Cannabis Cultivation Best Management Practices

The following Best Management Practices (BMPs) are designed for in ground cultivation, but shall be applied to container grown Cannabis as applicable. The BMPs for water quality shall apply to all cultivators not required to enroll in the North Coast Regional Water Quality Control Board Waste Discharge program for cannabis.

Outdoor Cultivation BMPs

Pesticide and Fertilizer Use and Storage

Pesticide Use Requirements

Pesticides must be registered by both the US Environmental Protection Agency (US EPA) and the California Department of Pesticide Regulation (DPR) before they can be sold and used in California.

There are no pesticides registered specifically for use directly on marijuana and the use of pesticides on marijuana plants has not been reviewed for safety or human health effects.

Under California law, the only pesticide products not illegal to use on marijuana are those that contain an active ingredient that is exempt from residue-tolerance requirements and registered and labeled for a use that is broad enough to include use on marijuana (e.g. unspecified green plants) or exempt from registration requirements as a minimum risk pesticide under FIFRA section 25(b) and 3 CCR § 6147. (FAC §§ 12973, 12995; 3 CCR § 6490.)

Before using any pesticide, ALWAYS read and follow the pesticide label. The label is the law.

If you apply registered pesticides to your crop, you must obtain an operator identification number from the County Agricultural Commissioner and submit monthly pesticide use reports to that office. (FAC § 11408; 3 CCR § 6622; 3 CCR § 6627.)

US EPA designates certain pesticide products as federally "Restricted Use" products when they determine those products may cause unreasonable adverse effects even when used as directed on the product labeling. Restricted Use pesticides are limited to use by certified applicators, or to those under the supervision of a certified applicator.

DPR designates certain pesticide active ingredients as California "Restricted Materials" when they determine those pesticides are especially hazardous to human health or the environment.

Restricted Materials require a permit issued by the County Agricultural Commissioner. Permits will not be issued for marijuana cultivation sites. (FAC § 14001, et seq.; 3 CCR § 6400.)

Employers must protect their workers from exposure to pesticides. State law requires that employers follow the pesticide label and provide required personal protective equipment, provide required training and access to pesticide labels and safety information, and properly store, handle, and dispose of pesticides.

See Compliance Assistance Booklet; 3 CCR § 6670, et seq.; 3 CCR § 6700, et seq.; http://www.cdpr.ca.gov/docs/enforce/cmpliast/bkltmenu.htm.

Rodenticide Use Requirements

Rodenticides that require a California Restricted Materials permit cannot be used; and those that are designated as federally Restricted Use products can only be used by a certified applicator. See above.

There are some rodenticides labeled for below ground applications that are not designated as California Restricted Materials or federally Restricted Use pesticides that can be used if consistent with the label.

The following rodent repellants may be used in and around marijuana cultivation sites consistent with the label: Capiscum Oleoresin, Putrescent Whole Egg Solids, and Garlic.

Refer to DPR document, "Legal Pest Management Practices for Marijuana Growers in California" (attached) for more detailed information.

Inspect planting stock for pests and disease prior to planting. Avoid planting stock with pests and disease.

Evaluate irrigation water, soils, growth media, and plant tissue to optimize plant growth and avoid over fertilization.

Do not store any fertilizers, pesticides, or soil amendments in the riparian setback or in any manner which may result in the discharge of a pollutant. Storage of all pesticides must comply with state regulations.

Nitrate-based and other oxidizing fertilizers must be stored away from solvents, fuels and pesticides.

Riparian Protection

Observe riparian corridor setbacks for agricultural cultivation as applicable. These shall be maintained as "no touch" areas.

No equipment and/or vehicles shall be stored in the riparian setback.

Composting areas shall not be located in the riparian setback area.

Water Use and Storage

Irrigation must be conducted in a manner that does not result in runoff from the cultivated area.

Any water tanks or storage facilities must obtain all necessary permits from the Sonoma County Permit and Resource Management Department.

If using an irrigation system, inspect for and repair leaks prior to planting each year and periodically during the season.

Waste Management

Recycle or properly dispose of all plastic bags, containers, or irrigation materials.

Properly dispose of green waste in a manner that does not discharge pollutants to a watercourse. This may be accomplished by composting, chipping, and/or shredding. Method of green waste disposal must be documented.

Used growth medium (soil and other organic medium) shall be handled to minimize or prevent discharge of soil and residual nutrients and chemicals to watercourses. Proper disposal could include incorporating into garden beds, spreading on a stable surface and re-vegetating, storage in watertight dumpsters, or covering with tarps or plastic sheeting prior to proper disposal. Method of disposal must be documented.

Compost piles are to be located outside of riparian setbacks and in a manner that will not discharge pollutants to a watercourse. If necessary, construct berm or install fiber roll around compost area to prevent runoff or use straw wattles around perimeter.

Erosion Control/Grading and Drainage

Leave a vegetative barrier along the property boundary and interior watercourses to act as a pollutant filter.

Avoid soil disturbance between November 1st and April 15th.

All exposed and disturbed soil to be covered with a minimum of 2 inches of mulch, such as straw, bark, wood chips, etc., by November 15th. Alternatively, establish a thick cover crop over disturbed areas.

Erosion control materials shall be available on site at all times in the form of straw or appropriate mulch adequate to cover area of disturbed soil. In the event of a forecast storm event likely to produce runoff, apply mulch prior to rain event.

Any grading or drainage conducted as part of site preparation shall have the appropriate permits from the Sonoma County Permit and Resource Management Department (PRMD), or the Sonoma County Department of Agriculture/Weights & Measures as applicable.

Indoor Cultivation BMPs

Pesticide Use Requirements

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Under California law, the only pesticide products not illegal to use on marijuana are those that contain an active ingredient that is exempt from residue-tolerance requirements and registered and labeled for a use that is broad enough to include use on marijuana (e.g. unspecified green plants) or exempt from

registration requirements as a minimum risk pesticide under FIFRA section 25(b) and 3 CCR § 6147. (FAC §§ 12973, 12995; 3 CCR § 6490.)

Before using any pesticide, ALWAYS read and follow the pesticide label. The label is the law.

If you apply registered pesticides to your crop, you must obtain an operator identification number from the County Agricultural Commissioner and submit monthly pesticide use reports to that office. (FAC § 11408; 3 CCR § 6622; 3 CCR § 6627.)

US EPA designates certain pesticide products as federally "Restricted Use" products when they determine those products may cause unreasonable adverse effects even when used as directed on the product labeling. Restricted Use pesticides are limited to use by certified applicators, or to those under the supervision of a certified applicator.

DPR designates certain pesticide active ingredients as California "Restricted Materials" when they determine those pesticides are especially hazardous to human health or the environment.

Restricted Materials require a permit issued by the County Agricultural Commissioner. Permits will not be issued for marijuana cultivation sites. (FAC § 14001, et seq.; 3 CCR § 6400.)

Employers must protect their workers from exposure to pesticides. State law requires that employers follow the pesticide label and provide required personal protective equipment, provide required training and access to pesticide labels and safety information, and properly store, handle, and dispose of pesticides.

See Compliance Assistance Booklet; 3 CCR § 6670, et seq.; 3 CCR § 6700, et seq.; http://www.cdpr.ca.gov/docs/enforce/cmpliast/bkltmenu.htm.

Rodenticide Use Requirements

Rodenticides that require a California Restricted Materials permit cannot be used; and those that are designated as federally Restricted Use products can only be used by a certified applicator. See above.

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Refer to DPR document, "Legal Pest Management Practices for Marijuana Growers in California" (attached) for more detailed information.

Inspect planting stock for pests and disease prior to planting. Avoid planting stock with pests and disease.

Evaluate irrigation water, soils, growth media, and plant tissue to optimize plant growth and avoid over fertilization.

Nitrate-based and other oxidizing fertilizers must be stored away from solvents, fuels and pesticides.

Waste Management

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Properly dispose of green waste in a manner that does not discharge pollutants to a watercourse. This may be accomplished by composting, chipping, and/or shredding. Method of green waste disposal must be documented.

Used growth medium (soil and other organic medium) shall be handled to minimize or prevent discharge of soil and residual nutrients and chemicals to watercourses. Proper disposal could include incorporating into garden beds, spreading on a stable surface and re-vegetating, storage in watertight dumpsters, or covering with tarps or plastic sheeting prior to proper disposal.

Excess irrigation water or effluent from indoor cultivation shall be discharged to an irrigation or bioretention treatment system, sewer, or a septic system that has been properly evaluated and sized.

Water Use

If using an irrigation system, inspect for and repair leaks prior to planting each year and periodically during the season.