research and development at Nektar Therapeutics (formerly Inhale) and Lockheed Martin's Advanced Technology Center.

During his 8 years at Nektar (San Carlos, CA), he designed, tested, and implemented novel spray drying and capsule filling hardware and processes that dramatically improved collection efficiency of spray dried aerosol particles, and custom powder filling equipment capable of handling challenging powders.

At Lockheed Martin (Palo Alto, CA), Andreas developed processes for the superplastic forming of near net shaped ceramics (ZTA) made from nano-crystalline alumina. Other ceramics processing experience include ball milling, high energy attrition milling, and manufacture of green bodies via uniaxial filter pressing and slip casting. In support of an initiative to reduce weight and increase payload on the Fleet Ballistic Missile (FBM) project, he developed proprietary powdered metal slurry fusion processes to establish continuous coatings of refractory metals and metal/carbides on carbon-carbon composites.

Entrepreneurial in nature, Andreas co-founded Zigzag Designs in 1998, which was sold for a profit in 2006. He also collaborates regularly with a number of enterprises in California and Florida. Andreas likes to be highly involved in the local community and is a member of Rotary International and a Paul Harris Fellow. Andreas holds a Bachelor's of Science in Materials Science and Engineering, specialization in ceramics, from the University of Florida.

David Cookson, Founder - CFO, and CMO

Prior to joining DL, David was the President of Cookson Research Consulting, a strategic research consultancy generating compelling, inspiring insight from conversations with people - as individuals, consumers, customers, employees, clients, constituents, members and citizens. We devise unique strategies to identify real opportunities for our clients and capitalize on them.

During 20 years in the industry, David has provided strategic consultation and custom research solutions to Fortune 100 corporate clients, advertising and communications companies, interest groups, leaders, officeholders and issue advocates across the US and internationally.

An innate, dedicated problem solver and just plain curious, David has an affinity for nuance and numbers and an understanding of the complex dynamics underlying choice and behavior. His appreciation of the power and interplay of cultural patterns, social contagions, bias, framing, priming, memes, emotions, habits, memories, desires, moods, thinking, and motivations have guided his work and strategy for an intriguing mix of clients and industry groups such as Walt Disney World, Lippincott, Harrah's Casinos, NASA, St. Louis Symphony, Home Depot, Inc., the Toledo Zoo, HCA Holdings, Mt Olive Pickles, Lockheed Martin, The Nature Conservancy, and Wal-Mart.

David pairs creativity and flexibility with a technician's skill in research methodology, statistical methods and analysis. At the same time, his willingness to explore the tangential and look across seemingly unrelated, disparate subject areas, allow for the discovery of connections that other researchers often fail to identify or even grasp.

David has been recognized by the Orlando Business Journal as one of the top 40 business people under the age of 40 in Orlando. His work has appeared in the North American Journal of Psychology, Forbes, the Associated Press, Reuters, the Orlando Sentinel, the Orlando Business Journal and the Wall Street Journal.

CONTACT:

Dispersa Labs Inc
114 E. Tarpon Ave, #7
Tarpon Springs, FL 34689
<http://dispersalabs.com>

Andreas Boeckl
andreas@dispersalabs.com
408 431-7714

David Cookson
david@dispersalabs.com
321 945-9221

DISPERSA LABS

OPERATING PLAN

Hours of Operation

Dispersa Labs (DL) plans to operate its manufacturing facility during standard business hours, i.e. 8am – 5pm Monday through Friday and operating in a single shift.

Facilities and Equipment

Dispersa Labs (DL) plans to operate a manufacturing facility located at 1655 Abram Court, in San Leandro, CA. The facility and equipment will be used for the manufacture of DL's Dry Powder Inhaler (DPI) product for the medical cannabis market. The facility design specifies 4,928 square feet for manufacturing operations, 1,913 square feet for general office use, and 850 square feet for loading area.

The manufacturing space will include designated areas for shipping and receiving, warehousing unfinished and finished goods, quality control, and production. The fit and finish of functional areas shall be in compliance with Bureau of Medical Cannabis Regulation (BMCR) requirements. Manufacturing spaces will include warehouse, laboratory, and production suites.

DL's facility and operations will comply with Cal/OSHA regulations. Equipment used to manufacture DL's products is listed in Table 1.

Table 1. Manufacturing Equipment

Description	Function
Lab Balance	Use to weigh raw materials
Analytical Balance	Capsule tare and filled weight determinations to quantify dose content
Homogenizer	Coarse emulsion production
Microfluidizer	Fine emulsion production
Air Compressor	Generates compressed air
Air Dryer	Converts compressed air to CDA
Spray Dryer	Production of bulk powder
Pump	Supplies feedstock to spray dryer
Isolator	Handling and filling of powders in controlled RH
Capsule Filler	Manual filling of powder into capsules, small scale production
Capsule Filler	Automated filling of powder into capsules
Particle Size Analysis	QA, Characterization of emulsions and powders
Blister Packaging Line	Forms blisters and seals capsules into blister cards
Carton Line	Packaging of inhalers and blister cards into cartons

Geographical Location

DL intends to manufacture at 1655 Abram Court in San Leandro, CA.

California is a favorable market to launch DL's product for several reasons. Firstly, California has had an established medical cannabis market since 1996, making it the most mature market in North America. Secondly is market size, California is the most populous state, having an estimated population of 39 million.

In June 2017, San Leandro's City Council voted to allow cannabis product manufacturing and testing businesses to operate under conditional use permits (CUP). San Leandro has a long history as a manufacturing hub and its location in the East Bay of the greater San Francisco Bay Area locates DL in one of the largest concentrations of dispensaries, distributors and cannabis extractors – close to customers and suppliers. The SF Bay Area offers a high concentration of highly skilled labor, which DL will require to establish its manufacturing capabilities and develop future products. Labor rates are higher in the SF Bay Area than other geographical areas.

Supply Chain

DL will implement a supply chain management (SCM) tool to acquire raw materials and components. A supply chain manager will be a job responsibility at DL.

DL uses 11 components in the production of its finished goods. The cannabis extracts used in DL's manufacturing process will be procured from licensed extractors and manufacturers. The projected peak demand for cannabis extracts is 1 kg per month. The other ten components are common materials available from multiple commercial vendors. DL will establish redundancy in its supply chain.

Hazardous Materials & Odor Mitigation

DL purchases cannabis concentrates from extractors and does not require or operate extraction equipment or employ the solvents commonly used for the production of plant extracts.

DL uses small quantities of high purity d-limonene in bulk powder production. Approximately 300g of Limonene would be used in the production of 1kg of DL bulk powder. Assuming a nominal fill weight of 0.010g per capsule, 1kg of DL powder would produce 100,000 DL capsules. D-limonene is a byproduct of the citrus industry and is utilized in various industrial applications such as flavorings, fragrances, solvents, and degreasing agents.

Common organic solvents such as isopropyl alcohol will be used sparingly for cleaning purposes. All flammable materials shall be stored in a flammables cabinet.

The small quantities of cannabis extracts used by DL will be stored in a secure freezer. In gram quantities, the extracts used in our manufacturing processes do not create noticeable cannabis odors or volatiles often related to handling and processing of plant matter. Via the formulation and spray drying method, the cannabis extracts are encapsulated and do not generate cannabis odors. Regardless of the likelihood, all powder production exhaust will encounter a final multistage carbon filtration system to sequester any possible odor causing agents or compounds. There is no odor potential when finished goods are packaged and warehoused.

Cannabis Waste

DL will track all waste and disposal via Inventory Control System (ICS) and comply with all reporting. DL will contract a licensed full-service cannabis waste disposal company to destroy unsold or damaged inventory and cannabis waste. While a new line of business, [GAIACA](#) is an example such a service provider.

Office Trash/Recyclables

Efficient manufacturing processes and special handling/disposal of our manufacturing waste will reduce our standard waste streams. For office trash/ recyclables DL will apply for weekly commercial service from ACI for use of one 96-gallon solid waste cart and one 96-gallon recycling cart. The carts will be stored inside the facility within the loading area and deposited street-side for pickup each week and returned inside the facility after pickup has occurred.

Labor Structure

DL anticipates having 5 to 6 employees in 2017 and 2018. Because DL will implement highly automated manufacturing systems, it projects having approximately 8 employees from 2019 and on. Initially and for general operation, from 2 to 4 employees are anticipated on site at any given time. An organizational chart for DL is shown in Figure 1.

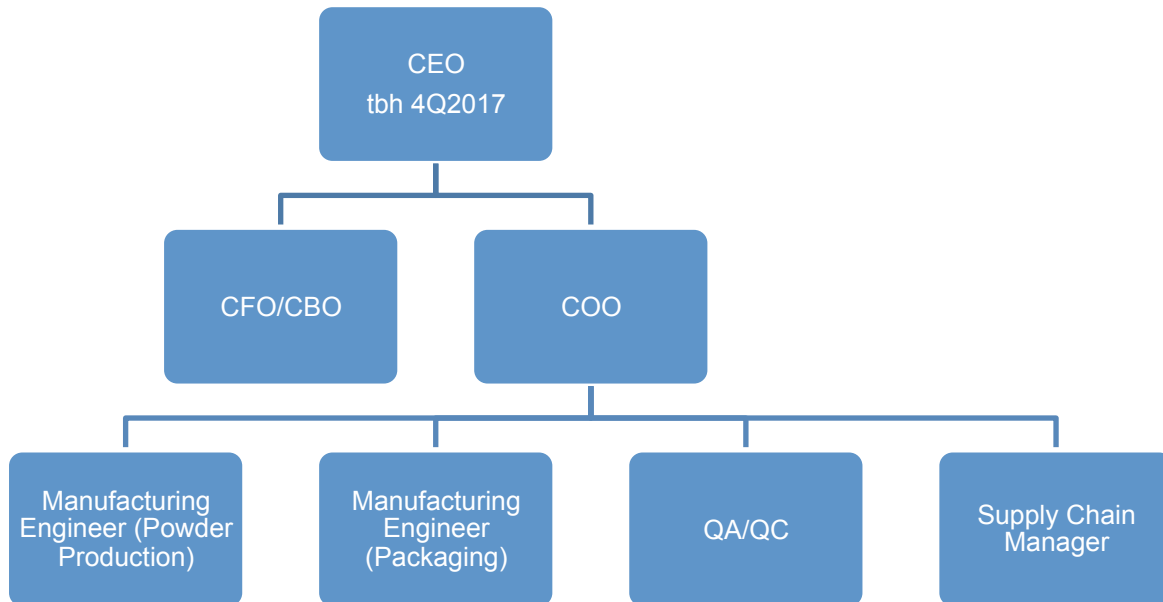


Figure 1. DL Organizational Structure

Production Process

For its limited launch, DL will establish a pilot production line with a projected throughput of up to 5,000 capsules per day. Longer term, DL intends to establish a highly automated manufacturing line capable of producing up to 100,000 capsules per day.

Production of finished goods will require the following process steps:

1. Formulation – preparation of feedstock for spray drying
2. Spray Drying – production of bulk powder
3. Capsule Filling - dispensing pre-metered quantities of powder into capsules
4. Blistering – packaging capsules into blister packs to ensure long shelf life
5. Carton-ing – packaging blister packs and inhalers into cartons

Storage and Distribution

DL will employ an Inventory Control System (ICS) and seed to sale software to manage inventory of raw materials and finished goods. Raw materials and finished goods shall be assigned DL product codes, batch, and lot numbers for traceability. Raw materials and finished goods shall be stored in separate stock rooms.

When California’s Medical Cannabis Regulation & Safety Act (“MCRSA”) goes into effect in 2018, DL’s finished goods shall be distributed by one or more companies holding a Type 11 license.

It is anticipated that pick-ups from DL’s distribution partners would be conducted on a bi-monthly basis. At that time, finished goods would be transported to the distribution partner’s warehouse where they would subsequently be distributed per dispensary purchase orders.

Anticipated Number of Deliveries

DL anticipates 1 or fewer deliveries of Active Cannabis extracts per month. Other production supplies are typical non-hazardous and lab related. These supplies have limited relative value or use outside our manufacturing process and can ordered supplied/delivered on a quarterly basis via common carrier.

Security

Please refer to DL’s separate and included Draft Security Plan document.

Regulatory Compliance

DL shall designate an employee as its head of Regulatory Affairs. This employee will be responsible for ensuring compliance with regulatory agencies including:

City of San Leandro

- City regulations including those specified in the Conditional Use Permit (CUP)

State of California

- Manufactured Cannabis Safety Branch (MCSB)
- Medical Cannabis Regulation and Safety Act (“MCRSA”). DL will apply for a Type 6 or 7 (depending on how law is written) manufacturing license from the State of California under its Medical Cannabis Regulation and Safety Act.
- Cal/OSHA

DL will also designate a Security Manager to comply with security and issues of compliance related to it.

Gross Revenue

During 2018, its first full year on the market, DL foresees \$850,000-\$1.1M in gross receipts. Due to launch of additional product lines and expansion into new dispensaries, DL forecasts tripling gross receipts on an annual basis.

DISPERSA

LABS

SECURITY PLAN

Dispersa Labs (DL) will implement a comprehensive security plan that addresses facility security, the facility's security and alarm system, product security during processing, product security during transport, and the secure handling of all cash and other payments in order to prevent theft and diversion and aid in monitoring and compliance.

DL's security plan will also assist law enforcement in preventing and detecting the theft or diversion of medical cannabis.

DL's security plan is designed with the view that facility and product protection begin with the layout of the site and the Manufacturing facility's floor plan. DL has designed the facility and site to be secure. DL will equip the entire facility and site with a modern surveillance system, interior area access control, and seed-to-sale software, including a state of the art inventory control system designed for the cannabis industry. DL will also employ layered security to deter diversion and theft during the transport of cannabis products to and from dispensaries. This will include GPS asset tracking technology, GPS vehicle tracking, CCTV in the vehicle, and secure transport compartments.

DL will implement a comprehensive employee-training program, so that each employee understands their role keeping the facility, themselves, and products safe and secure.

DL will also implement systems that facilitate access by regulating authorities and local law enforcement to the site and facility. Product location data, surveillance video and inventory reports will also be made available in real time.

Section 1 - Facility Security

Exterior Building Security

DL's Manufacturing Facility will be modified specifically for the manufacture of cannabis products. The facility is designed to be well-lit, well-ventilated commercial building with a single secure main entrance and a secure loading bay. To prevent unauthorized access, only authorized persons will have access to the facility via biometric key fobs. All others will be admitted electronically at the beginning of their shift. To prevent access into the production area, there are limited points of access. The building has one main entrance, a secure loading bay and exits used for emergency exit only. These doors shall remain locked at all times except for authorized access. All doors (whether interior or exterior) shall have electronic surveillance and sounding alarm equipment to deter and detect unauthorized intrusion and emergency exits.

The facility will have all necessary air-filtering, environmental controls, and circulation systems and will have all requisite fire and safety features in order to protect the cannabis products being manufactured, employees, and properly badged and escorted visitors.

There will be no signage on the building, except the address, as it will not be used for commercial retail purposes and has no need, and limited expectation, for visitors. Further, the absence of signage will serve to minimize the presence of an attractive nuisance. Lack of signage will help limit attention and thus, the threat of crime.

The manufacturing facility's mundane aesthetic is ideal for anonymity and security purposes. In addition, DL will prevent all views into the production areas of the building.

The main entrance area will be unmarked with the exception of warning signs on the main entrance door advising no firearms or dangerous weapons allowed anywhere in the facility. The main entrance area will be equipped with panic buttons to alert authorities in the event of an emergency. DL shall implement strict security measures to ensure that only the main entrance and secure loading bay is used for access to the premises.

The exterior of the building will be equipped with an automatic electronic alarm, lighting, and 24/7 video monitoring to detect unwanted and unauthorized intrusion. Through planned construction improvements and security equipment installation, DL will ensure that the building, people and product inside are safe from unwanted or negligent harm, and that products are not observable or detectable from outside the facility.

All exterior access doors (main as well as emergency exit) shall be well lit and equipped with door alarms. Real time recording video cameras (with remote viewing screens located in the Security office and also monitored by an offsite company) shall be situated thereabout to ensure visibility of persons accessing or attempting to access the facility. Access shall be granted through the call-up monitor operated by security personnel, a biometric key fob, or similar.

These perimeter and exterior security features, working independently or in concert, will serve to limit the threat of crime or its success.

Interior Building Security

The interior of the Manufacturing Facility will be divided into the main entrance/lobby/administrative area, employee locker and break rooms, bathrooms, general storage areas, and a segregated area relating to the various stages of cannabis product manufacturing and processing/packaging ("access areas"). All access areas that house any cannabis products for any reason, and in any quantity, will be secured by an automatic locking device and shall have a sign posted at all entryways which shall be a minimum of 12 inches in height and 12 inches in length and shall state:

Access thereto shall be limited to the following:

1. Badged employees having appropriate authority
2. Badged Laboratory staff collecting cannabis samples for purposes of conducting laboratory tests
3. Badged Local regulating authorities and law enforcement
4. Badged and escorted Visitors
5. Emergency personnel performing their duties
6. Badged, vetted and approved Contractors
7. Badged Sanctioned visitors

Access areas will include:

1. Encapsulated Products Manufacturing and Packaging Area
2. Secure Product Quarantine Area
3. Secure Waste Storage and Rendering Area
4. Secure Product Storage and Shipping Area
5. Secure Loading Bay

Each access area, and the hallways in between, shall be equipped with real-time electronic video cameras (with remote viewing screens) situated thereabout to ensure visibility of employees and escorted visitors working in the cultivation facility. Video cameras will also be situated in and about the sensitive areas of the cultivation facility so as to prevent the theft, loss or diversion of medical marijuana.

Various access areas within the interior manufacturing facility shall be securely separated from one another and only accessible by those employees whose job necessitates their entry into specific designated areas and who display proper identification. Interior areas not associated with manufacture shall be well lit, clean, free of debris and properly maintained.

Those access areas that are dimly lit due to manufacturing practices, shall have the appropriate video surveillance equipment in order to ensure the visibility of those persons located therein and a related and detailed report regarding the specific area the times, dates, and the reasons for the same not being well-lit.

The main entrance will be equipped with a biometric reader, and all access areas within the cultivation facility will be equipped with biometric controlled access panels that will allow access to authorized employees. Further, this modern access system will permit only authorized employees, at the time of their shift, into the access area into which they are permitted. All other doors will be, and shall remain, securely locked at all times. Electronic doors will have traditional key lock entrance in the event of a power outage. Keys will be located in a locked cabinet in a secure location.

Facility Storage

DL will not produce or maintain more cannabis products than is required for normal, efficient operation. Beyond the area access controls adopted throughout the facility, DL will only store cannabis in secure rooms equipped with motion and pressure sensor technology in addition to CCTV. Access to storage areas will be limited to DL's hours of operation and any breach outside these hours will automatically trigger an alarm. DL will limit storage area access to the minimum number of specifically authorized personnel necessary for efficient operations of the manufacturing facility.

The building safety and security systems shall be approved by all appropriate public safety departments including without limitation, fire, building, health and air quality inspections and other regulatory bodies, who shall inspect as they deem fit.

Hours of Operation

The business shall operate during normal business hours 5 days a week (8am-5pm, Monday-Friday), in a single shift, depending on demand. Security at the manufacturing facility will be in place 24 hours a day, 7 days a week, and include offsite and smart phone monitoring.

During times when the manufacturing facility is closed, it shall be securely locked and the exterior entrance alarm system shall be activated. The exterior entrance alarm system will operate separately from any other alarm system at the manufacturing facility and the system will be able to immediately detect and notify authorities of unauthorized entrance at times when the facility is closed.

A designated Security Manager and Agent-in-Charge shall keep keys and access codes to the alarm system and the building. This information will remain confidential and secured so as to prevent access to the manufacturing facility by anyone other than authorized employees. Only the CEO, Agent-In-Charge, Security Director, Compliance Officer and Manufacturing Manager shall have the ability to unlock exterior doors for the purposes of commencing business and to deactivate the access alarm.

Security Manager

DL will designate a Security Manager to provide leadership and training to ensure a secure, safe business environment. The Security Manager shall make himself or herself known to all law enforcement and emergency providers serving the Manufacturing Facility. (S)He shall foster a good relationship with these individuals and work in conjunction with such professionals to ensure that safety and security concerns are constantly addressed and continually monitored. The Security Manager and Agent-in-Charge shall conduct security and emergency preparedness staff training by developing, scheduling and/or facilitating training for employees in order to ensure that all employees meet and exceed all applicable building security requirements. The Security Manager, in conjunction with the Agent-in-Charge, will provide oversight, and continual evaluation of DL's Security Plan for the continuous improvement of proactive responsiveness to changing safety conditions.

In addition to information regarding the product, the Security Manager's office shall house all sensitive information such as keys, codes, records and reports in a safe and locked cabinet. A security area shall also house video monitors for the live and recorded video feed collected from the video cameras located in, about and around the Manufacturing Center. In addition to the local authorities, video camera monitoring shall also be provided to the Agent-in-Charge, Security Manager, CEO and Compliance Officers by the use of a smart phone application that provides live video monitoring from various video devices throughout the manufacturing facility. Footage there shall be recorded and maintained offsite for no less than ninety (90) days on-site and an additional ninety (90) days offsite, or longer if required.

Hiring & Vendor Selection

Manufacturing facility security is enhanced by the selection of qualified personnel to assist with the operation of the business. To promote public perception and the security interests of DL, all prospective employees and vendors shall be stringently vetted during the application process. Each employment candidate shall undergo a thorough background check, drug test, and character assessment and review. The most qualified and desirable candidates will be selected. However, and in any event, a person who:

1. Has been convicted of an excluded felony offense;
2. Does not work pursuant to the rules and regulations or;
3. Is less than 21 years of age will not serve as a facility agent, i.e., employee or vendor.

All vendors shall have requisite licenses and legal authority to operate its business. Employees shall, at all times during employment, display their valid badge. An employee needing to update or report a lost badge must report the same to a Security Manger or Agent-in-Charge. An Employee Handbook will provide the specific procedures to be followed in the event of the loss of badges and IDs. Valid DL issued identification card will assist in building safety in that only authorized and trained personnel shall be allowed into the manufacturing facility.

Employee Expectations & Security Training

In addition to obtaining the agent card, each successful employee DL shall undergo safety, security and cultivation training before beginning work. As a part of the employee orientation process, and as an ongoing regimen, all employees will be provided with a copy of the Employee Handbook, the Security Plan, as well as security and safety training. Security and safety training shall consist of examination and discussion of the Security Plan, premises orientation, emergency training, and situational training. Situational training consists of instruction related to particular employees' job duties. Refresher training will be provided to each employee on a consistent basis and intermittently as necessary.

Initial employee safety and security training shall include:

- . 1) Building orientation and access authority which shall include:
 - . a) The proper use of employee's access badge for entry into the premises and main building entrance;
 - . b) The proper use of employee's access badge for entry into employee's authorized access areas;
 - . c) Employee's authorized entry and exit points;
 - . d) Employee's locker; and
 - . e) Restroom and sink facilities.
- . 2) Measures and controls for the prevention of diversion, theft or loss of marijuana which shall include:
 - . a) Necessity of keeping all facility doors locked and secure at all times
 - . b) Prohibited activities such as entrance into unauthorized access areas
 - . c) Awareness of video monitoring
 - . d) Inventory Control System training for the tracking of all product-related activities and information
 - . e) Requirement to report any unusual activity, security concern, or loitering
- . 3) Procedures and instructions for responding to an emergency that will include:
 - . a) Accident prevention training
 - . b) How to respond to an emergency
 - . c) Emergency service provider location
 - . d) Emergency service contact information
 - . e) Emergency first aid kit locations
 - . f) Emergency exits and panic button locations

To promote professionalism and organization, all employees will be expected to follow the established safety practices set forth in the Security Plan, be in compliance with the approved uniform dress code for their respective position of employment, display proper hygiene, keep a professional physical appearance, and wear their agent card at all times.

Employee Log

For the safety and security of the premises surrounding the building, the building, its occupants, plants and products, the Security Manager will keep a current and accessible roster of all employees and ensure that both all employees are aware of terminations or duty reassignments as they occur. All terminated employees or those not having valid agent cards shall be prohibited from being in, on or about the manufacturing facility.

Employee Termination

Upon termination of any employee, whether it be voluntary or involuntary, DL shall ensure that terminated employee's keys, uniform, tools and access codes and cards are returned, and ensure that such codes and access points are altered so as to prevent the terminated employees' access. DL shall notify the Department within ten (10) days after a medical marijuana establishment agent ceases to be employed by at the cultivation facility.

Premises Access

There is limited expectation for visitors at the Manufacturing facility. Lack of signage and public visitation will prevent unwanted attention and thus, the threat of crime. It is DL's intent to pursue anonymity as a security strategy. DL's Security

Plan details protocols to ensure:

1. Only authorized employees have access to the manufacturing facility
2. Only certain authorized employees have access to the locked segregated areas within the cultivation facility that contain medical marijuana
3. Unauthorized access into any access area will result in the automatic triggering of audible and visible alarms to prevent unwanted access
4. All employees are properly identified and display their badge
5. All visitors are properly badged, supervised and escorted

In the event of an emergency, the security manager will assist all emergency service providers so as to ensure that the emergency situation is remedied, employees and visitors are clear of harm, and that any risk of loss, theft, or diversion is quelled.

Employee and Visitor Badges

The only persons who may be on the premises of DL Manufacturing facility are:

1. An employee
2. A person with appropriate authority and a visitor identification badge
3. A person inspecting DL's facility with proper government authority

Any person other than those authorized to be on the Manufacturing facility premises must obtain a visitor identification badge from DL at the time of entering the main entrance. All persons on or about the premises must visibly display proper identification at all times. Any lost or stolen agent card, or those that may need to be updated, must be immediately reported to the Security Manager and the Department.

Only authorized employees may dispense visitor badges, and only upon verification of such person's valid state picture identification card (i.e. driver's license), completion of the visitor information form, and such person's signature thereon and on the visitor log. The visitor log shall indicate the date, time and duration of the visit as well as the escort responsible for the visitor.

A person who obtains a visitor identification badge, including, without limitation, an outside vendor or contractor, if appropriate:

1. Must be escorted and monitored by an agent at all times he or she is on the premises
2. Must visibly display his or her visitor identification badge at all times he or she is on the premises
3. Must return the visitor identification badge to DL upon leaving the premises of the manufacturing facility and sign out

Visitor Log

DL shall maintain a visitor log that includes the name of the visitor and the date, time and purpose of each visit by a person other than those authorized to be on the premises as an Employee. DL shall make its visitor log available to the Division, SP and local law enforcement upon request.

Facility Layout and Security Drawings

Once finalized, DL will provide current copies of manufacturing facility floor plans to local law enforcement that have jurisdiction in the area the Manufacturing facility is located, as well as current contact information for the Agent-in-Charge, Security Manager, and CEO.

Section 2 - Security Surveillance System

DL's manufacturing facility will implement a security surveillance system that will provide for 24-hour, seven day a week closed-circuit television (CCTV) surveillance system that covers the Manufacturing facility site and facility. DL will also use asset tracking global positioning system (GPS) technology to track individual cannabis shipments between Manufacturing facility and the intended dispensary as well as the DL's delivery vehicles(s). The Department and SP will have real-time access to all parts of DL's security surveillance system.

A. Specifically, the Electronic Surveillance System will seek to meet the following minimum standards:

1. DL will operate and maintain in good working order a 24 hour, seven day a week closed circuit television surveillance system. Cameras will be located as follows:
 - a. CCTV surveillance system will visually record
 - i. All building entrances and exits
 - ii. All parking lot areas
 - iii. Facility emergency access roads
 - iv. All areas inside the facility including:
 1. All limited access areas
 2. All areas where cannabis is received
 3. All areas where cannabis is processed
 4. All areas where cannabis is stored
 5. All areas where cannabis is shipped
 6. All areas where cannabis is destroyed
 - b. Areas excluded from CCTV coverage are the following:
 1. Restroom Facilities
 2. Executive Office
 - c. Fixed cameras will be installed to provide a consistent recorded image that maximizes the quality of facial and body images. Manufacturing facility cameras will be located to address the following:
 - i. Backlighting and physical obstructions
 - ii. The manufacturing cycle in production areas
2. Fixed Cameras with the ability to shoot in low light will be installed. These cameras will be day/night cameras with a minimum resolution of 600 lines per inch (analog) or D1 (IP) and a minimum light factor requirement of 0.7 LUX. DL will install lighting to increase picture clarity and brightness. Cameras will be serviced and calibrated to maximize the quality of the recorded image.
3. The recording device will meet the following minimum standards:
 - a. Display a date and time stamp on all video

- b. Produce a digital video file (CD/DVD/SSD/flash drive) directly from the DVR using an installed media recording drive. The video on the file will be:
 - i. Viewable on any Windows PC
 - ii. Include any required player software with the file
 - c. Remain operational during a power outage
 - d. Allow for the exporting of still images industry standard formats including .jpg, .bmp, and .gif
 - e. Exported video will be exported in a proprietary format that ensures authentication of the video and guarantees that no alteration of the recorded image has taken place.
 - f. Exported video will also be exported in an industry standard file format that can be played on any Windows PC
 - 4. Surveillance system display monitor will have a minimum screen size of 17 inches and will be connected to the electronic recording system at all times.
 - 5. Electronic recording system will be maintained in good working order at all times. Manufacturing facility's Agent-in-Charge will instruct each manager, employee, or agent overseeing the functioning of the surveillance system to immediately report to the Agent-in-Charge any malfunctioning or technical problems with the system.
 - 6. Security Recordings will meet the following minimum requirements:
 - a. Recorded image will be at least D1
 - b. Recorded image frame rate will be at three frames per at all times
 - 7. Security Recordings will be retained for at least 90 days at the Manufacturing facility using a recording system located in a locked tamper-proof compartment. Taping over existing recordings will be prohibited for last 90 days of recordings.
 - 8. A video printer capable of producing a clear still photo from any camera image will be attached to the system.
 - 9. All recordings and videos and photos be turned over to the authorities or regulators upon request.
 - B. Access to the electronic surveillance recording and control areas will be limited to the following:
 - 1. Employees essential to Manufacturing facility surveillance operations
 - 2. Law enforcement agencies, regulators and authorities
 - 3. Security system service personnel
 - 4. Others when approved by DL
 - C. Access to the electronic security system will be available 24 hours per day, 7 days per week to regulators, law enforcement agencies via a secure web-based portal and mobile device compatible applications.
 - D. DL will also use a GPS asset tracker to geo-locate all individual packaged cannabis shipments destined for a dispensary as well as the delivery vehicle at all times. The proper authorities will be given access to this data via IP or a iOS or Android application.

Section 3 – Product Security

DL will use the following inventory control methods to maintain a current inventory of all products received, produced, moved, sold and/or destroyed.

Inventory Control System

DL will implement an inventory control system to monitor the chain of custody of cannabis used for medical purposes from the point of receipt to the delivery of finished product to a licensed Dispensary. DL's Inventory Control System (ICS) will include, raw materials delivered, all cannabis waste and all products in various stages of processing and packaging. DL intends to purchase and implement the sophisticated seed-to-sale software system developed by that company. Seed-to-sale software's ICS software and services are operational in jurisdictions that already participate in the medical cannabis industry and, as such, DL believes the seed-to-sale software's products and services, including a fully-integrated ICS, will allow DL to successfully manage inventory and report to the appropriate authorities, including the Department, as required.

Responsible Employee

DL's Agent-in-Charge is the designated employee with oversight of DL's (ICS) and overall inventory management within DL's facility. The ICS will manage and track cannabis at every stage into, through and out of the facility.

Initial Inventory

Prior to commencing business, DL will conduct an initial comprehensive inventory of all cannabis material at the facility. If DL commences business with no cannabis on hand, DL will record this fact as the initial inventory.

Perpetual Inventory Protocol

At regular, required and/or necessary intervals, DL will manage, check and monitor inventory, such that DL can accurately and consistently document the status of all materials and products in the manufacturing process.

DL will use its ICS to document:

1. Each day's beginning inventory, acquisitions, production, sales, disbursements, designation and disposal of unusable cannabis, and ending inventory.
2. Any samples provided, including the provision, return and/or destruction of the same, as set forth by law and regulation.
3. Each batch of encapsulated cannabis powder produced, including:
 - a. The batch number;
 - b. The weight of raw cannabis materials used and produced
 - c. The list of all excipients and additives
4. After production, DL's ICS will document, without limitation:
 - a. Date of production
 - b. Weight of production
 - c. Weight of the Cannabis waste
 - d. The name and employee(s) badge number those responsible for production.

A complete physical inventory of both usable and unusable cannabis will be performed on a weekly basis and logged in to DL's ICS. DL's staff will document the following:

1. Date of the inventory
2. Summary of the inventory findings

3. The name, signature and title of the employees who conducted the inventory and the agent-in-charge who oversaw the inventory
4. Staff will count and precisely weigh all products. Packaged Cannabis in various stages of production and by-product Cannabis products in quarantine, Waste Cannabis awaiting disposal, Cannabis products reserved for Dispensaries.

Records of all

1. The date of sale
2. The name of Dispensary facility to which medical cannabis was sold
3. Batch number, product name(s) and quantity of cannabis products sold

Records of all medical Cannabis destroyed will show:

1. The date the medical cannabis was destroyed
2. Manner in which it was destroyed
3. Reason it was destroyed
4. Employee responsible for the destruction of the cannabis

Random Physical Inventory Checks

Random physical inventory checks will be conducted throughout the facility, throughout the year.

DL's staff will document one or more of the following:

- a. Packaged Cannabis
- b. Cannabis products in various stages of production
- c. Products in quarantine
- d. Waste Cannabis awaiting disposal
- e. Cannabis products reserved for a Dispensary

Agent-in-Charge will monitor all random physical inventory checks.

Annual Inventory

A complete and accurate recording of all cannabis plant stock and products on hand will be prepared annually on or before the anniversary of the initial inventory under the direct supervision of the Agent-in-Charge.

Inventory Audit

The Agent-in-Charge shall conduct and document a system-wide audit of the inventory of the establishment that is accounted for according to generally accepted accounting principles at least once every year.

Justified Inventory Adjustments Can Be Made Only Authorized Personnel Can Make Adjustments Inventory Discrepancy Procedures

If an audit or random inventory check identifies a reduction in the amount of medical cannabis in the inventory of the establishment not due to documented causes, or in the event actual inventory counts do not match the recorded or expected counts, DL shall determine where the loss has occurred and take and document corrective action. If the reduction in the amount of medical cannabis in the inventory of the establishment is due to suspected criminal activity by an employee, DL shall report the employee to the Department and to the appropriate law enforcement authorities.

When a significant discrepancy in inventory occurs, the Agent-in-Charge will conduct an internal audit and investigation. The Agent-in-Charge will document the incident in a report that includes the following information:

1. Incident date
2. Name of people involved
3. A description of the incident
4. Identification of known or suspected causes of the event any corrective actions taken.

All such incidents will be reported to regulatory and/or law enforcement authorities.

Cannabis Waste Tracking and Notification

All waste will be secured, locked and tracked in accordance with regulations and the Manufacturing facility's Operations and Management Practices Plan.

Solid Cannabis Waste Handling Procedure

1. Cannabis waste will be weighed
2. Data will be recorded in DL's ICS noting date, weight, batch number, variety or product and section of the facility generating the waste.
3. Waste will be bagged, tagged and moved in the ICS, as well as physically to the Secure Waste Storage and Rendering Room.
4. DL will provide notice through the traceability system to law enforcement prior to rendering the Cannabis solid waste unusable and disposing of the Cannabis waste.

All aspects of the marijuana plants, byproduct wastes, weights, ID numbers and associated data is stored in the system indefinitely. Destruction event information and explanations are also documented and stored within the Seed-to-sale software system.

This data cannot be modified or deleted by the manufacturing facility employees or even by Seed-to-sale software.

Seed-to-sale software records manual inventory adjustments through a detailed notes section. The reason for disposal and, if applicable, disposal company are recorded and archived to the 16 digit barcode associated with the disposed cannabis.

As with all transactions in the Seed-to-sale software system, the employee responsible for the transaction is required to enter a PIN number or biometric fingerprint recording the date, time, and reason for the transaction.

Section 3.4 – Shipping and Transportation Security Measures

DL will use Seed-to-sale software (ICS) to create transport manifests and store transferee information internally. Manifests will be archive by the ICS and quickly available upon Department and SP request for a period of five (5) years. DL will also complete shipping manifests prescribed by the Department and maintain manifests for five years.

Prior to shipping any cannabis or cannabis-infused product, DL will:

1. Complete a shipping manifest
2. Securely transmit a copy of the manifest to the dispensary facility that will receive the products the day before transport.
3. Shipping Manager will follow the same procedure with every shipment:

- a. Assemble the order
- b. Box the order
- c. Assign asset tracking GPS to shipment
- d. Place a copy of the manifest and the asset tracking GPS unit in the box
- e. Attach two copies of the manifest to the box

Information collected and tracked by the ICS manifest will include:

1. Drivers (2) license numbers
2. Transport vehicle VIN#
3. Transport vehicle license number
4. Transport vehicle description
5. Transport Vehicle Asset Tracking GPS ID#
6. Origin Manufacturing facility number
7. Destination Dispensary number
8. Product quantity, names, and serial numbers

DL will use a non-descript delivery vehicle with a locked cargo container. The cargo container will not be visible from outside the motor vehicle. All delivery times and routes will be randomized.

Shipping procedures will include the following:

1. A minimum of two transport agents will transport cannabis products to and from dispensaries and laboratories.
2. All individual orders will be assigned a unique asset tracking GPS unit
3. The delivery vehicle will have a fleet tracking GPS unit attached to the vehicle
4. The delivery vehicle will have a CCTV system that will record at all times the vehicle is outside the Manufacturing facility Secure Loading Bay.
5. The manufacturing facility's AIC or his/her designee and at least one of the employees that will be transporting the cannabis products or samples will check all shipments and manifests for accuracy and seal the shipments in the Secure Product and Shipping Area (SPSSA).
6. Boxed and sealed orders will be moved from the SPSSA to the Secure Loading Bay (SLB) through secure corridor.
7. Transport will travel directly from the manufacturing facility SLB to the dispensary facility or testing facility and then back to the Secure Loading Bay.
8. Transport agent will collect a signed manifest for all deliveries. Dispensary or laboratory agent will confirm that all cannabis products or cannabis samples were delivered and the seal was unbroken at the time of delivery.
9. Transport may stop at other dispensary facilities, laboratories, gas stations for refueling, and in the case of emergencies. In the case of emergency, transport agents will report the emergency immediately to law enforcement through the 911 emergency systems and the manufacturing facility.
10. All delivery times and routes will be randomized.
11. One delivery transport agent will remain with the vehicle at all times the vehicle contains cannabis with the engine running.
12. Each transport agent will have access to a secure form of communication with personnel at the manufacturing facility and the ability to contact law enforcement through the 911 emergency system at all times the motor vehicle contains cannabis. These phones will be company issued and dedicated to the transport team.

13. Each transport agent will keep in their department issued identification card in their possession at all times when transporting or delivering cannabis and will produce department issued identification for the Department or Department's authorized representative or law enforcement official upon request. \

Post Shipping Reconciliation Procedures

Transfer agents and AIC or his/her designee will reconcile all shipment manifests after the return of transport vehicle to the Manufacturing facility Secure Loading Bay. If this inventory check identifies a discrepancy in the amount of medical cannabis scheduled for delivery and the amount actually delivered, DL will determine whether a loss has occurred and take and document corrective action. If the discrepancy is due to suspected criminal activity by an employee or Dispensary, the DL will report the employee or Dispensary to the Department and to the appropriate law enforcement authorities.

When a significant discrepancy occurs, the Agent-in-Charge will conduct an internal audit and investigation. The Agent-in-Charge will document the incident in a report that includes the following information:

1. Incident date
2. Name of people involved
3. A description of the incident
4. Identification of known or suspected causes of the event any corrective actions taken. Pursuant to law all such incidents will be reported to regulatory and/or law enforcement authorities.

Payment Handling Procedures

DL will accept payments from dispensaries in the form of business check, cashier check, credit card, EFT, ACH, wire transfer, and cash.

1. Transport agents will not handle cash payments and cannabis simultaneously.
 - a. All transport of cannabis will be cannabis only
 - b. All transport of cash payments will be comprised of payments only
2. All cash payments will be reconciled digitally with the comptroller and immediately deposited.
 - a. Transport agent will have deposit slips when they leave the facility
 - b. Transport agent will only accept payments for the exact amount due.

Record Keeping

DL will maintain any and all inventory records and documentation for at least five years after the date on the document. All documents will be available to regulatory bodies for review upon request.

Security Plan Appendix

Inventory Control System (ICS) Software Features and Reports

In addition to meeting the requirements set forth in the law and regulations, Seed- to-sale software's Inventory Control System software also tracks, records, and enforces the following key metrics and controls. For instance, its Inventory Control System software advertises the following features:

1. Configures user authorizations (sets individual permission settings per employee);
2. Customizes product labels (product ID/weight/THC/additives);
3. Generates price-based units of inventory (no math involved);
4. Allows for biometric fingerprint scan for employee time clock/management.

Tracking Features:

1. All products are assigned a unique barcode ensuring full compliance from seed-to-sale
2. Adds and tracks concentrates origins - strains, strain types, strain notes, & medicinal benefits
3. Waste tracking
4. Automated Task Reminder (sends text and email reminders and end-of-day reports)
5. Maintains facility and procedural notes and reminders
6. Automatically generates transportation manifests with turn-by-turn directions, product information, driver, and vehicle information

Inventory Features:

1. Inventory grading
2. Allows designation of specific inventory items at a higher or lower price point relative to the original price
3. Inventory conversion
4. Allows wholesale transfers
5. Adjusts/converts inventory
6. Provides vendor document scanning
7. Creates unique barcodes or uses existing product barcodes
8. Transfers inventory from one area to another
9. Add employees and vehicles for the built-in transportation features
10. Add vendors
11. Accounts receivable/payable
12. Inbound and outbound transfers
13. Inventory audit
14. Creates different inventory types
15. Tax collections/tracking
16. Sets price points

Reports*

1. Accounting:
 - a. Accounts/Bad Debts
2. Employee Reports:
 - a. Sales Statistics
 - b. Timesheet
 - c. Time Sheet Log
 - d. Cash Close
 - e. Complex Sales Report
 - f. Discount Report

- g. Discount Report by Employee
 - h. Discount Report by Item
 - i. Payments
 - j. Payouts
 - k. Sales Counts by Hour
 - l. Sales Counts by Weekday
 - m. Sales Counts by Weekday and Hour
 - n. Sales Reports
 - o. Sales Tickets
 - p. Voided Tickets
 - q. Wholesale Payments
 - r. Wholesale Report
 - s. Wholesale Tickets
 - t. Worst Sellers
 - u. Worst Sellers by Quantity
 - v. Z-Out Report
 - w. Sales Demographics
 - x. Sales Trends
3. House Reports:
 - b. Product inventory
 - c. Rejected product inventory
 - d. Waste
 - e. Product Auditing Report
 4. Inventory Reports:
 - a. Current Inventory
 - b. Historical Inventory
 5. Inventory Adjustments
 - a. Products
 - b. Inventory Forensics
 - c. Inventory Audits
 - d. Inventory Conversions
 - e. Inventory Area Transfers
 - f. Inventory Transfers
 6. Logs:
 - a. Product Categories Log
 - b. Products Log
 - c. Strain Log
 - d. Backup Log
 - e. Patient Ratio
 7. Sales
 - a. Best Sellers Reports:
 - b. Best Sellers by Quantity