SOUL ARC SOLUTIONS, INC CULTIVATION AND OPERATIONS MANUAL HUMBOLDT COUNTY, CA

COMMERCIAL CANNABIS CULTIVATION

PREPARED FOR:



UPDATED APRIL 2019

Cultivation and Operations Manual For Soul Arc Solutions, Inc.

Commercial Cannabis Cultivation

Lead Agency: **Humboldt County Planning Department**3015 H Street
Eureka, CA 95501

Originally Prepared By: *Manhard Consulting* 517 3rd Street, Suite 6 Eureka, California 95501

In Consultation with: Canigou, Inc P.O. Box 38 Samoa, CA 95564

April 2017

Updated By: **Soul Arc Solutions, Inc.** 5600 West End Rd. Ste. G Arcata, CA 95521

> March 2019 April 2019

This page intentionally left blank

TABLE OF CONTENTS

1. Project Summary	4
1.1. Project Narrative	4
1.2. State and Local Compliance	4
1.3. Authorization for County of Humboldt Staff	5
2. Operations Plan	6
2.1. Water Supply, Storage, and Projected Water Use	6
2.2. Site Drainage, Runoff, and Erosion Control	6
2.3. Watershed and Habitat Protection	7
2.4. Use and Storage of Regulated Products	7
2.5. Waste Management Plan	9
2.6. Employment Plan	9
3. Cultivation and Processing Plan	11
3.1. Cultivation Plan	11
3.2. Processing Plan	13
3.3. Security Plan	13-13
3.5. Transportation and Distribution Plan	14
4. Resources	15
Appendix A: Site Plan	
Appendix B: Pesticide Storage, Handling, and Application Plan	

Appendix C: Emergency Procedures and Contact Information

1. PROJECT SUMMARY

1.1. PROJECT NARRATIVE

Soul Arc Solutions, Inc. ("Soul Arc") is proposing to permit existing mixed-light commercial cannabis cultivation activities in accordance with the County of Humboldt's ("County") Commercial Medical Marijuana Land Use Ordinance (CMMLUO). The project requires a Conditional Use Permit for approximately 14,247 square feet (sf) of cannabis cultivation. The project includes the permitting of existing facilities appurtenant to the cultivation including greenhouses and supporting infrastructures. The applicant aims to become fully compliant with State and Local cultivation regulations.

The Project is located at 12023 Wilder Ridge Road, (APN 108-012-009) approximately 2.6 miles north of the Ettersburg area. The subject parcel is approximately 80 acres in size (per the County of Humboldt's WebGIS), having a majority of relatively mountainous topography and slopes in excess of 30% gradient. The northern half of the property slopes toward the Mattole River and is covered with mixed fir, oak, and madrone forest. The southern half of the property slopes south and west, also toward the Mattole River, and is also fir and oak forest. The existing 14,247 sf of cultivation is located within greenhouses centered on a ridge at the western side of the parcel.

The subject property is located outside of the Coastal Zone, and has a Humboldt County General Plan designation of Timber Production (T-FRWK), and is zoned Agriculture Exclusive and Timber Production Zone (AE;TPZ). The property contains no prime farmland according the Humboldt County WebGIS. Land uses surrounding the parcel are all comprised of Timber Production. The surrounding parcels are zoned Agricultural Exclusive (AE), and Timber Production Zone (TPZ).

1.2. STATE AND LOCAL COMPLIANCE

1.2.1. STATE OF CALIFORNIA COMMERCIAL CANNABIS CULTIVATION LICENSE

Soul Arc has obtained a Temporary Commercial Cannabis Cultivation License from the State of California and has submitted an application for an Annual Commercial Cannabis Cultivation License.

1.2.2. STATE WATER RESOURCES CONTROL BOARD

Soul Arc has secured authorization from the State Water Resources Control Board for the seasonal diversion and use of 0.6-acre feet of water for storage from the Mattole River. Soul Arc diverts to a series of water storage tanks during the winter rainy season of December 15 to March 31.

1.2.3. North Coast Regional Water Quality Control Board

Soul Arc is enrolled with the North Coast Regional Water Quality Control Board (NCRWQCB) Order No. 2015-0023.

1.2.4. HUMBOLDT COUNTY BUILDING DEPARTMENT

Building permits will be obtained from the Humboldt County Building Department for all structures and grading activity upon approval of Conditional Use Permits (CUP).

1.2.5. CAL FIRE

The subject property has a Timber Production (T) designation as identified by the Northern Humboldt General Plan (NHGP) and is zoned Timber Production Zone (TPZ).

1.2.6. CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

A Lake and Streambed Alteration Agreement (LSAA) has been obtained from the Department of Fish and Wildlife (DFW) for the diversion of surface water from Mattole River to storage facilities onsite. Soul Arc will not divert water from Mattole River during the forbearance period.

1.3 AUTHORIZATION FOR COUNTY OF HUMBOLDT STAFF

Per the County of Humboldt's *Commercial Medical Marijuana Land Use Ordinance No. 2544* (CMMLUO) §314-55.4, the *Soul Arc Solutions, Inc. Cultivation and Operations Manual* contains the required information for operating cannabis cultivation facilities within the limits of the County of Humboldt. The operations detailed in the manual follow the operating standards described in CMMLUO §§314-55.4.10 and 314-55.4.11.

Soul Arc is committed to maintaining all necessary permits. Staff is required to adhere to the *Soul Arc Solutions, Inc. Cultivation and Operations Manual* to ensure compliance with state and local regulations. Through this application, the applicant authorizes the County of Humboldt, its agents and employees, to seek verification of the information contained within this application, including verification of the operations as described in the *Soul Arc Solutions, Inc. Cultivation and Operations Manual*.

Soul Arc consents to onsite inspection of the parcel by County officials at a prearranged date and time in consultation with the applicant prior to issuance of any permit and once annually thereafter. Soul Arc acknowledges that the County reserves the right to reduce the size of the area allowed for cultivation in the event that environmental conditions, such as sustained drought or low flows in the watershed, will not support diversions for irrigation. Soul Arc also acknowledges that the County reserves the right to engage with local Tribes before consenting to issuance of any permit.

2. OPERATIONS PLANS

2.1. WATER SUPPLY, STORAGE, AND PROJECTED WATER USE

Water provision for cultivation is achieved from one Point of Diversion (POD) on the Mattole River within the subject parcel, and a rainwater catchment pond. Soul Arc has been authorized by the State Water Resources Control Board, *Certificate H100206*, to seasonally divert 0.6-acre feet of water for storage from the Mattole River. Soul Arc diverts to a series of water storage tanks during the winter rainy season of December 15 to March 31.

Soul Arc has a Notification of Lake or Streambed Alteration with DFW to include the POD and a total of 161,000-gallons of hard storage in tanks, including a 136,000-gallon tank and multiple tanks ranging in size from 1,000 to 5,000 gallon.

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

Table 3.1: Estimated Annual Irrigation Water Usage (Gallons)											
Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
>10k	>10k	10,000	20,000	40,000	40,000	40,000	40,000	40,000	20,000	>10k	>10k

2.2. SITE DRAINAGE, RUNOFF, AND EROSION CONTROL

Soul Arc is enrolled with the North Coast Regional Water Quality Control Board (NCRWQCB) for Tier 2 coverage, and a Water Resources Protection Plan (WRPP) has been developed utilizing best management practices (BMP's) in accordance with the NCRWQCB's recommendations. The drainage and erosion control measures described below are referenced from the WRPP report and measures detailed in Attachment B.

2.2.1. SITE DRAINAGE AND RUNOFF

The site is located on a ridge with mild to extreme slopes with the majority draining toward the south-east region of the property and into the Mattole River. The western region of the property drains to the north-west into tributaries of the Mattole River. Three class III drainages direct flows from below the cultivation area to the Mattole river at the eastern edge of the property. Between the developed area and all focused drainages there are significant vegetated buffer areas that prevent sediment delivery.

There is a main road to the upper cultivation site, to the drying shed, and to the point of diversion on the Mattole River totaling approximately 1.5 miles in length. The main road network was noted in the 2017 WRPP as needing maintenance and treatments to aid drainage protection. There are three stream crossings on the parcels road network. Corrective actions are specified in the WRPP and Best Management Practices (BMPs) selected with priority given based on threat to water quality and multi-year treatment planning. All noted road and stream crossing improvement projects were completed as of August, 2018. Fertilizers and pesticides are currently stored in a shed with secondary containment to prevent contamination with runoff. Sites have been identified for storage/disposal of spoils and cultivation waste.

2.2.2. Erosion Control

The Water Resource Protection Plan (WRPP) includes erosion and sediment control BMP's designed to prevent, contain, and reduce sources of sediment. See the WRPP sections titled *Water Resources Protection Plan Map* Attachment A. and *WRPP Design Plans* Attachment B. for complete BMP recommendations and specifications.

2.2.3. ROAD USE AND MITIGATION STRATEGY

Soul Arc has completed its initial road repair and maintenance activities. All roads are out sloped, and rolling dips have been inserted at regular intervals as required for standard maintenance for logging roads. All outlets for water are clear of debris and allow free flow of water from the road surface. All berms have been removed. In addition, all roads on the property are in the process of being rocked. Seasonal maintenance will include regrading of out slopes and rolling water bars to ensure good run off. We will also replace rock where necessary.

Soul Arc will conduct road maintenance inspections during any and all *major rain events*. Soul Arc considerers a *major rain event* to be any rainfall above one half inch (1/2"). This inspection will include observing existing features for any minor or major issues, such as rolling dips, standing water in outlets, and the diversion of water running directly down and eroding the road surface.

Soul Arc will implement procedures to reduce traffic on our roads. Transportation and deliveries of cannabis and associated supplies will be delivered in bulk to minimize road impacts. By processing offsite, Soul Arc will mitigate the need for a large number of employees for processing, therefore, reducing the number of daily trips to the property.

Soul Arc will encourage ride-sharing to and from the site by employees. All employees will be trained on the ride-share and trip minimization policy and be required to sign a pledge to adhere to all driving and road use policies set by Soul Arc. Speed limit signs are posted and compliance with the speed limit policy will be enforced.

2.3. WATERSHED AND HABITAT PROTECTION

Adherence to the Water Resource Protection Plan (WRPP) ensures that the watershed and surrounding habitat are protected. The cultivation activities and associated structures are >400 feet from the nearest watercourse, providing a suitable buffer between the cultivation operation and habitat. Additionally, site development and maintenance activities utilize BMP's in accordance with the NCRWQCB's recommendations. Any grading and earthwork activities will be conducted by a licensed contractor in accordance with approved grading plans and permits and the WRPP.

2.4. Use and Storage of Regulated Products

The State of California Agricultural Department as well as the Humboldt County Agricultural Department recognize the need for use of pesticides and fungicides. Soul Arc will employ best management practices when storing, handling, mixing, application and disposal of all pesticides/fungicides.

Soul Arc will follow required regulations in the storing, handling, mixing, application and disposal of any and all pesticides.

All nutrients, pesticides and fungicides will be stored in accordance with manufacturer's instructions. In addition, at any place where pesticide/fungicide are to be stored, handled, mixed, applied or disposed, Soul Arc will provide saline eye wash stations, emergency containment, and clean up kits as prescribed in the State of California Agricultural Department Pesticide Applicators License handbook (see Appendix D - Pesticide Storage, Handling and Application Plan and Water Resources Protection Plan for detailed descriptions of practices). Nutrients, fertilizers, and pesticides are listed in the below table.

Product	Туре			
Earth Juice Seablast Grow(17-8-17)	dry fertilizer			
Earth Juice Seablast Bloom(3-26-22)	dry fertilizer			
Earth Juice Bloom master(0-50-30)	dry fertilizer			
Liquid Fish(2-3-0.2)	Liquid fertilizer			
Liquid Kelp	Liquid fertilizer			
Molasses(1-0.1-3)	Liquid fertilizer			
Calcium Metalosate	dry fertilizer			
Epsom Salt	dry fertilizer			
Fish Bone Meal(3-16-0)	dry fertilizer			
Feather Meal(12-0-0)	dry fertilizer			
Fermented digestate/compost	organic additive			
Gypsum	soil conditioner			
Hi-Phos Bat Guano	dry fertilizer			
Calcium Silicate	dry fertilizer			
Volcanic Rock Dust	dry fertilizer			
Nitrogen Bat Guano	dry fertilizer			
Agricultural Lime	soil conditioner			
Blood Meal	dry fertilizer			
Fish Meal	dry fertilizer			
Sulfate of Potash(0-0-2)	dry fertilizer			
Sulfur 99% powder	dry pesticide			
Regalia	Liquid biofungicide			
Venerate	Liquid bioinsecticide			
Grandevo	dry bioinsecticide			
Zerotol/Oxidate 2.0	Liquid fungicide			

Botanigard	Dry bioinsecticide
Plant Therapy	Liquid pesticide

All liquid nutrients are stored in 5 gallon buckets. All dry nutrients are stored in 50 pound bags and 50 gallon drums.

Diesel fuel for on-site power generators will be brought to the site as needed.

Propane fuel is stored in a 5 and 10 gallon tanks which will be properly anchored and secured.

Bleach and rubbing alcohol (approximately 2 gallon of each) are stored within the shed.

Generator maintenance including motor oil and coolant changes will be performed off site.

A copy of the Operations Plan will be kept on site by the *General Manager* and will contain all safety data sheets for all regulated products used on site (SDS).

2.5. WASTE MANAGEMENT PLAN

2.5.1. SOLID WASTE MANAGEMENT

All waste and recycling on site will be collected in lidded trash containers and transported weekly to the adjacent southern parcel, APN: 108-012-010, also managed by Soul Arc. A trailer with side walls and cover will be utilized for transportation of waste. Waste is removed from the adjacent property every week and is transported to Redway Waste Authority transfer station and/or Eel River Disposal.

Spent soil will be stockpiled and in a depressed stockpile area to prevent erosion and will be amended and re-used the following season.

2.5.2. WASTEWATER MANAGEMENT

There is no proposed wastewater generation and are no wastewater treatments on site. All employees will have access to restrooms located on the adjacent southern parcel. The septic system for that location has been designed to accommodate a peak count of 6 employees who operate cultivation activities on both parcels. The proposed primary treatment leach field consists of two 40-foot trenches. The reserve treatment has been designed as an infiltrator system with two 60-foot trenches.

2.6. EMPLOYMENT PLAN

2.6.1. ALATORRE-ZENOVICH-DUNLAP-BERMAN AGRICULTURAL LABOR RELATIONS ACT STATEMENT

Soul Arc is an "agricultural employer" as defined in the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975 (Part 3.5 (commencing with Section 1140) of Division 2 of the Labor Code), to the extent not prohibited by law.

2.6.2. CALIFORNIA AGRICULTURAL EMPLOYER COMPLIANCE

Soul Arc will comply with all applicable federal, state and local laws and regulations governing California Agricultural Employers.

2.6.3. JOB DESCRIPTIONS AND EMPLOYEE SUMMARY

- > General Manager: Oversight and management of the entire facility. Responsibilities will include but not be limited to: personnel, records keeping, budget, and liaison with State and County inspectors as needed.
- > Cultivation Lead: Oversight and management of the day to day cultivation of cannabis.

 This will include but not be limited to: irrigation, fertilization, pesticide management and harvest
- Cultivation Tech: The person will support the responsibilities of the Cultivation Lead. Mainly, the Cultivation Tech will assist the Cultivation Lead in his/her day to day duties as well as take the Lead Role during times when the Cultivation Lead may be off site. During harvests, the Cultivation Tech duties will switch to oversight and management of drying and curing cannabis.
- > Seasonal Labor: This position is temporary and employee count will vary based on the needs of the farm during the cultivation and harvest seasons.

Soul Arc intends to employ an estimated total of approximately three (3) employees at the Project site at any given time. A peak of four (4) employees during the cultivation season and a peak of four (4) employees during the harvest seasons are expected.

All Soul Arc employees will be required to wear a Soul Arc-issued photo ID badge on a lanyard at all times while working at the cultivation site. They will be required to read the Soul Arc Operating Manual along with the Soul Arc Employee Handbook. They will also be required to sign and date a form acknowledging they have read and understand its contents (see Attachment A – *Personnel Acknowledgement Form*).

The *General Manager* will meet with all employees once a week to discuss any pending internal issues relating to day to day operations and record keeping and inventory reporting. This will include a plant count inventory, a daily fertilizer application summary, a daily pesticide application summary, and a weekly water use summary. During periods of drying and curing The *General Manager* will stay 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 *General Manager* to maintain a transparent communication at all times to ensure all cannabis cultivation activities remain compliant and employees are acting within the code of conduct.

2.6.4. EMPLOYEE SAFETY PRACTICES

All part time seasonal employees will be trained 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, proper hand washing guidelines and an Emergency Procedures Plan in case of emergency. Contact information for the local fire department, CAL FIRE, Humboldt County Sheriff and Poison Control as well as the *General Manager* will be posted in a conspicuous place. Soul Arc will provide personal protection equipment to all employees as needed. Soul Arc will provide Saline Eye Wash Station. Soul Arc will also provide each Employee with a written copy of emergency procedures and contact information (see Appendix D – Emergency Procedures and Contact Information). A copy of the Operations Plan will be kept on site by the *General Manager* and will contain all safety data sheets (SDS).

2.6.5. On-SITE HOUSING

There is no on-site housing.

3. CULTIVATION AND PROCESSING PLAN

3.1. CULTIVATION PLAN

3.1.1. PLANTING METHODS AND MEDIUMS

The cultivation will occur in one (1) 20'x84' greenhouse; one (1) 24'x108' greenhouse; one (1) 37.5'x170' greenhouse,; and one (1) 30'x120' greenhouse, for a combined cultivation area of approximately up to 14,250 square feet. The greenhouses consist of heavy gauge steel tubing, covered with a woven poly translucent opaque tarp. Each greenhouse is ventilated by intake and exhaust fans. The greenhouses utilize light deprivation to produce up to three (3) flowering cycles per year.

A complete list of base soil and amendments will be recorded in the Cultivation Handbook. All soil and amendments will be OMRI (or equivalent) certified and SDS for each applicable amendment will be recorded in the Cultivation Handbook. The total amount of plants per bed is dependent upon the cultivar and run length.

3.1.2. IRRIGATION AND FERTILIZATION PRACTICES

Soul Arc will implement water resource management strategies to address water needs for the commercial cannabis cultivation described herein. This plan may include but not be limited to:

- > Annual forbearance as determined by a Water Availability Analysis
- ➤ Obtaining a Lake or Streambed Alteration Agreement for the water diversion works and storage through the Department of Fish and Wildlife (DFW)
- ➤ Enrollment in the North Coast Regional Water Quality Control Board's (NCRWQCB) Cannabis Cultivation Discharge Program (Order #R1-2015-00230, which includes preparation of a Water Resources Protection Plan (WRPP).

The *Cultivation Lead* will be solely responsible for the implementation of the irrigation and fertilization program.

A proprietary nutrient solution is prepared as needed at time of application by the *Cultivation Lead*. The solution is formulated by manufacturer instructions. SDS and manufacture labels will be available onsite.

Irrigation and fertigation of plants will occur initially via hand water. At this stage the plants are juvenile and planted in a container; therefore, the amount of irrigation and fertigation needed is better controlled via hand watering. Upon final planting plants will be irrigated and fertilized using drip emitters specifically tailored to the application. Drip irrigation will be installed and utilized prior to May 15th annually.

Estimated Annual Irrigation Water Usage (Gallons)

Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
>10K	>10K	10K	20K	40K	40K	40K	40K	40K	20K	>10K	>10K

The table above outlines the estimated irrigation water usage for Soul Arc during a typical year. Irrigation water usage will be dependent on weather conditions.

3.1.3. CULTIVATION SCHEDULE

February 1 - May 15: Initial Transplant

A State licensed Nursery will provide all clones for cultivation. Upon arrival, the *General Manager* will examine the clones and approve initial planting to begin.

Upon approval, the *Initial Transplant* will commence. The rooted clones will be planted directly into 4-5 inch cups. This point in the cultivation process is most often referred to as the 'vegetative' cycle. Due to container and plant size, utilizing a hand watering method is most effective. The *Initial Transplant* phase lasts from one to two weeks depending on the desired outcome

When the plants have achieved desired height and plant growth density for final transplant, the plants are immediately planted in a raised bed. Due to the increase in container size and increase in daylight hours, the plants will continue to grow in a vegetative state for two to four (2-4) weeks. The approximate desired height and growth density would be three to four feet (3'-4'). Upon final transplant into either raised beds, a drip irrigation/fertilization system will be implemented. Once this desired height and vegetative growth density has been achieved the Light Deprivation Phase begins.

May 1 - July 1: Light Deprivation Phase

Taking into account factors such as height, growth density and overall health of the plant, the *Cultivation Lead* 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 manually pulled over the outside of the hoophouses. This process will reduce the daylight hours from approximately fifteen (15) hours of daylight to the desired twelve (12) hours of daylight and twelve (12) hours of darkness 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 vegetative growth while transitioning into flowering.

It is not uncommon for plants to obtain 25% of their entire height and vegetative growth density during the transitional phase. Once the plants enter into the final bloom or flowering phase, they will begin to expend energy into the production of flowers, therefore, ceasing vegetative growth and begin to flower. The entire flowering process, including the transitional and final bloom phases, will last fifty-five (55) to sixty-five (65) days depending on strain variation and weather conditions.

July 1-15: First Harvest and Re-Planting

Once the Light Deprivation Phase has concluded and the plants are at their peak, harvest procedures will be initiated (see *Harvesting/Processing Plan* for harvesting and processing procedure). The raised beds will be turned and amended. All amendments used are in accordance with Humboldt County and State of California Department of Agriculture compliance. SDS are recorded into the General Managers Handbook. New clones will transplanted from the Nursery.

Due to the length of daylight hours, the plants will continue in a vegetative state for approximately one month. Plants will be planted using the same methodology as with the Initial Transplant Phase. Final Transplant will occur when deemed appropriate, usually seven to 14 days from initial transplant.

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

Once the Final Transplant Phase has been initiated by the *Cultivation Lead*, the plants are fertilized with a proprietary feeding program. All fertilizers and supplements used are in accordance with Humboldt County and State of California Department of Agriculture compliance. SDS are recorded

into the Cultivation Handbook.

Due to the natural decline in daylight hours, approximately one (1) 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 and final bloom phase. Once the plants enter into the bloom phase they will be fertilized using a proprietary high phosphorus feeding program. All fertilizers and supplements used are in accordance with Humboldt County and State of California Department of Agriculture compliance. SDS are recorded into the Cultivation Handbook. Once the plants are through the final bloom phase and have reached peak potential, Harvest Two will be initiated (see *Harvesting/Processing Plan* for harvesting and processing procedure).

November 7 - February 1: Repair, Upgrade and Recondition Phase

Soul Arc will inspect all hoop houses and covers for wear and replace as necessary. The irrigation system will be inspected and repaired or replaced, as appropriate. Refilling of irrigation tanks will commence in accordance with the Small Irrigation Use Registration and conditions of the Department of Fish and Wildlife (DFW) Lake or Streambed Alteration Agreement (LSAA). Winter road and site maintenance will begin in line with procedures outlined in the Site and Road Maintenance Plan.

3.1.4. GENERATOR USE PLAN

Due to the remote location and off the grid nature of the site, it will be necessary for Soul Arc to employ the use of a generator for power. Soul Arc will limit generator use to an as needed basis following all guidelines set up by Humboldt County and the State of California. The generators will be located over one hundred feet from the property line to ensure the noise level will not exceed 60 decibels at the property line. Potential noise impacts to protected species will be identified as part of the NTMP and the generator sites will be adjusted accordingly if species of concern and habitat are found. The generator onsite is currently housed in a cinder block enclosure. Every effort will be made to sound-proof this shed.

The generators will be potentially in operation from February to December for supplemental lighting within the drying facilities. See Section 2.4. for details on the storage of generator fuel.

3.1.5. PRODUCT INVENTORY AND TRACKING

Soul Arc participated in the 2018 Humboldt County CalOrgions Track and Trace program and will continue participation as long as the County deems necessary. Soul Arc plans on meeting Metro reporting requirements as soon as access to the State system becomes available.

3.2. Processing Plan

The *Cultivation Lead* will be responsible for all training of seasonal harvest employees. Workers employed as harvesters will be required to train in each aspect of the procedure including use of harvesting tools, proper harvesting techniques and fresh harvested plant handling, and handling of dried flowers. Access to any part of the onsite Drying and Curing Facility will be limited to the *General Manager* and authorized employees.

3.2.1. Harvesting

Harvesting will be done by hand, employing seasonal help. Harvesters will be trained on the methods by which each plant is to be harvested. Soul Arc will provide all harvest workers with personal protective equipment as needed.

3.2.2. Drying and Curing

Prior to entering the on-site drying and curing facilities, the product will be examined, weighed, recorded in accordance with applicable Track and Trace requirements. Branches will be hung on racks in dry facilities to air dry and cure. Air circulation will be utilized in the form of wall fans, exhaust fans and box fans. Each rack will contain the original numbered tag(s) of the plant(s).

The drying and curing process takes between seven (7) and ten (10) days. Once the material has reached the desired consistency the dried and cured flowers will be prepared to be transported offsite for processing.

3.2.3. PROCESSING

All Processing will occur offsite at a State licensed processing facility.

3.3. SECURITY PLAN

A locked gate is located at the entrance to the parcel. A *No Trespassing* sign is proposed near the gate. Cultivation facilities will be completely enclosed by a six foot (6') security fence that features a locked gate. Soul Arc is proposing to have security cameras at the entrance to the cultivation site and dry facility. Motion sensors will be installed at all cultivation sites.

All potential employees will be subject to a criminal background check prior to employment. Employees will be issued a company issued ID badge and will be required to display the badge at all times while working at the subject property.

3.4. Transportation and Distribution Plan

Transportation and Distribution will be handled by a State licensed transporter/distributor in accordance with MMRSA. Prior to moving packages from the on-site holding facility to another premises, a shipping manifest will be created.

The *General Manager* is 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
- Origin and destination addresses

RESOURCES

- Bass, Ronald E., Kenneth M. Bogdan, and Terry Rivasplata. 2013. CEQA Desktop. Point Arena, CA; Solano Book Press. Page 44.
- California Code of Regulations. Health and Safety Code Section 11357-11362.9. http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=11001-12000&file=11357-1136 http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=11001-12000&file=11357-1136 http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=11001-12000&file=11357-1136 http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=11001-12000&file=11357-1136 http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=11001-12000&file=11357-1136 http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=11001-12000&file=11357-1136 http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=11001-12000&file=11357-1136 http://www.leginfo.ca.gov/cgi-bin/displaycode http://www.leginfo.ca.gov/cgi-bin/displaycode http://www.leginfo.ca.gov/cgi-bin/displaycode http://www.leginfo.ca.gov/cgi-bin/displaycode http://www.leginfo.ca.gov/cgi-bin/displaycode http://www.leginfo.ca.gov/cgi-bin/displaycode http://www.leginfo.ca.gov/cg
- California NORML. SB 420 Establishes Prop. 215 Guidelines, Voluntary Patient Identification Card System. http://www.canorml.org/laws/sb420.html. Date accessed: July 21, 2014.
- County of Humboldt. *Medical Marijuana Land Use Ordinance (MMLUO) Phase IV, Commercial Cultivation, Processing, Manufacturing and Distribution of Cannabis for Medical Use* (Staff Report to the Board of Supervisors). January 26, 2016. https://humboldt.legistar.com/Calendar.aspx. Date accessed: March 28, 2016.
- North Coast Regional Water Quality Control Board. 2016. *Cannabis Cultivation Waste Discharge Regulatory Program*. http://www.waterboards.ca.gov/northcoast/water_issues/programs/cannabis/. Date accessed: March 28, 2016.
- State Board of Equalization. Information on the Sales and Registration for Marijuana Sellers. June 2007. http://www.boe.ca.gov/news/pdf/173.pdf.>
- State of California. Guidelines for the Security and Non-Diversion of Marijuana Grown for Medical Use. August 2008.
 - http://www.ag.ca.gov/cms attachments/press/pdfs/n1601 medicalmarijuanaguidelines.pdf>

Appendix A: Site Plan

Appendix B: Pesticide Storage, Handling and Application Plan

Soul Arc Solutions, Inc ("Soul Arc") Pesticide Storage, Handling and Application Plan

All pesticides, disinfectants, fungicides and agricultural chemical products used by the Soul Arc, 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 *General Manager* will maintain a current Private Applicators License with the Humboldt County Agricultural Department. This license will be posted and a copy will be entered into the Manager's Handbook and available for view by any regulatory agency deemed appropriate by Humboldt County or State of California.

<u>Storage</u>

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 by the *Cultivation Lead*. 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 over-the-counter pesticide products may be applied by either the *General Manager* or trained personnel in accordance with State of California Agricultural Department's Private Applicators License criteria. Training of employees will be 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 SDSs and labels will be clearly identified and maintained onsite at all times in the Cultivation Handbook. Soul Arc will make available to its employees saline eye wash stations wherever pesticides are stored.

<u>Handling</u>

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 logged into the Master Log immediately by the *Cultivation Lead*. By having a strictly monitored Pesticide Management plan in place, Soul Arc will strive for a "ZERO SPILL POLICY". In the event of a spill, Soul Arc will maintain on site an Emergency Containment and Clean Up policy in accordance with *State of California Agricultural Department Personal Pesticide Application License* guidelines.

Soul Arc 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. Soul Arc will 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 documented into the Master Log by the Cultivation Lead.

Application

All application will be done in accordance with *State of California Agricultural Department Personal Pesticide Application License* guidelines. A copy of all applications will be manually entered into the Master Log. Proper personal protective equipment shall be provided by Soul Arc 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 plants 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 and air less sprayer. Nozzle types and pressure settings will be determined by manufacture directions. Anywhere pesticide is applied Soul Arc will provide a saline eye wash station in case of accidental exposure.

Disposal

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 of California Agricultural Department Private Applicators License* guidelines. Proper training of employees in rinsing, washing and disposal shall be overseen by the Licensed *Lead Cultivator* on premise. All washing, rinsing or disposal of any product packaging, applicator or protective clothing will be logged into the Master Log.

Appendix C: Emergency
Procedures and Contact
Information

Emergency Procedures Instructions Soul Arc Solutions, Inc

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
- 3. Give the following address:
- 4. Do not hang up until told to do so by the 911 Operator

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 fire fighting 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 utilize 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 the 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 saline eye wash 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