# MAPLE CREEK RANCH CORPORATION CULTIVATION AND OPERATIONS MANUAL v.4

APN- 313-145-006

APPS#- 12154 & APPS#- 15197(RRR)

#### PREPARED FOR:

# HUMBOLDT COUNTY PLANNING AND BUILDING DEPARTMENT COMMERCIAL MEDICAL MARIJUANA LAND USE ORDINANCE (CMMLUO)

#### PREPARED BY:



Six Rivers Development LLC.

Updated:

December 2020

#### **TABLE OF CONTENTS**

#### A. PROJECT DESCRIPTION

- 1. Project Location
- 2. Land Use and Zoning
- 3. Project Objectives

#### **B. PROJECT CONSTRUCTION**

- 1. Project Construction
- 2. Energy Source
- 3. Water Source
- 4. Soils Management Plan
- 5. Environmental Protection
- 6. Hazardous Area Protection
- 7. Sensitive Habitat Areas
- 8. Irrigation Plan
- 9. Current and Projected Water Use
- 10. Water Metering and Usage Monitoring
- 11. Access Roads
- 12. Slope Requirements
- 13. Prime Agricultural Soils
- 14. Setbacks

#### C. CULTIVATION AND OPERATIONS PLAN

- 1. Description of Cultivation Activities
- 2. Cultivation Cycles

#### D. PROCESSING PLAN

- 1. Processing Location
- 2. Description of Harvest Activities
- 3. Description of Processing Activities
- 4. Staffing and Hours of Operation
- 5. Facilities Overview
- 6. Off Street Parking
- 7. Security Plan
- 8. Safety Procedures
- 9. Emergency Procedures

#### E. FERTILIZER STORAGE AND HAZARDOUS MATERIALS MANAGEMENT

- 1. Fertilizer Storage and Application Procedures
- 2. Fertilizer Application and Safe Handling
- 3. Storage Location
- 4. Fire Prevention and Suppression
- 5. Inventory and Record Keeping
- 6. Monitoring of FSA
- 7. Security
- 8. Signage
- 9. Spill Prevention and Preparedness
- 10. Delivery Systems
- 11. Hazardous Waste and Materials Disposal Plan
- 12. Hazardous Material Containment
- 13. Safety Procedures
- **14.** Emergency Procedures

#### F. PRODUCT TESTING AND DISTRIBUTION

- 1. Product Testing
- 2. Product Inventory and Tracking
- 3. Product Distribution

#### G. ATTACHMENTS

- 1. Property Deed (Previously Submitted)
- 2. Articles of Organization (Previously Submitted)
- 3. Operating Agreement (Previously Submitted)
- 4. Site Plan/Route Map/Project Location Map (Updated Maps Attached)
- 5. Indemnification and Hold Harmless Agreement (Previously Submitted)
- 6. Road System Assessment (Previously Submitted)
- 7. Botanical and Wetland Assessments (Attached)
- 8. Archaeological and Historical Surveys (Updated Addendum Attached)
- 9. Emergency Action Plan (Previously Submitted)
- 10. Processing Facility Schematic (Previously Submitted)
- 11. Prime Agricultural Soils Report (Additional Report Attached)
- 12. CEQA Initial Study (Attached)

\_\_\_\_\_

#### A. PROJECT DESCRIPTION

#### A.1. Project Location

Maple Creek Ranch Corporation, hereafter referred to as MCR, is the owner of property located within the County of Humboldt near the community of Maple Creek with APN's 313-145-006, with APPS# 12154 hereafter referred to as (Site). Based on County of Humboldt Geographical Information System (GIS), the parcel is a total of (420) acres.

#### A.2. Land Use and Zoning

The current zoning for the site is **(AE/TPZ)**. Based on the current zoning and the general plan description the sites would be eligible for commercial cannabis cultivation and ancillary support facilities for processing.

#### A.2.(a) Zoning

On parcels 320 acres or larger in size, in the eligible zoning districts described in 55.4.8.2.1, one additional cultivation area permit of up to one acre each for each one hundred acre increment (e.g. 3 for a 320 acre parcel, 6 for a 600 acre parcel, etc.), up to a maximum of 12 permits, may be issued with a Use Permit, subject to the limitations contained in section 55.4.8.10. No more than 20% of the area of Prime Agricultural soils on the parcel may be utilized for commercial medical marijuana cultivation activities.

#### **A.3. Project Objectives**

MCR is proposing 4 Conditional Use Permits (CUP's) for a new cannabis cultivation project in the amount of 4 Acres or 174,240 SF of outdoor cultivation, and 1 Zoning Clearance Certificate (ZCC) for an additional 27,000 SF RRR of outdoor cultivation from APN- 315-011-009/APPS#- 15197 as defined in Humboldt County's Commercial Medical Marijuana Land Use Ordinance (CMMLUO). MCR is also proposing development of a new ancillary support facility (processing/drying) in the amount of 4,800 SF for drying and processing of harvested product, and 6,600 SF of greenhouse nursery. The facilities are to be constructed in accordance with the requirements as spelled out in the CMMLUO and the current adopted building code.

- Obtain 1 Conditional Use Permit (CUP) to allow for new outdoor cannabis cultivation of 43,560 SF/ 1 Acre in accordance with CMMLUO section(s) 55.4.5 55.4.14.
- Obtain 1 Conditional Use Permit (CUP) to allow for new outdoor cannabis cultivation of 43,560 SF/ 1 Acre in accordance with CMMLUO section(s) 55.4.5 55.4.14.

• Obtain 1 Conditional Use Permit (CUP) to allow for new outdoor cannabis cultivation of 43,560 SF/ 1 Acre in accordance with CMMLUO section(s) 55.4.5 - 55.4.14.

- Obtain 1 Conditional Use Permit (CUP) to allow for new outdoor cannabis cultivation of 43,560 SF/ 1 Acre in accordance with CMMLUO section(s) 55.4.5 55.4.14.
- Obtain 1 Zoning Clearance Certificate (ZCC) to allow for an RRR of outdoor cannabis cultivation of 27,000 SF from APN-315-011-009/APPS#- 15197, in accordance with the CMMLUO.
- Obtain necessary approval to allow for cannabis cultivation ancillary support facility for drying and processing of 4,800 SF in accordance with CMMLUO section(s) 55.4.5 55.4.14.
- Obtain necessary approval for 6,600 SF of support nursery facilities
- Obtain necessary approval for 25k MQ Whisper watt diesel generator and 500-gallon diesel storage
- Obtain necessary approval for 200,000-gallon rainwater catchment storage tank
- Necessary approvals for installation of a new well

MCR is proposing to obtain the necessary approvals for MCR's cultivation areas and ancillary facility for the processing of commercial cannabis.

#### B. PROJECT CONSTRUCTION

#### **B.1. Project Construction**

MCR has completed a site plan to outline a strategy for development of the cannabis cultivation sites and ancillary support facilities in accordance with environmental safety and local and state regulations regarding cannabis cultivation.

MCR has contracted with various professional consultants to develop a strategy for development. This strategy outlines procedures for development and provides adequate setbacks of the cultivation areas in accordance with the standards of the CMMLUO as well as a plan to maintain roads utilized for access of the cultivation area and ancillary support facilities needed for the success of the project in accordance with the Performance Standards- Road Systems in section 55.4.12.1.8. The strategy outlines measures to maintain roadways with the installation of water bars and run-off outlets (i.e. culverts). The professional consultants involved in this process are licensed engineering firms as well as licensed professional foresters, and water professionals to consult with on the construction of the project to ensure the environmental and building code requirements outlined by local and state regulatory agencies are adhered to.

\_\_\_\_\_

The outdoor cultivation areas totaling 174,240 SF or 4 acres, will be constructed to utilize existing open areas and not infringe upon forested areas. The cultivation area will be developed utilizing native soils and planting directly in the ground. Organic fertilizers and amendments will be purchased from a local provider and irrigation and fertigation systems will be utilized to ensure water and fertilizers will be applied at agronomic rates. Water meters will be installed, and usage will be logged and submitted annually to regulatory agencies.

#### **B.2. Energy Source**

MCR is proposing to implement diesel generator powered electrical systems to provide for the sites electrical usage. The supplied power source will be provided by a 25kw Whisper Watt diesel generator with 500 gallons of diesel storage and backup power source will be supplied by solar power supply installed on the roof of the proposed drying/processing facility.

The generator will be installed in an enclosed generator shed located near the proposed processing facility and depicted in the site plan. The shed will be constructed to attenuate the noise produced by the generator to adhere to the noise requirements for nearby sensitive habitat of Northern Spotted Owl. The shed installed on a concrete slab and will be insulated with soundproofing materials to accomplish this task. Soundproofing materials used to meet the noise attenuation requirements will include but not be limited to, fiber sound board, foam insulation, foam paneling, etc.

Diesel storage for the generator will be stored in above ground 500-gallon diesel metal storage tank near the processing facility with required setbacks from buildings adhered to, barriers will be installed around the perimeter of the tank to prevent vehicles or equipment from damaging the tank. The tank will be on a raised stand and sitting inside of a secondary containment basin. The secondary containment basin will be rated at 125% of the fuel tank storage to capture and contain all fuel in the unlikely event of a fuel tank failure or accident. The tank, stand, and secondary containment basin will be installed on a slab and under the cover of a roof.

Electrical equipment to be utilized will be installed by a licensed electrician in accordance with current adopted National Electrical Code Standards. Power requirements will be established based on the equipment utilized and will include but not be limited to, irrigation pumps, security systems, egress lighting, support and nursery facilities, dehumidifiers, nursery greenhouse lighting etc.

Solar is proposed as a backup power source for a number of reasons and include but are not limited to, planned power outages, fuel availability, generator failure or maintenance, weather, etc.

\_\_\_\_\_

All electrical equipment, nursery greenhouse lighting, processing and support facilities will have the capability of being operable on generator supplied power and/or solar supplied power.

#### **B.3. Water Source**

MCR is proposing to install a well near the cultivation area to supply the main portion of the projects water needs. Until approvals are issued the well will not be constructed, and in the unlikely event that the proposed new well is found to be hydrologically connected, then water will be trucked from an approved well on a neighboring parcel under the Maple Creek Ranch ownership. The neighboring parcel is APN: 313-146-010

MCR has contracted with Pacific Watershed Associates (PWA) to file water compliance components for the project including if needed, a Notification of Lake or Streambed Alteration (LSA 1602) with the California Department of Fish and Wildlife for surface water diversion. MCR will also enroll in NCRWQCB Cannabis Cultivation Waste Discharge Regulatory Order (Order No. R1-2015-0023) upon project approval. MCR will implement a Water Resource Protection Plan (WRPP) consistent with regulatory requirements. If needed MCR will file for a Small Use Irrigation Registration (SUIR).

In addition to the installation of the proposed well, MCR plans to utilize rainwater catchment and install a 200,000-gallon storage tank and is seeking conditional permitting to do so. Additionally, MCR plans to develop a smaller 50,000 gallons tank farm near the cultivation site. These tanks will be 5,000-gallons each and constructed of hard plastic and will serve primarily as fertigation and irrigation supply reservoirs. MCR will designate one of the 5,000-gallon tanks for fire suppression usage only.

#### **B.4. Soils Management Plan**

MCR plans to utilize the native soils located within the project location and implement standard cultivation techniques as pertains to the utilization of the existing soils. Minimal excavation, grading and tillage of the proposed cultivation site will be conducted upon approval to maximize the sites potential. All soils originating from the excavation and grading process will be evenly distributed throughout the proposed cultivation area as to alleviate the need to remove and or dispose of the soils during the earth working process. During the initial development process amendments will be purchased from local providers and applied to the cultivation area at agronomic rates to condition the native soils and promote healthy crop growth. Periodically additional amendments will be brought in on an as needed basis. The amendments and frequency of application will be cataloged and recorded manually onsite and transposed digitally at the end of the growing cycle. Any disposal of onsite soils will be taken to an approved waste management facility within the County of Humboldt.

#### 1. Transportation/Disposal Off-Site

In the unlikely event of disposal, excavated soil will be loaded directly onto trucks for off hauling to an approved waste management facility within the County of Humboldt. The soil transport vehicles will be equipped with plastic sheeting and will be loaded using a standard front-end loader. After the soil is loaded into the transport trucks, the soil will be covered with secured tarps according to all applicable Department of Transportation regulations to prevent soil from spilling during transport to the waste management facility. Prior to departure, the operations manager will ensure that loose soil debris is removed from trucks via dry brushing the tires and truck body.

If excavated impacted soil is stockpiled on-site prior to off-hauling, it will be placed on a flat, rocked surface and covered with plastic. The sheeting shall be held down with rock-filled bags cross-tied into a weighted net.

#### 2. Winterization

During the off season, the proposed cultivation area will be planted with cover crops and areas of high risk for run-off will be lined with hay berms and or covered with hay to help minimize the impacts to the surrounding environment and watershed.

#### **B.5.** Environmental Protection

Fertilizer and pesticide runoff are a threat to our watersheds and our way of life, procedures will be implemented to minimalize these effects on the watershed and environment. Hay waddles will be utilized to control runoff that may pose the threat of discharging into the watershed. Monitoring points will be established based on the contours and slope of the developed site. Water currently being used is metered and recorded and submitted annually to regulatory agencies.

The cultivation areas to be developed will be lightly graded to provide a workable surface for agricultural crop production. The grading work is to be conducted by a licensed contractor in accordance with approved grading or earthwork plans. MCR will work with a licensed engineer to develop grading plans. Site and road development will implement best practices to minimalize erosion and runoff, such as out sloping of the roads, installation of water bars, culverts, and rock to maintain the integrity of the site.

Environmental review of the site has been conducted in accordance with County and State requirements as pertains to the California Environmental Quality Act (CEQA) by Tami Camper of Trans-Terra

Consulting, and supporting Botanical and Wetland studies were performed by Kyle Wear, both of which are professionals qualified to perform the necessary environmental studies needed. The required studies will be attached as supplemental to this application. MCR is committed to environmental conservation and will implement best practices based on the recommendations outlined in the environmental studies to mitigate potential negative environmental impacts.

#### **B.6. Hazardous Area Protection**

MCR by way of historical geological, and hydrological mapping has identified no known hazardous areas on the proposed project site regarding the following:

- Areas subject to inundation or flooding
- Steep or unstable slopes
- Expansive (clay) soils
- Earthquake Faults
- Hazardous waste or other substance sites

Whereas the abovementioned hazardous areas do not exist on the proposed site, MCR is proposing the installation of a Fertilizer Storage Area (FSA). The FSA will be located inside of the proposed processing/drying facility and will encompass 200 SF. All installations of the proposed equipment will be installed in compliance with local building code and will not pose a threat to any hazardous areas listed above. For more information about the FSA, and containment and hazardous protections, see section E.11 and E.12.

#### **B.7. Sensitive Habitat Areas**

MCR has performed a complete biological, and hydrological review of the proposed project site and identified and notated on the project mapping the sensitive areas. For more information see **attached** "Botanical and Aquatic Survey for Maple Creek Property 313-145-006". Additionally, MCR has complied with requirements of the County, and performed an Initial Study in compliance with CEQA.

#### **B.8. Irrigation Plan**

MCR is committed to responsible farming practices, resource protection, and land stewardship. Necessary measures and procedures will be implemented that align with the local and state regulations regarding cannabis cultivation. Regulations outlined for adequate water storage and forbearance periods for water diversion will be strictly adhered to. MCR is working with PWA, the SWQCRB, and the Department of Fish and Wildlife (DFW) to design and execute a water storage and resource protection

\_\_\_\_\_

plan to help minimize negative impacts on the watershed. Water usage and conservation techniques will be implemented to utilize water efficiently. Water storage will be developed by way of a (10) 5,000-gallon hard tanks and utilize water provided by a proposed new well installed near the cultivation area, and 200,000-gallon rain catchment water storage tank near the proposed nursery and drying/processing facilities. Commercial water meters will be installed in line on both the point of diversion and at the outlet of storage tanks that lead to the cultivation areas. Drip irrigation system will be utilized to deliver water at agronomic rates to more accurately monitor usage for monitoring and recording purposes. Irrigation of the site will take place in the early morning or evening, as to provide maximum soil saturation and limit evaporation due to excessive heat caused by daytime temperatures.

#### **B.9. Current and Projected Water Use**

The cultivation cycle for the proposed project is set to begin in early April and end in late October. More on this cycle is spelled out in the cultivation and operations plan.

Projected water usage is estimated at 80,000 gallons a month and yearly usage at 800,000 gallons. This figure is based on projected usage on 10,000 SF of cultivation area.

#### **B.10.** Water Metering and Usage Monitoring

Commercial grade, analog water meters will be installed at outlet points from water storage tanks that supply the irrigation system for all cultivation areas in accordance with State regulations. In addition, on site water usage logs will be maintained and recorded daily. The water usage logs will be transposed digitally monthly and provided to PWA for monitoring and recoding requirements for the SWQCRB and NCRWQRB.

#### **B.11. Access Roads**

Currently the site is serviced by two County maintained roads, Maple Creek road and Butler Valley road. From these roads there is a short driveway entrance that is rocked and gated. A Road Assessment has been performed (See attached Road Evaluation Reports) and the County maintained access roads meet the Category 4 Road Standards, Standard 2

In addition to existing access to the site, MCR is proposing to improve existing legacy ranch roads that serve as access to cultivation site. Some minimal grading is required to accomplish this, and MCR is seeking the necessary approvals to perform this work. Additionally, for access to the cultivation area and ancillary support facilities, MCR is proposing the development of a new access roads and is seeking the

necessary approvals and allowances. The existing and proposed new cannabis use roads are outlined in the site plan.

#### Standard 2

Unless otherwise specified, roads providing access to the parcel(s) or premises must meet or exceed the Category 4 road standard (or same practical effect). The application package must demonstrate compliance with this requirement in one of the following ways:

- parcel(s) served exclusively by roads which are paved publicly maintained or private roads
  where all portions of the paved road system feature a center-line stripe and two ten-foot-wide
  travel lanes require no further analysis only a notation on the plans that the access to the site
  meets this requirement, or
- 2) parcel(s) served by roads without a centerline stripe must submit a written assessment of the functional capacity of the road segments. If the assessment reveals that all road systems meet or exceed the Category 4 standard (or same practical effect), then no additional review is necessary. Documentation of self-certification shall be produced to the satisfaction of the County; including use of appropriate forms where provided. The County reserves the right to independently verify general compliance with this standard.

#### B.12. Slope

MCR, by way of PWA and Dirty Business Soil Analytics, has performed a slope analysis of the proposed new cultivation site and the areas to be utilized meet the requirements of this section. **Slope is not exceeding 15%.** 

#### **B.13. Prime Agricultural Soils**

MCR has performed the necessary prime agricultural studies in accordance with the requirements from section, 55.4.8.2.1, Approvals for New Outdoor and Mixed-Light Cultivation Areas. Two studies were performed, the first study was performed by PWA which provided findings of 14.01 acres of prime agricultural soils, see attached "Prime soil extent mapping on Humboldt County APN's 313-146-004 and 313-145-006. The second study was performed by Dirty Business Soil Analytics and focused on areas not previously surveyed during the initial PWA study. The second study provided additional findings of 6.7 acres of prime agricultural soils, see attached "Prime Agricultural Soil Assessment, Maple Creek Ranch Corporation". Combined totals from both studies equates to 20.8 acres of prime agricultural

soils, and in accordance with the County's CMMLUO, 20% of that total equates to 4.16 acres of eligible cultivation area. Whereas the total eligibility is 4.16 acres, MCR is only seeking approvals for 4 acres.

#### **B.14. Setbacks**

The site mapping generated will be in accordance with all setback requirements outlined in the CMMLUO.

### C. Cultivation and Operations Plan

#### **C.1. Description of Cultivation Activities**

The cultivation practices that are to be implemented come from years of experience in the industry. MCR plans to contract with a local farm operations and management company that specializes in cannabis cultivation. The plants will be cultivated in open air and planted in the ground in native soils. Soil amendments will be purchased from a local provider. The farm operations and management company will implement outdoor cultivation techniques, and best practices.

MCR by way of their farm management contractor, will implement established cultivation methods and industry specific techniques for cultivating cannabis.

MCR will source rooted clones or seed stock with verified genetics from a licensed nursery. Clones will be provided to MCR in three-inch (3") pots, and seeds will be purchased in bulk allotments. The clones and/or seeds will be transported to the cultivation site and transplanted into the nursery area to acclimate prior to being planted in the cultivation area where they will be grown to maturity.

After clones and/or seeds are transplanted into the cultivation area, irrigation and fertigation will commence. Custom commercial irrigation systems affixed with a commercial grade water meters will be utilized for the fertigation requirements of the crop. Monitoring and recording procedures will be implemented for tracking water and fertilizer as well as pesticide usage as required by the State Water Resource Control Board (SWRCB) and the Department of Pesticide Regulation (DPR). MCR will implement a Water Resource Protection Plan (WRPP) in consultation with a PWA to address water needs for the project.

#### C.2. Cultivation Cycle(s)

April 1st - July 1st : Acquire clones/seeds from Nursery, Transplant and Vegetative Phase

All the plants to be cultivated on-site will originate as a clone and/or seed from a mature healthy plant stock in the vegetative stage or seed stock.

After approval of the genetics to be used for the cultivation cycle, employees of the operations and management company will commence the transplanting of the clones and/or seeds into the cultivation area where they will remain until maturity. At this point in the cultivation cycle it is imperative that the plants receive high amounts of nitrogen for rapid new growth development. The operations and management team have over the years developed a proprietary blend of fertilizers and supplements that will be used to accomplish this task. All fertilizers and supplements to be used will follow local and state regulations regarding application at agronomic rates and safe handling procedures.

# June 1<sup>st</sup>- July 1<sup>st</sup>: Crop Irrigation and Fertigation, Pesticide and Fungicide Control, Start clones/Seeds for second crop

The plants will be irrigated using a pump driven irrigation system with adjustable emitters that can be adjusted from 0-10 gallons a minute. This system is specifically designed for large scale crop irrigation and is effective in delivering precise amounts of fertilizer at agronomic rates to each plant. The irrigation system will be affixed with a commercial grade water meter for monitoring and recording purposes in conjunction with the SWRCB's regulatory requirements. Pesticide and Fungicides will be applied by utilizing sprayers at agronomic rates and amounts will be recorded.

#### July 1st - October 1st: Crop harvest, Replant, Irrigation and Fertigation, Pesticide and Fungicide Control

The first crop will be harvested, and the second crop will be planted. The plants will be irrigated using a pump driven irrigation system with adjustable emitters that can be adjusted from 0-10 gallons a minute. This system is specifically designed for large scale crop irrigation and is effective in delivering precise amounts of fertilizer at agronomic rates to each plant. The irrigation system will be affixed with a commercial grade water meter for monitoring and recording purposes in conjunction with the SWRCB's regulatory requirements. Pesticide and Fungicides will be applied by utilizing sprayers at agronomic rates and amounts will be recorded.

#### October 1st - November 1st: 2nd Crop harvest, Processing, and Farm Winterization

During this time the crop will be nearing the end of its cycle and harvested upon ripeness. Pesticides and fungicides will no longer be applied, and irrigation of the crop will continue until the crop is harvested. Fertilization of the crop will also cease as the leaching of the of nutrients is desired. Upon harvesting the crop, maintenance repairs and non-essential equipment will be broken down and stored for the off season. The final harvest will occur by mid- October and the farm will be decommissioned for the off

season, plants will be removed cut down and hung to dry in the proposed 4,8000 SF drying and processing facility onsite. Upon completion of the harvest root balls from the prior cycle will be removed from the cultivation area and composted. All trash will be bagged and brought to an approved landfill within the county of Humboldt. After the site has been cleaned and prepared for the winter, the cultivation area will be amended with beneficial microbial inoculants and cover crops to maintain soil condition. Winterization of the farm, and equipment repairs will be made in preparation for the following season.

It is important to understand that these time frames are contingent on a variety of factors, but not limited to availability of clones/seeds from a permitted nursery, inclement weather, natural disaster, wildfires, drought and theft.

### **D. Processing Plan**

#### **D.1. Processing Location**

MCR is proposing permitting for an onsite processing facility. The facility will provide adequate space for minimally processing product produced onsite (i.e. Drying and Bucking). The proposed facility is 4,800 SF and will be designed to adhere to all local and state building code requirements for the facility. The facility will be utilized for drying, curing, processing and storing of product ahead of sale to a licensed distributor or manufacturer.

MCR will contract with a licensed engineer for the design of the proposed 4,800 SF facility and a licensed contractor for the construction of the facility.

#### **D.2. Description of Harvest Activities**

Harvesting of the crop will be executed at the discretion of the operations and management teams lead agent at various time throughout the year. All determinations will be based on scheduling and crop readiness.

Harvesting will be performed by hand and will employ the use of seasonal laborers. The process is long and repetitious and requires minimal skill or training. The plants will be harvested by lot and batch number and transported to the proposed drying and processing facility where they will be hung on a custom drying rack designed to allow even distribution of the product for controlling air movement and humidity levels. The hanging product will be categorized by lot and batch number and all steps will be taken to comply with State track and trace regulations. By ensuring all lot numbers are kept separate the management can better estimate total yields and record product for tracking purposes during the processing stage.

\_\_\_\_\_

After the drying of the harvested product is completed, the process of removing the cannabis from the stem will begin. This process is also known as "Bucking". Before processing can begin each lot must be completely bucked and a gross weight will be recorded for each lot. All waste product from each lot will be collected, weighed, recorded, and composted. The processing manager will oversee employee supervision, production deadlines, product weight recording, and inventory. Inventory and processing records will be maintained both in paper form and digital form, by way of spreadsheets generated by the management and operations agent and uploaded to the approved software program for tracking purposes.

#### **D.3. Description of Processing Activities**

After bucking is completed and gross weight has been recorded and entered into the track and trace platform, processing will begin. MCR will contract with a licensed processor or manufacturer to accomplish this task at which point a product manifest will be generated and product transfers will occur.

#### D.4. Staffing and Hours of Operation

MCR by way of their contracted management and operations team will employee eight (8) full time employees throughout the year to carryout cultivation tasks, and ten (10) part time or seasonal employees for harvesting and processing. The operations and management team provide safety trainings consistent with State agricultural laws and workers compensation coverage as well as manage payroll. Work hours will be Monday – Saturday from 8am to 5:30pm with adequate rest periods consistent with State labor laws during the workday regarding breaks and time off.

#### **D.5. Facilities Overview**

MCR's proposed 4,800SF processing facility will adhere to all local and state building code requirements. **Portable Toilet and handwashing facilities will be provided onsite,** antibacterial soap to prevent contamination, and disposable paper hand towels. Signage will be posted within the restroom facilities in compliance with the Department of Health's regulations.

MCR will provide non-communal purified drinking water via bottled water purchased from a local store.

#### **D.6. Off Street Parking**

All off street parking for the proposed processing facility will adhere to the requirements outlined in the Humboldt County Zoning Regulations section 313-109.1.

For the proposed project MCI will develop the following parking and loading spaces in accordance with the requirements of Humboldt County Zoning Regulations off-street parking **Section 109.1.4.4.3** 

- 5 standard parking spaces measuring 8'x18'
- 1 disabled/handicap parking space measuring 14'x18'
- 1 loading zone measuring 10'x60'

#### 109.1.3.1

Location of Off-Street Parking- Required parking facilities shall be located on the same building site and conveniently proximate to the use or uses they serve, and shall be designed, located, constructed and maintained so as to be fully and independently usable and accessible at all times. Exceptions to the location requirement for parking facilities for commercial uses may be allowed if it is found that: (Former Section CZ#A314-26(C)(1))

#### 109.1.3.2.1

Each normal size parking space shall be not less than eight feet (8') wide, eighteen feet (18') long and contain seven feet (7') of vertical clearance; (Former Section CZ#A314-26(C)(2)(a))

#### 109.1.3.3

Required Off-Street Parking

Off-street parking facilities shall be provided for any new building constructed and for any new use established.

(Former Section CZ#A314-26(C)(3))

#### 109.1.3.7

Lighting

Any lights used to illuminate the parking spaces or driveways shall be designed and located so that direct rays are confined to the property where the parking is located. (Former Section CZ#A314-26(C)(7))

#### 109.1.3.8

Parking Facilities for the Physically Handicapped Facilities accommodating the general public, including but not limited to auditoriums, theaters, restaurants, hotels, motels, stadiums, retail establishments, medical offices and office buildings shall provide parking spaces for the physically handicapped in compliance with the Humboldt County Code and the following provisions: (Former Section CZ#A 314-26(C)(8)) 109.1.3.8.1 The handicapped parking spaces shall be fourteen feet (14') wide and eighteen feet (18') long. (Former Section CZ#A314-26(C)(8)(a))

\_\_\_\_\_

#### 109.1.3.8.2

Parking facilities containing six (6) through forty (40) spaces, inclusive, shall include one (1) handicapped parking space permanently signed with the International Symbol of Accessibility. One handicapped space shall be provided for each additional forty (40) spaces or portion thereof. (Former Section CZ#A314-26(C)(8)(b))

#### 109.1.4.4.3

<u>Warehouse.</u> The higher of either: one (1) parking space for every (4) employees: or one (1) parking space for each 2,500 square feet of gross floor area. (Former Section CZ#A314-26(D)(4)(c))

#### D.7. Security Plan

In addition to the previously outlined security measures MCR's operations and management agent will implement procedures to properly secure the processing facility during and after hours of operation. Only management will be authorized in these locked areas to mitigate potential theft. All product at the end of the shift will be returned to these locked areas and remote monitoring via closed circuit video surveillance will be utilized for both operational and non-operation hours.

#### **D.8. Safety Procedures**

The management and operations agent will impose strict policy regarding safety. All employees will be always required to wear Personal Protective Equipment (PPE), such as but not limited to; closed toe shoes with non-skid bottoms safety glasses and latex gloves. Safety precautions will be further outlined by the management team in the employee orientation.

#### **D.9. Emergency Procedures**

MCR's contracted farm operations and management agent will implement emergency protocols for the sites. Locations for employees to meet in the event of an emergency, exit routes, and strategies for defense from natural disasters (i.e. earthquakes, inclement weather, and wildfires,) will be developed and employees will be provided with this information in the orientation process. Basic instructions will be outlined in an "Emergency Action Plan". (See Attached Emergency Action Plan)

\_\_\_\_\_

#### E. FERTILIZER STORAGE AND HAZARDOUS MATERIALS MANAGEMENT

#### **E.1 Fertilizer Storage and Application Procedures**

- All fertilizers will be stored separate from other chemicals in dry conditions.
- Extra care will be given to concentrated stock solutions by providing secondary containment for all authorized products.
- Secondary containment will be sized at 125% of the total amount of fertilizer/pesticides being stored in that containment.
- All products will be stored off the ground.
- Where necessary pallets will be utilized to keep large drums or bags off the floor.
- The storage will be locked at all times to prevent unauthorized use of fertilizers, as well as the chance of accidental spills, theft, and to deter wildlife.
- Fertilizer storage area will be clearly labeled as a Fertilizer Storage Area (FSA).
- Labels of the contents of the fertilizer storage area will be posted on the door of the building to alert emergency responders about the contents of the FSA and other products present during an emergency response to a fire or a spill.
- MSDS and Emergency Action Procedures will be clearly marked and located in the onsite in the FSA.
- Adequate access to the FSA will be provided for deliveries and making the storage area secure, and to allow getting fertilizers and other chemicals or personnel out in a hurry.

#### E.2 Fertilizer Application and Safe Handling

- Approved fertilizers and pesticides are to be handled in a manner as to not cause harm to the applicator or the environment.
- All fertilizers and pesticides are to be applied at a rate which is consistent with its labeling.
- Only CALEPA, and DPR compliant products will be utilized onsite.
- Personal Protective Equipment (PPE) is required anytime fertilizers or pesticides are handled or applied, and PPE is to include, but are not limited to the following items: gloves, eye protection, face shields, respirators, and dust masks.

#### **E.3 Storage Location**

- Fertilizer will be stored in their original containers unless damaged.
- Labels will be visible, readable and in plain sight.
- Containers are not permitted to come into direct contact with floor.

\_\_\_\_\_

- All containers will be stored in an up-right position and secured to prevent from falling over.
- Aisles or walkways will be kept clear at all times and made wide enough to comfortably accommodate workers or emergency personnel.
- Containers are not permitted to be stacked or crowded on shelves or pallets.
- Partially used containers are to be resealed and returned to storage.
- All open bags are to be sealed inside another larger container, labeled and placed in secondary containment.
- Damaged containers are to be immediately repackaged, labeled, and stored in another larger container and place in secondary containment.

#### **E.4 Fire Prevention and Suppression**

- Fire extinguishers will be clearly marked and located within the FSA.
- Emergency contact information and procedures will be located within the FSA.
- Smoking is strictly prohibited within the FSA as well as within 50ft of the FSA.
- Flammable or combustible products will be clearly labeled as so and be stored separately from non-flammable or non-combustible products.

#### **E.5 Inventory and Recordkeeping**

- Inventory will be actively maintained as chemicals are added or removed from the FSA.
- Containers will be dated when purchased.
- Outdated materials will be removed and disposed in accordance with proper disposal guidelines set by the state pesticide and fertilizer regulating authority.
- Regular recording of inventory will be conducted to prevent the accumulation of excess material.
- Application or usage of fertilizers or pesticides will be recorded on a regular basis.

#### **E.6 Monitoring of FSA**

A monthly inspection of the FSA will be conducted for the following:

- Signs of container corrosion or other damage.
- Spill kit re-stock (if needed).
- Faulty ventilation, electrical, and fire suppression equipment.
- Updates to the Emergency Action Plan.
- All required postings are current and clearly visible.

#### E.7 Security

• The FSA will be locked, and access restricted to unauthorized personnel.

#### E.8 Signage

- The contents of the FSA will be clearly posted at the entrance.
- Warning signs will be used as needed to alert personnel.
- Emergency contact information will be posted within the FSA as well as in the caretakers living quarters.

#### **E.9 Spill Prevention and Preparedness**

Opening fertilizer product containers, measuring amounts, and transferring fertilizer to the delivery system involves some level of risk from spills.

- Secondary containment will be utilized for fertilizer stock.
- Spill clean-up materials will be readily available for liquids (e.g., absorbent materials) and solids (e.g., shovel, dustpan, broom, and buckets)

#### **E.10 Delivery System**

- Fertilizers are to be mixed at a rate consistent with the manufacturers labeling.
- Emitters and commercial grade water meters are used to precisely calculate amounts of fertilizers and water applied to the crop.
- Gas powered, or solar powered electrical pumps will provide the irrigation system with the solution for the crop.

#### E.11 Hazardous Waste and Materials Disposal Plan

All spent materials utilized for the construction and operations of the proposed project will be removed and transported to an authorized waste management facility within the County of Humboldt. The preferred location for disposal is **Humboldt Waste Management in Eureka**, **CA**. All materials used for fertigation or pest and disease control will be triple rinsed and drained into fertigation and pest or disease control equipment and used in the next application to the crop. There is no domestic trash or waste on site as there is no domestic residence. Trash from daily operations and employee areas will be bagged onsite and removed weekly and transported to the above-mentioned waste management facility. Solid or human waste will be captured by utilizing portable facilities maintained by **Six Rivers Portable Toilets in Blue Lake, CA.** Operator will maintain service records and receipts for these facilities

\_\_\_\_\_

in accordance with State agricultural field sanitation laws and regulations. Non-usable plant materials will be composted onsite and amended into the soils the following year.

#### **E.12 Hazardous Material Containment**

For areas and equipment utilized that pose a potential threat to the environment, (i.e., gas powered pumps, sprayer cleanout, FSA, etc.) secondary containment measures will be implemented to mitigate potential exposure to the environment. Secondary containment will be calculated at 125% of the total volume of the Hazardous material stored or utilized.

#### **E.13 Safety Procedures**

MCR plans to contract with a local farm operations and management company that will implement farm safety requirements, trainings, and certifications that have been adopted by the state. Currently, the Occupational Safety and Health Administration (OSHA) has minimal safety requirements that must be adhered to for those seeking state licensing.

All employees will be provided with an orientation of the site and receive a reference manual that will outline safety precautions, emergency contacts, Personal Protective Equipment (PPE) requirements, locations of medical equipment, hand wash/eye wash stations, and bathroom facilities. Employees will always be monitored by the site supervisor and injury occurrences will be recorded and reported immediately. The farm operations and management company will have private liability insurance and state worker's compensation insurance that will cover any unfortunate occurrences.

#### **E.14 Emergency Procedures**

MCR's contracted farm operations and management agent will implement emergency protocols for the site. Locations for employees to meet in the event of an emergency, exit routes, and strategies for defense from natural disasters (i.e. earthquakes, inclement weather, and wildfires,) will be developed and employees will be provided with this information in the orientation process. Basic instructions will be outlined in an "Emergency Action Plan". (See Attached Emergency Action Plan)

#### F. PRODUCT TESTING AND DISTRIBUTION

#### F.1 Product Testing

MCR will contract with a state certified testing laboratory to perform product testing requirements as outlined by the States regulations. The testing will include a complete breakdown of the product and will be used to determine the following:

- Pesticides
- Molds and/or Microbial contamination
- Potency, CBD, THC, and Terpene content
- Residual Solvents
- Mycotoxin

Testing will occur throughout the cultivation cycle, and when the crop is harvested. MCR will implement liquid chromatography analysis to determine the abovementioned data. Samples will be submitted in person to a State licensed testing facility and records of the test results will be maintained by the laboratory and MCR's operations agent for one year. All product that test below the acceptable allowances will be noted and destroyed.

#### F.2 Product Inventory and Tracking

MCR will adhere to County and State requirements by enrolling in an approved track and trace program

#### **F.3 Product Distribution**

MCR will use a State licensed distributor for the transportation and distribution of processed product to licensed dispensaries throughout the State of California in accordance with the requirements outlined in the State regulations. Through approved software the operator will be able to issue a transportation manifest. This manifest is required for each point of sale and will be recorded in the distribution master log.

The lead operator and processing management team will be responsible for preparing the product for distribution. The management team will ensure that outgoing product inventory coincides with the distribution manifest and the master log. The distributor will be responsible for maintaining the manifest which will include the following information:

- Origin of sourced product
- Product type
- Condition of received product
- Product weight
- Travel routes
- Date and time of departure
- Date and time of arrival

## **G.** Attachments

30" Drip Line 1 Bed= 2 Drip Lines Total Drip Line Output= .26GPH/100'
Total Daily Output Per Bed/Day=25GPD
Total Rows/ Acre: 83 Total GPD/Acre= 2,075 Total Cultivation Cycle=180 Days Irrigation Cycle=90 days Total Irrigation= 186,750 GPA GPH= Gallons Per Hour GPD= Gallons Per Day GPA= Gallons Per Acre 208'

Calculations Derived From: Netafim Irrigation

Prepared By: Six Rivers Development LLC



# PioneerLine PC



REAL PRESSURE COMPENSATING
TECHNOLOGY FOR PRECISE
FLOWS IN ANY TERRAIN

## IT TAKES A PIONEER TO UNDERSTAND A PIONEER ™





#### **CONTAINS RECYCLED MATERIAL**

Committed to Sustainable Agriculture, this Netafim Product contains recycled driplines.



## UNIFORMITY FROM THE FIRST EMITTER TO THE LAST EMITTER

Pressure Compensating technology delivers precise flows in undulating terrain. Large fields with long rows (up to 50% longer) recieve the exact amounts of water.



## A SUSTAINABLE PRODUCT FOR THE SAVVY GROWER

Save water and nutrients while reduce plastic footprint by using a Netafim ReGen product. All this while increasing yield and profitability.



Netafim Financial Solutions Available for \*Hemp Growers

\*Restrictions Apply



#### PRECISE WATER AND NUTRIENT DELIVERY

Water and nutrients are delivered directly to the crop's root zone, ensuring every single plant receives the same amount of water and nutrients for higher yields and uniformity.



# REDUCE PLANT STRESS THROUGHOUT THE SEASON:

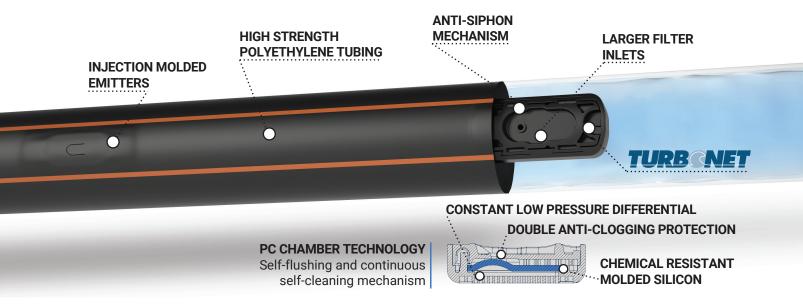
Netafim's low flow options enable growers to match irrigation with the plant's water needs, mitigating risks of plants stress.



#### **ANY WATER. ANYWHERE:**

Netafim's dripper require less filtration than any other dripline in the marketplace. Consult with your Netafim Representative for the right Filtration Solutions.

# MOST RELIABLE PRESSURE COMPENSATING DRIPLINE HIGHEST UNIFORMITY AND YIELD FOR MAXIMUM SAVINGS



#### **TECHNICAL INFORMATION**

SPECIFICATIONS				
PIONEERLINE PC	WALL THICKNESS (MIL)	INSIDE DIAMETER	NOMINAL FLOW RATES GPH @ 10 psi	
636 SERIES	15	0.636"	.16, .26	
875 SERIES	15	0.875"	.16, .26	

Recommended filtration: 120 Mesh

MAXIMUM PRESSURE RANGES				
WALL THICKNESS	OPERATING (psi)	FLUSHING (psi)		
636 SERIES 15 MIL	32	48		
875 SERIES 15 MIL	26	39		

