



Civil Engineering
Surveying
Water Resources Management
Water & Wastewater Engineering
Construction Management
Environmental Sciences
Landscape Architecture
Land Planning

December 5, 2017

Attachment for Mattole Acres, LLC

Formerly known as Ice Box Flat Farms CO-OP Corp Operations Plan Application number 11169 APN: 107-232-005

Water Source and Projected Water Use

Water for domestic and cultivation uses are provided by the property's permitted well through the Humboldt County Division of Environmental Health. The secondary source of water is a point of diversion that has been registered with and Initial Statement of Water Diversion and Use with the State Water Resources Control Board Division of Water Rights. With the proposed storage and the permitted well Ice Box Flat Farms is expected to meet the required forbearance set by the Department of Fish and Wildlife.

The table below outlines the estimated irrigation water usage for cultivation during a typical year. Variables such as weather conditions and specific cannabis strains will have a slight effect on water use.

| Table | 3.1: Esti | mated / | Annual II | rrigation | Water Us | age (Gall | ons) | 7 7 | | pro a majoritario | | |
|-------|-----------|---------|-----------|-----------|----------|-----------|--------|------------|-------|-------------------|-----|--------|
| Jan | Feb | Mar | April | May | June | July | Aug | Sept | Oct | Nov | Dec | Total |
| - | | | 750 | 1,800 | 5,200 | 10,000 | 13,000 | 13,000 | 5,250 | 1,000 | Q | 50,000 |

Water Storage

The table below outlines the existing and proposed water storage on the parcel. Mattole Acres, LLC has an existing water storage capacity of 26,800 gallons. With the permitted well through the Humboldt County Division of Environmental Health. Mattole Acres, LLC is estimated to meet its irrigation needs and storage.

| Туре | Quantity(gal) | Number | Total | |
|------------------------|---------------|--------|--------|-----|
| Plastic Tank | 2,500 | 2 | 5,000 | win |
| Plastic Tank | 500 | 1 | 500 | |
| Plastic Tank | 300 | 2 | 600 | |
| Current Total | | 5 | 6,100 | . , |
| | (| | | |
| Proposed Metal Tank | 50,000 | 1 | 50,000 | |
| Total Proposed Storage | | | 56,100 | |

Irrigation Plan

The Lead Cultivator will be solely responsible for the implantation of the irrigation and fertilization program. The lead Cultivator will also provide the necessary training of Assistant Cultivators and oversee all product handling. All safety, handling and mixing as well as application procedure training will be organized by the Lead Cultivator and recorded. Annual training sessions will ensure all safety guidelines issued by the manufacturer, Humboldt County Agricultural Department, State of California Agricultural Department and federal Environmental Protection Agency and those of IBFF are followed. All fertilizers will be stored in watertight locked housings. These housing will be properly labeled as to denote their contents. All MSDS will be recorded and available for inspection. At all locations fertilizers are to be mixed, applied or stored, IBFF will install saline eye wash stations, first aids kits, and spill kits. In addition, IBFF will provide any employee with proper hand, eye and body protection deemed necessary by manufacture labeling requirements.

A proprietary nutrient solution is prepared as needed by the Lead Cultivator and housed in a light resistant, agricultural grade fertilization holding tank site. Each batch solution mixed is then logged. The solution is formulated by manufacturer instructions and calibrated by means of a sensor feedback array composed of a pH probe, parts per million probe, thermometer probe and if needed a solar water heater all of which will work in concert with a proprietary dosing algorithm. The subsequent nutrient is then dosed with either an agricultural base or acid in order to ensure proper pH prior to feeding. A target pH range of 5.6 to 6.2 is ideal and necessary to maximize uptake of the solution by the plant. All fertilizers and supplements to be used are compliant with all Humboldt County and State of California Department of Agriculture label requirements. MSDS and labels will be available onsite.

Irrigation and fertigation of plants will consist of hand watering as well as employ a top-feed/bottom-flow nutrient flow technique with runoff capture and reuse. Irrigation and fertigation of plants will occur initially via hand water. At this stage the plants are juvenile and the one gallon container is very small; therefore the amount of irrigation and fertilization needed is better controlled via hand watering. Upon final planting plants will be irrigated and fertilized using a top-feed fashion with nutrients being dispensed from drip emitters specifically tailored to the application. The watering cycle is controlled via battery operated timers and lasts approximately fifteen to twenty minutes. These cycles occur between two and four times per day, depending on the stage of growth, canopy biomass and evaporative transpiration demand.

Ice Box Flat Farms Operations Manual for Medical Cannabis Cultivation

Prepared By:

Patrick Andrews

Agent in Charge

Ice Box Flat Farms Collective

7. Acknowledgements

In regards to Humboldt County CMMLOU section 55.4.10 k:

Patrick William Andrews/Ice Box Flat Farms consent to onsite inspection of the parcel by County officials at prearranged date and time in consultation with the applicant prior to issuance of any clearance or permit, and once annually thereafter.

In regards to Humboldt County CMMLOU section 55.4.10 m:

Patrick William Andrews/Ice Box Flat Farms acknowledge that the County reserves the right to reduce the size of the area allowed for cultivation under any clearance or permit issued in accordance with this Section in the event that environmental conditions, such as a sustained drought or low flows in the watershed will not support diversions for irrigation.

In regards to Humboldt County CMMLOU section 55.4.10 n:

Patrick William Andrews/Ice Box Flat Farms acknowledge that the county reserves the right to engage with local Tribes before consenting to the issuance of any clearance or permit, if cultivation operations occur within an Area of Traditional Tribal Cultural Affiliation, as defined herein. This process will follow current departmental referral protocol, including engagement with the Tribe(s) through coordination with their Tribal Historic Preservation Officer (THPO) or other tribal representatives. This procedure shall be conducted similar to the protocols outlined under SB 18 (Burton) and AB 52 (Gatto), which describe "government to government" consultation, through tribal and local government officials and their designees. During this process, the tribe may request that operations associated with the clearance or permit be designed to avoid, minimize or mitigate impacts to Tribal Cultural Resources, as defined herein. Examples include, but are not limited to: conducting a site visit with the THPO or their designee to the existing or proposed cultivation site, requiring that a

professional cultural resources survey be performed, or requiring that a tribal cultural monitor be retained during project-related ground disturbance within areas of sensitivity or concern. The county shall request that a records search be performed through the California Historical Resources Information System (CHRIS).

In regards to Humboldt County CMMLOU section 55.4.11 i:

Patrick William Andrews/Ice Box Flat Farms consent to an annual on-site compliance inspection, with at least 24 hours prior notice, to be conducted by appropriate County officials during regular business hours (Monday – Friday, 9:00 am – 5:00 pm, excluding holidays).

8. Suitability of Proposed Facility

Suitability of the Proposed Facility

In choosing our cultivation site, Ice Box Flat Farms (IBFF) has carefully taken into account all aspects laid out in the guidelines set forth in the Humboldt County Medical Cannabis Ordinance. In order to truly encompass all needs of an efficient, safe and successful cultivation site one needs to take into account mitigating factors including but not limited to; site location, water usage, general environmental impact, proper facilities to handle industrial agricultural needs, and proper secure facilities to intake and exit safely medical cannabis products.

Size of facility is imperative to handle not only phase one of operations, but long range planning as well. Ice Box Flat Farms has carefully taken into account all aspects of phase one (5,000 square feet) needs. Sites have been selected that can adequately house and operate all phases of operation per site needs. IBFF site locations were researched and verified for proper zoning and site requirements. Doing this IBFF can ensure a well-planned, energy efficient, environmentally sound Cultivation Facility in our ongoing effort to ensure high quality, sun grown, organic, medical grade cannabis to our current collective members.

IBFF has on ongoing working relationship with Manhard Consultants. IBFF has worked diligently with the engineers and personnel at Mansard Consultants to encompass all needs surrounding proper land use and zoning compliance, proper building codes and permits, NCRWQCB registration, DFW and CalFire compliance. It is our intention to operate all aspects of our facility with many environmental protections in place. These including adequate water storage, using low flow and drip irrigation, implementing green renewable energy sources such as solar power into our cultivation sites, using safeguards to ensure that fertilizer run off from cultivation sites does not enter the water supply, all while engaging in best management practices in terms of land use and following annual road and site maintenance plans. IBFF will also be implementing multiple safeguards to ensure the proper storage and handling of all fertilizers and pesticides/fungicides.

By operating our cultivation facility with a mindset of assuring the community and local and state government, as well as the NCRWQCB, DFW and CalFire that all safety and security measures have been met or exceed that of Humboldt County Ordinance #2544, IBFF intends to be a template for the industry to follow. IBFF has spared no expense in ensuring our land and buildings

are up to current code specifications. Our lead cultivator holds a Personal Pesticide Application license acquired from the Humboldt County Agricultural Department and all employees are trained on proper application, handling and disposal of such products. IBFF has in place emergency preparedness procedures in the unlikely event of a fertilizer or pesticide spill. It is of utmost importance to IBFF, and our commitment to the environment and the surrounding community that our cultivation site is managed in such ways as to have minimal impact. Thus assuring water quality, air quality, wildlife and the quality of life our neighbors have come to expect.

9. Management Practices Plan

Management Practices Plan

IBFF has implemented a flow of management at the cultivation site that reflects a compliant chain of custody for the production of medical cannabis as follows:

- Agent in Charge: Our Agent in Charge will act as overseer of the entire facility. Responsibility will include but not be limited to: personnel, records keeping, budget, and liaison with State and County inspectors as needed.
- Lead Cultivator: Our Lead Cultivator will be responsible for the day to day cultivation needs of the cannabis plants. This will include but not be limited to: irrigation, fertilization, pesticide management and harvest.
- Assistant Cultivator / Processing Manager: Our Assistant
 Cultivator/Processing Manager will act under the responsibility of the
 Lead Cultivator. Their main responsibility will be to assist the Lead
 Cultivator in his/her day to day duties as well as take the Lead Role
 during times when the Lead Cultivator may be off site. During the
 Harvest Times the Assistant Cultivator / Processing Manager duties will
 switch to being responsible for the oversight of the Processing Facility.
- Seasonal Labor: Season Labor will be hired to assist during the harvest seasons. Their Duties will include harvesting, and assisting in the Processing Facility.

With this structure in place it is simple to define duties and tasks. By having designated duties and procedures in place for each job title IBFF can efficiently manage the workflow and chain of custody for the product. In turn if problems do arise having this type of structure in places makes it easy to identify where and when the problem occurred and remedy it.

Employees of IBFF will all be California Medical Cannabis card holders and carry such recommendations on their person at all times while at the cultivation site. Also all IBFF employees will be required to wear an IBFF Issued photo ID badge on a lanyard at all times while working at the cultivation site.

Employees of IBFF will be required to read the IBFF Operating Manual along with the IBFF Employee Handbook. They will also be required to sign and date a form acknowledging they have read and understand its contents.

The Agent in Charge will meet with the Lead Cultivator, Assistant Cultivator and Processing Manager daily to discuss any pending internal issues relating to day to day operations as well as discuss any upcoming schedule needs. Each department will give a daily synopsis related to their particular tasks. This will include a daily plant count inventory, a daily fertilizer application summary, a daily pesticide application summary a daily water use summary and a daily inventory of processing and packaging as well as product packaged for distribution. The Lead Cultivator will maintain daily contact with the Agent in Charge to keep the Agent in Charge abreast of any issues that occur pertaining to cultivation, inventory, non-security related employee issues and facility compliance needs. It is the intention of the Agent in Charge to maintain a transparent communication at all times to ensure the uninterrupted flow of medical cannabis remains compliant and within the code of conduct for internal and county needs.

The Agent in charge will monitor the entire facility daily to ensure all medical cannabis from freshly cut clone to packaging for sale is tracked, accounted for and inventoried in real time. In addition, weekly physical inventory will be taken by each department to ensure all inventory logs are accurate and accounted for. Cultivation inventory is tracked via State implemented seed to sale program as directed. Harvested packaged ready for retail medical cannabis will be monitored and inventoried via the State implemented program.

10. Inventory of Production Areas

Inventory of Production Areas

An inventory of all plants shall be performed by the Agent-in-Charge and/or Lead Cultivator on a daily basis. Batches of plants are inventoried by using the State Track and Trace methodology. This takes into account any plants that have been added to inventory via Licensed Nursery, any plants that were removed from inventory or any plants moved to another phase of its lifecycle and any plants that have been destroyed. Any discrepancy in physical plant inventory is traced to the source of the discrepancy, documented. After further investigation, any appropriate corrective measures will be taken.

A. Intake of Clones from Nursery

The Lead Cultivator oversees the entire cultivation process, from initial intake of clones from the Nursery to final harvest. Well-documented intake procedures ensure that clones procured from the Nursery are taken in, logged immediately into the State Seed to Sale Program.

B. Tracking of Plants in Vegetive Phase

The Lead Cultivator oversees the vegetive process. Well-documented cultivation procedures ensure that plant health and location, as well as actions performed during the vegetive phase, are tracked. Actions performed on plants are tracked by documenting individual plants, or entire batches of plants and recording the action taken. This might include watering, feeding, plant movement from one physical location to another, plant destruction due to plant sickness or pest infestation or plant progression through the next stage of cultivation. This information as well as the employee performing any such activity is recorded. A physical plant inventory is taken any time plants are moved. The Lead Cultivator performs random spot checks of the physical count and location of plants. Any discrepancy in physical plant inventory is traced to the source of the discrepancy, documented, and reported to the Agent in Charge. After further investigation, any appropriate corrective measures are taken.

C. Tracking Actions of Plants During Flowering

The Lead Cultivator oversees the flowering process. Well-documented cultivation procedures ensure that plant health and location, as well as actions performed during the flowering phase, are tracked. Actions performed on plants are tracked by documenting individual plants, or entire batches of plants and recording the action taken. This might include watering, feeding, plant movement from one physical location to another, plant destruction due to plant sickness or pest infestation or plant progression through the next stage of cultivation. This information as well as the employee performing any such activity is recorded. A physical plant inventory is taken any time plants are moved. The Lead Cultivator performs random spot checks of the physical count and location of plants. Any discrepancy in physical plant inventory is traced to the source of the discrepancy, documented, and reported to the Agent in Charge. After further investigation, any appropriate corrective measures are taken.

D. Tracking the Change of Plants to Bulk Inventory (Harvest)

In this phase of the lifecycle, the plant batches are changed from a living plant count inventory (where the plant is the unit) to bulk inventory, which is tracked by weight. This provides accurate yield information – a key insight into the cost of cultivation for each batch and the ability to forecast accurate yields for future batches. This information is added to the records created in the previous phase. Specific details that are recorded include:

- Initial harvest (wet) weight
- · Weight after separation into flower, by-product, and waste
- Weight after trimming
- Staff identification (at each step)
- Physical location of the plant material at all times

E. Reporting

Daily reporting enables the Lead Cultivator to track productivity levels of staff involved in the harvest process, and identifies any discrepancies. The records will contain reports on the harvest process, providing total weight harvested and trimmed at each weigh point, and compares that to final weight post-trim, including waste. This ensures that any discrepancy in weight is identified by the

Lead Cultivator and the Processing Manager. Discrepancies are traced to the source, documented, and reported to the Agent in Charge. After investigation, any appropriate corrective measures are taken. This not only ensures that staff produce a quality final product in an efficient and timely manner, but also that inventory is not diverted as it is manicured and categorized. All cultivation and harvest records are retained pursuant to State regulations.

11. Cultivation Plan

Cultivation Plan

A. Cultivation Structures

It is intended for the cultivation space to utilize established and proven cultivation techniques shown to be effective for the commercial cultivation of cannabis species. The plants will be cultivated in two 25 ft. x 100 ft. cold frame structures. These cold frames will consist of heavy gauge steel tubing, covered with a woven poly translucent opaque tarp. Each cold frame will be ventilated by intake and exhaust fans as well as roll up side panels. The entire cultivation site will house two such structures totaling approximately 5,000 square feet of cultivation space. Both structures will house 18,000-watt energy efficient grow lights. The cold frames will employ two types of planting methods; raised beds and ten-gallon plastic pots. These methods will run independently of each other. Using this methodology IBFF will be able to create an advantageous environment for flowering.

IBFF will employ the use of black out tarps during certain times of the year in order to maintain a twelve-hour light to dark period (Light Deprivation). Theses blackout tarps will cover the inside of the cold frame and be operated automatically using timers and solar power. By manipulating the daylight hours to twelve hours of light and twelve hours of darkness it will allow IBFF to force flowering even during the elongated daylight hours of summer months. By doing this we will be able to make the most economical use of our stored water supply as the life cycle of each plant will be reduced.

B. Planting Methods/Mediums

IBFF will procure, under contract, already rooted clones in six square inch pots form a licensed nursery or dispensary. IBFF will only consider contracting with those entities who have garnered Humboldt County approval as well as State of California license when available. After inspection and approval of the Lead Cultivator, well established, well rooted clones will be transplanted into one-gallon plastic containers. The one gallon plastic containers will include a proprietary blend of high nitrogen soils and amendments. All MSDS will filed and available for inspection. These rooted clones will remain in the one gallon containers until such time as the Lead Cultivator deems they are ready for final transplanting.

Final Planting will be done in two different but distinct methods; raised beds or ten gallon plastic pots. Raised beds will measure 98'X9'X16". Each cold frame

structure will house two such beds. The beds will be constructed in such a way as to allow drainage from the bottom. Each bed will be filled a nutrient rich, proprietary soil formula. A complete list of base soil and amendments including MSDS will be recorded. The total amount of plants per bed is dependent upon the cultivar and run length.

Ten-gallon plastic pots may also serve as a planting methodology. As is the case with the raised beds each ten-gallon pot will be filled a nutrient rich, proprietary soil formula. A complete list of base soil and amendments including MSDS will be available for inspection. Each ten-gallon pot will hold one plant, with the total number of plants in each cold frame to be determined by cultivar and run length.

C. Irrigation/Fertilization Practices

IBFF will implement an *Irrigation Resource and Water Management Plan*. This plan will be drafted by Manhard Consultants and designed exclusively for our site. This plan will include but not be limited to:

- Estimated Monthly Water Usage.
- The implementation of one 50,000-gallon pioneer water tank. The volume of said tank will be of such capacity as to meet or exceed figus outlined in the estimated monthly water usage chart and the irrigation resource and management plan.
- A consent to forbear from any ground water diversion from May 15th to October 31.
- An approval from the RWQCB through enrollment pursuant to NCRWQCB Order Number 2015-0023 and/or preparation of a Water Resources Protection Plan.

Water for the entire site will be provided from a year round spring. The riparian right to this water source and the subsequent running of irrigation lines is shown in the deed to the parcel. As well this right has been investigated and approved by California Fish and Wildlife and The NCRWQCB. IBFF will be sanctioned under NCRWQCB Tier 2 criteria with every effort being made to move into the NCRWQCB Tier 2* category in subsequent years.

The Lead Cultivator will be solely responsible for the implantation of the irrigation and fertilization program. The lead Cultivator will also provide the necessary training of Assistant Cultivators and oversee all product handling. All safety, handling and mixing as well as application procedure training will be organized by the Lead Cultivator and recorded. Annual training sessions will ensure all safety guidelines issued by the manufacturer, Humboldt County Agricultural Department, State of California Agricultural Department and federal Environmental Protection Agency and those of IBFF are followed. All fertilizers will be stored in watertight locked housings. These housing will be properly labeled as to denote their contents. All MSDS will be recorded and available for inspection. At all locations fertilizers are to be mixed, applied or stored, IBFF will install saline eye wash stations, first aids kits, and spill kits. In addition, IBFF will provide any employee with proper hand, eye and body protection deemed necessary by manufacture labeling requirements.

A proprietary nutrient solution is prepared as needed by the Lead Cultivator and housed in a light resistant, agricultural grade fertilization holding tank site. Each batch solution mixed is then logged. The solution is formulated by manufacturer instructions and calibrated by means of a sensor feedback array composed of a pH probe, parts per million probe, thermometer probe and if needed a solar water heater all of which will work in concert with a proprietary dosing algorithm. The subsequent nutrient is then dosed with either an agricultural base or acid in order to ensure proper pH prior to feeding. A target pH range of 5.6 to 6.2 is ideal and necessary to maximize uptake of the solution by the plant. All fertilizers and supplements to be used are compliant with all Humboldt County and State of California Department of Agriculture label requirements. MSDS and labels will be available onsite.

Irrigation and fertigation of plants will consist of hand watering as well as employ a top-feed/bottom-flow nutrient flow technique with runoff capture and reuse. Irrigation and fertigation of plants will occur initially via hand water. At this stage the plants are juvenile and the one gallon container is very small; therefore the amount of irrigation and fertilization needed is better controlled via hand watering. Upon final planting plants will be irrigated and fertilized using a top-feed fashion with nutrients being dispensed from drip emitters specifically tailored to the application. The watering cycle is controlled via battery operated timers and lasts approximately fifteen to twenty minutes. These cycles occur between two and four times per day, depending on the stage of growth, canopy biomass and evaporative transpiration demand.

D. Pesticide / Fungicide Storage and Handling Practices

The State of California Agricultural Department as well as the Humboldt County Agricultural Department recognize the need for use of pesticides and fungicides. IBFF will employ best management practices when storing, handling, mixing, application and disposal of all pesticides/fungicides. IBFF will also engage in the use of pesticides and fungicides that have been approved by either the state of California Agricultural Department or the Humboldt CountyAgricultural Department or by any Humboldt County Ordinance or State of California Initiative.

IBFF will take great care in the storing, handling, mixing, application and disposal of any and all pesticides. The Lead Cultivator will hold a State of California Agricultural Department Person Pesticide Applicators License issued through the Humboldt County Agricultural Department. Training of employees in the storing, handling, mixing, application, disposal and emergency spill containment and clean up procedure will be sole responsibility of the Lead Cultivator as the holder of the Personal Pesticide Applicators License.

All pesticides/fungicides will be stored in water tight, locked and labeled housing in accordance with manufacturer's instruction. IBFF will provide all employees trained to handle, mix, apply or dispose of pesticides/fungicides with proper hand, eye body and protection in accordance with State of California Agricultural Department Personal Pesticide Applicators License as well as manufactures labeling requirements. In addition at any place where pesticide/fungicide to be stored, handled, mixed, applied or disposed of IBFF will provide saline eye wash stations as well as emergency containment and clean up kits as prescribed in the State of California Agricultural Department Personal Pesticide Applicators License handbook as well as manufacture labeling directions.

12. Cultivation Schedule

Cultivation Schedule

April 1 - June 1: Obtaining Stock From Nursery, Transplanting and Vegetive Phase

All plant samples used in IBFF cultivation sites will be composed of clones taken from Mother Plants. Mother plants are composed of samples that have been deemed to demonstrate superior genetics for desired outcomes. Cutting or *Clones* are taken from the Mother Plants at various intervals. These cuttings are then rooted using various methods employed by the contracted Nursery. IBFF will contract with a licensed Nursery to provide our rooted clone stock. The contract will show that the Nursery will provide well established, well rooted clones in six square inch containers. These plants will range from 10" to 12" in height. Once clones have been obtained from the Nursery the Lead Cultivator will examine each sample and approve initial planting to begin.

Upon the Lead Cultivators approval the *Initial Transplant* will commence. The rooted clones will be planted directly into one gallon plastic containers. This is the point in the cultivation process most often referred to as the "Vegetive" cycle. At this point due to container and plant size a hand watering method is most effective. The Lead Cultivator will make the determination based on factors such as height and plant growth density to determine when plants are to be transplanted into final planting. The *Initial Transplant* phase lasts from one to two weeks depending on the desired outcome. During this phase the adolescent plants are fertigated using hand watering methods and fertilized using our high nitrogen proprietary feeding program. All fertilizers and supplements used are in accordance with Humboldt County and State of California Department of Agriculture compliance. MSDS are recorded. At this point the pesticide/fungicide management plan is implemented. (See Pesticide Application and Storage Plan for pesticide storage, handling, application and disposal procedures)

Due to the photoperiodism of the cannabis plant and available daylight hours during this time period, supplemental lighting will be used to extend the photoperiod from 12 hours of natural light to 18 hours. During this time all greenhouses will be blacked out in such a manner as to insure no artificial light s released,

Once The Lead Cultivator has determined the plants have achieved desired height and plant growth density for final transplant, the plants are immediately planted into either a raised bed or ten-gallon pot. Due to the increase in container size and increase in daylight hours the plants will contain to grow in a vegetive state for two to four weeks. The approximate desired height and growth density would be three to four feet. Upon final transplant into either raised beds or ten gallon buckets a drip irrigation / fertilization system will be implemented. A specifically designed one gallon per hour drip emitter will deliver irrigation and fertilization to each plant. During the Final Transplant / Vegetive Phase the plants are fertigated using our high nitrogen proprietary feeding program. All fertilizers and supplements used are in accordance with Humboldt County and State of California Department of Agriculture compliance. MSDS are recorded. Once this desired height and vegetive growth density has been achieved the Light Deprivation Phase begins. During this time period the supplemental lighting may be used during day light conditions of less than nominal lumens. For example, during an extended period of raid or heavy cloud cover.

June 1 - August 7: Light Deprivation Phase

Taking into account factors such as height, growth density and overall health of the plant, the Lead Cultivator will determine the exact date for the Light Deprivation process to begin. Once that date is determined 100% light resistant, specifically designed tarps will be automatically pulled over the entire cold frames. This process will reduce the daylight hours from approximately fifteen hours of daylight to the desired twelve hours of daylight, twelve hours of darkness desired to induce flowering. During the first two weeks of Light Deprivation the plants will enter into a transitional phase. During this transitional phase plants will continue vegetive growth while transitioning into flowering. Once the plants enter the budding stage they will be fertilized using a proprietary blend of high phosphorus fertilizers as well as aerobic based supplements. All products used are in compliance with state and federal agricultural guidelines and corresponding MSD and labels are recorded.

It is not uncommon for plants to obtain 25% of their entire height and vegetive growth density during the transitional phase. Once the plants enter in the final bloom or flowering phase they will begin to expend energy into the production of flowers. At this point the plants will cease vegetive growth and begin to flower. The entire flowering process including the transitional and final

bloom phases will last fifty to sixty-five days depending on strain variation and weather conditions.

August 7 - August 14: Harvest One and Re-Planting Phase:

Once the Light Deprivation Phase has concluded and the Lead Cultivator has determined the plants are at their peak, harvest procedures will be initiated (see *Harvesting/Processing Plan* for harvesting and processing procedure).

After the Harvesting Procedure has concluded, the raised beds or ten gallon pots will be turned and amended. All amendments used are in accordance with Humboldt County and State of California Department of Agriculture compliance. MSDS are available on site. New clones will be procured and delivered under contract from the Nursery. Due to the length of daylight hours the plants will continue in a vegetive state for approximately one month. Plants will be planted using the same methodology as with the Initial Transplant Phase outlined above. Plants will be planted into one gallon buckets and watered and fed using hand watering/fertilization techniques. Upon initial transplant the newly transplanted plants are fertilized with our high nitrogen proprietary feeding program. All fertilizers and supplements used are in accordance with Humboldt County and State of California Department of Agriculture compliance. At this point the pesticide/fungicide management plan is implemented. (See Pesticide Application and Storage Plan for pesticide storage, handling, application and disposal procedures). Final Transplant will occur when deemed appropriate by the Lead Cultivator, usually seven to 14 days from initial transplant.

August 14 - November 7: Second Transplant /Natural Flowering Cycle and Harvest Two Phase:

Once the Final Transplant Phase has been initiated by the Lead Cultivator, the plants are fertilized with our high nitrogen proprietary feeding program. All fertilizers and supplements used are in accordance with Humboldt County and State of California Department of Agriculture compliance. MSDS are recorded.

Due to the natural decline in daylight hours, approximately one month after the Re-Planting Phase has begun the plants will begin to flower naturally. This natural drop in light will negate the need for Light Deprivation Techniques. As in the Light Deprivation Phase, the plants will go through the transitional phase an final bloom phase. Once the plants enter into the bloom phase they will be fertigated using our proprietary high phosphorus feeding program. All fertilizers and supplements used are in accordance with Humboldt County and State of California Department of Agriculture compliance. MSDS are recorded. Once the plants are through the final bloom phase and the lead Cultivator has determined they have reached peak potential, Harvest Two will be initiated (see *Harvesting/Processing Plan* for harvesting and processing procedure).

November 8 – February 15: Third Transplant, Mixed Light, Flowering Cycle an Harvest Phase 3

This phase of operations will consist of an expedited cycle. Plants will be procured from the nursery and allowed a shortened two (2) week vegetate cycle before flowering. During this time, the day light hours as well as the more frequent seasonal rains and cloud cover will necessitate the use of supplemental lighting to promote healthy and vigorous growth.

February 16 - April 31: Repair, Upgrade and Recondition Phase

During this phase IBFF will take the time to inspect all cold frames and covers for wear and replace as necessary. The irrigation system will be inspected and repaired or replaced where appropriate. The Agent in Charge and the Lead Cultivator will meet weekly to determine the best action plan for the upcoming season.

13. Cultivation Menu

14. Pesticide Storage, Handling and Application Plan

Pesticide Storage, Handling and Application Plan

All pesticides, disinfectants, fungicides and agricultural chemical products used by IBFF will maintain strict compliance with standards imposed by the Humboldt County Agricultural department and State of California Department of Agriculture Department and US Environmental Protection Agency. The Lead Cultivator will maintain a current Private Applicators License with the Humboldt County Agricultural Department. This license will be posted and available for view by any regulatory agency deemed appropriate by Humboldt County or State of California.

A. Storage

All pesticides, disinfectants, fungicides and agricultural chemicals will be secured in an appropriate locked and labeled housing and accessed only by those employees that have been trained under the guidelines of State of California Agricultural Department Personal Pesticide Application License guidelines in handling, application and disposal of each product. Entry into the locked facility will be logged. This log will include: The name of employee removing the material, the date and time of day and the amount and type of pesticide removed.

Any pesticide products deemed appropriate to apply on Cannabis by the State Of California or Humboldt County Agency, may be applied by either the Lead Cultivator or trained personnel in accordance with State of California Agricultural Department's Private Applicators License criteria. Training of employees will be done in accordance with State of California Private Applicators License criteria. These products will be limited to safe chemicals recognized by the Humboldt County Department of Agriculture, the California Department of Agriculture and the Federal EPA. Copies of all MSDSs and labels will be clearly identified and maintained onsite at all times. IBFF will make available to its employees' saline eye wash stations, hand wash stations, and body protection necessary as deemed by manufacturers labels/instructions. Whenever pesticides are stored, precautions, such as spill kits, eye was statins, body protection and first aid kits will be in place and readily available.

B. Handling

The handling of pesticides/fungicide will be done in accordance with State of California Agricultural Department Personal Pesticide Application License guidelines. Handling will include, transportation from retail outlet to cultivation site, logging and entering into secured, labeled storage, mixing, preparation, transport to application locations on site, application and disposal. These activities will be recorded. By having a strictly monitored Pesticide Management plan in place, IBFF will strive for a "ZERO SPILL POLICY". In the event of a spill IBFF will maintain on site an Emergency Containment and Clean Up policy in accordance with State of California Agricultural Department Personal Pesticide Application License guidelines. IBFF will also maintain on site in a clearly marked and accessible secure location any materials deemed necessary for clean up or spill containment and abatement. IBFF will also maintain a well marked and easily accessible plan for accidental personnel exposure as well as proper applicators training as set forth by State of California Agricultural Department Personal Pesticide Application License guidelines in the event of such accidental exposure. Any spills or accidental personnel exposure will be reported to the appropriate agencies as deemed necessary by State of California Agricultural Department Personal Pesticide Application License guidelines. These incidents will also be recorded by the Lead Cultivator.

C. Application

All application will be done in accordance with State of California Agricultural Department Personal Pesticide Application License guidelines. A copy of all applications deemed necessary will be recorded via the State of California Agriculture pesticide tracking web-site. Proper eye, face and body protective wear as well as approved respirators shall be provided by IBFF and worn and available at all times during application of all pesticides/fungicides. A preventive application program per manufacturer's directions and label requirements will be established from the onset of the plant's initial transplant. Application frequency will vary with each phase of growth or infestation pressure. This will help to ensure the least amount of pesticide/fungicide will be needed. Application will end no less than thirty days before harvest or by manufactures able requirements, whichever is longer. During application factors such as wind, temperature and humidity will be taken into account. This will ensure that the pesticide/fungicide is used in the most efficient

manner and will mitigate drift. Pesticides will be applied using a variety of methods including atomizer, back pack sprayer an airless sprayer. Nozzle types and pressure settings will be determined by manufacture directions. Anywhere pesticide is applied IBFF will provide a eye wash station, hand wash station and body protection as deemed necessary by the manufacturers specification whenever pesticides are applied precautions such as spill kits, eyewash stations and first aid kits will be in place.

D. Disposal

All care will be taken to assure that any mixed solutions will be used to their entirety. In the event there is a surplus of used mixed solution it will be disposed of according to guidelines set forth by State of California Agricultural Department Personal Pesticide Application License procedures. After the applicator has finished application, the protective wear shall be discarded and disposed according to State of California Agricultural Department Private Applicators License guidelines. All bottles, containers or receptacles that have come into contact with, or contained, any product that falls under the state's guidelines for pesticides, disinfectants, fungicides and agricultural chemicals shall be washed, rinsed and or disposed of according to strict EPA and State Department of Agriculture Private Applicators License guidelines. Proper training of employees in rinsing, washing and disposal shall be overseen by the licensed Lead Cultivator on premise.

15. Summary of Processing Practices

Summary of Processing Practices

A. Harvesting/Processing

Harvesting will be done by hand employing seasonal help. Each harvester will be issued an agricultural grade, spring loaded, hand held anvil style pruner. Each harvester will be trained by the Lead Cultivator on the use of the pruner and the methods by which each plant is to be harvested. In addition IBFF will provide all harvest workers with proper hand, eye, and body safety equipment.

Each plant will be harvested individually and cut into pieces approximately sixteen inches long. Each branch will be rough trimmed by means of a Trim Pro Original. This machine allows for the quick removal of the large water leaf. At the time of harvest each plant will be recorded into the master log. After each piece of the cut plant has been through the Trim Pro process, the pieces are placed in a lid bin. Once these bins are full they are transported to the Bucking Machine Operator. The Bucking Machine Operator feeds each individual branch into the machine. As individual buds are removed from the stem they fall into a bin; and when the bin is full it is transferred to the automatic trim machine operator.

The automatic trim machine operator then places the individual buds on the feed conveyor. The buds then fall through a series of trim machines before exiting onto the conveyor for inspection. The individual trimmed buds are then inspected by the Processing Manager and a trained assistant.

The individual trimmed buds then fall into a locking lid container on a weight scale. When the container reaches the weight deemed appropriate by the Processing Manager. Bins are then removed to the dying and curing area. each bin will be unloaded onto a hanging drying rack. Once each rack is full, the drying and curing process begins.

Once full these bins will be labeled and sealed and transported to our onsite Drying and Curing facility.

Periodically throughout the process the trim accumulation by the trimming machine will be collected, labeled, dried, weighed and packaged for transport to a Manufacturing Facility.

B. Drying and Curing:

Upon entering the onsite drying and curing facility each bin will be weighed, recorded. The contents in each bin will be examined by the Processing Manager. When a rack is full it will then be wheeled into the Drying Chamber. The exact date and time of day along with the identification numbers of each plant(s) will immediately be recorded into the Master Log. Cannabis drying schedules and contains a proprietary feature that has been proven to eradicate 99.9% of molds including aspergillus and botrytis. Air circulation will be achieved via wall mounted, oscillating fans. Using this proven methodology IBFF will be able to deliver a clean, mold free product to our patient base.

The drying and curing process takes between five and seven days. The Processing Manger and the Lead Cultivator will be checking the facility five to six time per day to monitor the progress. Once the material has reached the desire consistency the processing will begin. At this stage the Processing Manager will also randomly select up to five batch samples for third party testing. The samples will be vacuum sealed and labeled with a batch number, strain, plant number and site number and recorded.

C. Processing:

Once the Lead Cultivator has determined the drying and curing process meets IBFF proprietary standards the dried and cured flowers are sent to final process. The Lead Cultivator will then instruct the Processing Manager to remove the dried buds from rack and place them in locked lid bins and weight and record each bin. Once the bins arrive in the trimming room the Processing Manager will record the date, time of day, weight and plant(s) or batch number (s). Once all of the flowers from the drying chamber have been binned, weighed and recorded the trimming process will begin.

Final trimming will be done via hand trimmers. Trimmers will be instructed to inspect individual buds for any residual leaf or stem not removed via the trim machine. The final trim product will be collected, binned and weighed periodically throughout the day by the Processing Manager. The Processing

Manager will then deliver the sealed and logged bins to the Processed Materials Holding facility.

The waste product from the "trim" will be collected and placed into sterilized locking lid bins. These bins will then be weighed, labeled and sealed for transport and delivery to an off site, contracted, licensed Manufacturing Facility. All weights will be recorded.

Upon completion of the trimming process the Processing Manger will turn over all of the now processed material to the Agent in Charge or the Lead Cultivator.. Only the Agent in Charge or the Lead Cultivator can accept and handle material in the processed state. Once in control of either the Agent in Charge or the Lead Cultivator the final processed material is removed from the Drying and Curing Facility and moved to a secured and locked storage facility. This facility will be only accessible to either the Agent in Charge or the Lead Cultivator. Once securely in the Processed Material Holding Facility, the Agent in Charge and the Lead Cultivator will begin to weigh, vacuum seal and label individual one pound packages for distribution. This procedure will be done always with both the Agent in Charge and the Lead Cultivator present. After weighing, labeling and packaging each unit will be placed inside of a lockbox or safe inside the Processed Materials Holding Facility.

16. CMMLOU Processing Center Application Requirements

CMMLOU Processing Center Application Requirements

A. Site Description

IBFF will conduct all drying and processing on site at our Drying and Curing Facility. This facility will incorporate all aspects of processing including drying, curing, bucking down and machine/hand trimming. This facility will be housed in a 20' X 60' engineered and permitted metal building. The metal building will be constructed upon a cement slab and all work will be conducted by licensed and bonded contractors in accordance with Humboldt County Building Codes. The site was picked due to its favorable qualities for building. IBFF will employ best management practices to ensure proper maintenance not only of the structure but of the site as well. The interior of the building will house the drying and curing chamber, trimming machines, commercial stainless steel work tables and employee bathroom. The work space will be well lit and ventilated.

B. Employee Information

Note: Insert information as required

C. Summary of Employee Safety Practices

All part time seasonal employees will be trained by the Lead Cultivator on proper safety procedure. This training will include but not be limited to: fire safety, proper harvesting techniques, use of harvesting equipment, use of rubber gloves and respirators, use and cleaning of trimming machines per manufactures direction, proper hand washing guidelines and an Emergency Procedures Plan in case of emergency. Contact information for the local fire department, CalFire, Humboldt County Sheriff and Poison Control as well as the Agent in Charge, the Lead Cultivator and the Processing Manager will be posted in a conspicuous place. IBFF will provide at no cost, rubber gloves and respirators or dust masks to all employees. IBFF will provide Saline Eye Wash Stations at strategic places inside the Processing Facility. IBFF will also provide each Employee with a written copy of emergency procedures and contact information.

D. Description of Toilet and Handwashing Facilities

IBFF will install an ADA compliant restroom. The restroom will be clearly marked. It will be well lit. It will include a working flush toilet as well as a sink with hot and cold running water. Anti-Bacterial Liquid Soap and paper hand towels will be made available. Above the sink in a conspicuous place a "Before Returning to Work" hand washing procedure placard will be posted. The bathroom will be constructed in such a way as to make cleaning and sterilizing a simple process. The cleaning and sanitation of the restroom will be the responsibility of the Processing Manager. A record of cleanings will be kept in the restroom at all times and include date and time of day cleaned.

E. Description of Drinking Water

IBFF will provide safe, clean, purified drinking water via store bought individual sealed bottled water bottles as well as an upright office style water cooler. Clean disposable paper cups will be made available free of charge to all employees.

17. Transportation/Distribution Plan

Transportation/Distribution Plan

Transportation will handled via a third party, contracted, licensed transporter/distributor. All merchantable product will only be distributed through licensed Medical Cannabis Dispensaries. Prior to moving packages from the on site Processed Material Holding Facility to another physical location, a shipping manifest will be created by the distributor/transporter. This distribution document is required for each movement of packages and will be recorded.

The Processing Manager and Agent in Charge are responsible for performing a physical inventory of all packages being transported, ensuring that the physical inventory reconciles with the transport manifest, as well as the packaging material is intact and the labeling is secure. The distribution document records the current location and status of the packages, such as "in-transit" or "received." The licensed distributor must also create detailed transport manifests for the package distribution. The manifest contains details such as:

- Time of departure
- Time of arrival
- Product and product weight
- Route to be travelled
- Origin and destination addresses

18. Product Safety, Labeling and Testing Phase

Product Safety, Labeling and Testing Plan:

IBFF will employ a detailed labeling process for all products produced and sold in retail locations to reflect chain of custody and packaging to ensure product safety and compliance. All finished flower product will be packaged in a vacuum sealed, batch number and identifying label. All products will be labeled coded, and include a unique label including but not limited to: IBFF contact information, weight, name of strain, date of process, and final testing of potency, and results of pesticide and molds testing. This information will provide information that will enable dispensaries and consumers to be able to contact us in an expeditious manner. None of the products cultivated at our facility will include labels that may be misleading for adults, or appealing to children. We intend to make every effort to provide information on our labels and package our products in such a way that will not lead to unintended consumption by a child. IBFF will also follow the initial guidelines set forth in State of California SB266.

A. Labeling Plan

IBFF will employ a proprietary labeling system. This table will include but not be limited to the following:

- IBFF Logo
- IBFF Contact information
- Certified Weight of Contents
- Strain Name
- Date of Processing
- State of California Labeling Requirements per SB266
- Third Party Certified Test Results For:
 - Microbiological contaminants
 - Mycotoxins
 - Pesticide active ingredients
 - Residual solvent
- THC, CBD, and terpene content

B. Product Testing Plan

IBFF will contract with a Certified Third Party state-certified laboratory to be determined once permits are issued. UPLC and mass spectrometry technology will be used to determine:

- Microbiological contaminants;
- Mycotoxins;
- Pesticide active ingredients;
- Residual solvent; and
- THC, CBD, and terpene content.

We plan to use UPLC technology because it offers the highest standard of data collection and most accurate testing available for all aforementioned issues in today's technology. Samples of all genetic material and varieties cultivated will be pre-tested before cultivating to certify all levels of active compounds fall within our efficacy for targeted medicine. Samples will be taken randomly as each batch is cultivated, and tested to ensure efficacy is maintained throughout our system of cultivation, and that our genetic varieties maintain absolute consistency with our patients' medical and therapeutic needs. All sample data will be readily available

Once the sample is taken, the Agent in Charge or the Lead Cultivator will weigh and seal the sample, and log the weight, date and time it was taken into the Master Log. The Agent in Charge will then deliver the sample in person to the state certified laboratory. Once the sample is in the lab's possession, the sample will be re-weighed, photographed and logged into the lab's system. The Agent in Charge will then log the receiving as "delivered to lab." Any leftover genetic material remaining in the lab's possession after all testing has been conducted will be destroyed by the lab according to state regulations. The test data will be logged by batch number and date, and the information will be available for clients' review. Lab data for each batch will be available for 12 months at our cultivation site. Should any tested material fall below state standards, or our own level of acceptance, the material will be recalled by batch number and destroyed.

19. Product Recall Plan

PRODUCT RECALL PLAN

All products manufactured at our cultivation facilities will bear a unique batch code. We will make every reasonable effort to ensure that our products are not outdated, damaged, or deteriorated, and that information included on the labels is neither misleading nor inaccurate. However, in the event that a recall needs to be initiated, our batch labeling system and procedures will ensure we will be able to respond in an expeditious manner. A recall can also be initiated should any product fail third-party testing due to presence of pesticide or chemical residue. A computergenerated report will compile a contact list from the aforementioned crossreferenced data. This will allow for quick and expedient notification. Customers purchasing the recalled product will be contacted via phone, mail, email, and media outreach. Once patients are notified, they will be instructed to return the product to the point of purchase. Upon arrival at the point of sale, the patient will return the material in question, and it will be weighed. Upon verification of the weight returned, the patient will be provided an equivalent or similar medicine equal in volume and potency to the product that was returned. This replacement will come from a documented batch that has been tested and shown to meet or exceed existing internal quality and potency levels. The unfit recalled material will be collected, weighed, inventoried and then destroyed. All records reflecting or indicating any and all product recalls and disposal due to recall shall be maintained electronically for five years.

20. Emergency Procedure to Farm Staff

Emergency Procedures Instructions to Farm Staff

The first priority in the event of an emergency is for the safety of all people present. Move quickly out of area danger. Meet at assigned meeting place to get a headcount. Enact Emergency Procedures.

Emergency Phone Numbers

Dial 911 for Fire/Police/Ambulance:

- 1. Tell the operator which emergency service you want
 - 2. Wait until the service answers
- 4. Give the following address

2480 Panther Gap Road Honeydew CA, 95545 Humboldt County AP #107-132-005

- 5. Do not hang up until told to do so by the 911 Operator
- 6. Other Emergency Contacts

Humboldt County Sheriff: 707-445-7251

Honeydew Cal Fire: 707-629-3344

Honeydew VFD: CB Channel 9 / 707-629-3445

Humboldt County HazMat: 707-445-6215

Humboldt County Ag Dept: 707-441-5260

Fire and Emergency Procedures Checklist

You must know and understand what to do if a fire occurs. Your first concern is the immediate safety of visitors and staff; secondly, the need to call emergency services and then to contain the fire but only if it is safe to do so. If help is available, allocate responsibilities to others to create a competent firefighting team.

- Evacuate people from the area
- If it is safe to do so, switch off power to all equipment
- Call the fire department (dial 911)
- If a small fire, use your fire extinguisher if it is safe to do so try to contain and extinguish the fire
- If the fire is near a fuel tank, do not attempt to extinguish the fire retreat to a safe distance
- Be prepared to direct the fire service to the scene

Spill Procedures Checklist

You must know and understand what to do if a spill occurs. Your first consideration is the immediate safety of visitors and staff; secondly, the need to call emergency services and then contain the spill if it is safe to do so. If help is available allocate responsibilities to others to create a competent team to deal with the spill.

- If the spill is from the hose or tap, shut the isolation valve
- Warn people in area of the spill evacuate if necessary
- Remove sources of ignition if flammable substance present
- Evaluate the spill only respond if you believe it is safe to do so
- Refer to the safety data sheet or call on an approved handler or other specialists for advice
- If necessary, call emergency services and advise local authority
- Put on safety equipment (e.g. overalls, boots, gloves, eye protection, etc.)
- Contain the spill if it is safe to do so utilise a drip tray or oversize container or spill kit to soak up the substance
- Dispose of waste safely as set out in the material safety data sheet

Incident Reporting

Every accident resulting in injury or damage to farm property must be reported to your manager immediately.

Respond to the accident promptly and positively

Collect relevant information about the accident

Develop and take remedial actions

Complete insurance claims and reports required

First Aid

- A first aid kit must be kept on the premises and maintained
- All staff must know basic first aid procedures

Minor Injury Accidents

- Minor cuts and abrasions must be attended to immediately
- If in doubt contact a physician or call 911

Serious Injury Accidents

- Call an ambulance immediately (dial 911)
 - Seek the assistance of any first responder
 - Stabilize Victim
 - Advise your manager

Property Damage

• All damage to farm property must be reported to your manager

Emergency First Aid-Procedures

Control of Bleeding

- 1. Direct pressure use your hand(s).
- 2. Elevate (raise) the limb
- 3. Apply a pad and firm bandage.
- 4. If necessary use clean rags or clothing.

Remember!!

- · Always check circulation below the bandage!
- If there is tingling, numbness or blueness loosen the bandage.

Management of Burns

- 1. Cool the burnt area with cool water for 10-15 minutes
- 2. If necessary, cover the burn with a clean dressing or plastic wrap before removing person to medical aid.

Remember!!

- Do not burst blisters.
- Do not remove clothing that is stuck.
- Do not apply creams

Management of Eye Injuries

Foreign bodies in the eye(s)

- 1. Wash the eye(s) with eyewash or clean water.
- 2. If the foreign body is stuck to the eye DO NOT attempt remove.
- 3. Place covering over the eye and obtain medical attention.

Management of Chemicals in Eye(s)

- 1. Wash the eye(s) with clean cool water for at least 15 minutes.
- 2. Wash from near the nose outward.
- 3. Always wash under the upper eyelid.
- 4. Obtain medical attention

Breathing

If a person is breathing but unconscious turn them on their side to prevent tongue swelling or vomit from obstructing airway.

If person is not breathing

- · Check airway for blockage and clear
- Call 911
- Administer CPR

Location of Firefighting Equipment, Spill and First Aid Kits

A fire extinguisher is located in the following places:

- All Generator Sheds
- · All Cold Frames
- Fertilizer Storage Facility
- Pesticide Storage Facility
- Drying and Processing Facility

A first aid kit is located in the following places:

- All Generator Sheds
- · Cultivation Site
- Fertilizer Storage Facility
- Pesticide Storage Facility
- Drying and Curing Facility

A spill kit is located in the following places:

- All Generator Sheds
- Cultivation Site
- Fertilizer Storage Facility
- Pesticide Storage Facility