Industrial Hemp Ordinance

SONOMA COUNTY DEPARTMENT OF AGRICULTURE/WEIGHTS & MEASURES

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Presented to:

Sonoma County Board of Supervisors

Presented by:

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Agricultural Commissioner/
Sealer of Weights & Measures
Regulatory Approach

Treat industrial hemp like any other legal crop to greatest extent possible to create opportunity and promote diversity while addressing three specific areas of concern:

1. Compatibility in residential zoning districts and environmental protections in resource zoning designations
2. Pollen management and crop compatibility
3. Enforcement/fraud mitigation
Industrial Hemp Proposal

- General background
- Non-zoning regulations
- Recommended Best Management Practices
- Zoning regulations
- Post-harvest ancillary agricultural production
- Allowances for industrial hemp extraction activities
General Background

- Industrial hemp definition (Health and Safety Code section 11018.5).
- For the 2019 growing season in California, there were 550 registered hemp producers accounting for 35,320 acres of registered hemp in 32 counties.
- The primary interest in growing hemp in California is for cannabidiol (CBD) production.
- CBD oil is extracted from hemp using solvents such as ethanol and CO$_2$. 
General Background – Legislative

- Federal Law
- State Law
- Sonoma County
Non-Zoning Regulations

- Vehicle for enforcement of ordinance is local registration
- Pollen management/crop compatibility
  - Planting only from clone or feminized seed
  - Cultivation of males for seed or fiber only indoors with output filtration
- Enforcement/fraud mitigation
  - Unregistered hemp may be enforced as unpermitted cannabis
  - Plant count and reporting of plant removal
  - Authority to at anytime; over 5% THC treated as cannabis
Recommended Best Management Practices (BMPs)

- BMPs are used to establish good farming practices for industrial hemp cultivation in Sonoma County.
  - All cultivation should maintain a setback of 200 feet from vineyard and orchard crops on adjacent parcels.
  - All cultivation should maintain a setback of 200 feet from any occupied residential or business structure on adjacent parcels.
- BMPs apply to all zoning districts where industrial hemp cultivation is allowed, with the exception of mandatory setbacks in Agricultural & Residential Zoning (AR).
Zoning Regulations
Rural Residential Zoning (RR)

- Purpose: to preserve the rural character of those lands best suited for low-density residential development.
- Primary use is residential.
- Odor presents compatibility issues relative to residential neighborhoods.
Rural Residential Zoning (RR) 
Policy Options

1. Prohibit industrial hemp cultivation.
2. Require discretionary permit for industrial hemp cultivation.
3. Require local registration with recommended BMPs.
4. Require local registration with recommended BMPs and mandatory setbacks.
5. No restrictions.

Staff recommendation: option #1.
Agricultural & Residential Zoning (AR)

- Purpose: to provide lands for raising crops and farm animals in areas designated primarily for rural residential use pursuant to Objective LU-6.5 and Policy LU-6d of the General Plan.
- Primary use remains residential.
General Plan Conformance

**Objective LU-6.5:** Create two Rural Residential zoning districts which provide different levels of permitted crop and animal production in the Rural Residential land use category.
General Plan Conformance

Policy LU-6d: Provide for different levels of crop and animal production in the Rural Residential land use category by creating an "Agriculture and Residential" and a "Rural Residential" zoning district, one which permits unlimited animal and crop production on parcels two or more acres in size, and one which limits agricultural activities regardless of parcel size.
General Plan Conformance

Policy LU-6d (continued): Allow expanded agricultural uses in the “Agricultural and Residential” zoning district limited to agricultural processing, sales of products grown on site, product promotion, tours, educational visits, and small scale events. Where appropriate, simplify permit processing for these uses. In neither zoning district will the agricultural activities be considered the primary use of the land; nor will all of the policies of the Agricultural Resources Element apply.
Agricultural & Residential Zoning (AR) Policy Options

1. Prohibit industrial hemp cultivation.
2. Require discretionary permit for industrial hemp cultivation.
3. Require local registration with recommended BMPs and mandatory setbacks of 600 feet from occupied structures and 200 feet from all property lines (setbacks may be waived by neighbors).
4. No restrictions.

Staff recommendation: option #3.
Resources & Rural Development (RRD)

- Purpose: to provide protection for lands needed for timber production, geothermal production, aggregate resource production, lands needed for protection of watersheds, fish and wildlife habitat, biotic resources and for agricultural production activities.

- Significant amount of agriculture in RRD zoning.
Resources & Rural Development Zoning (RRD) Policy Options

1. Prohibit industrial hemp cultivation.
2. Require discretionary permit for industrial hemp cultivation.
3. Require registration and recommended BMPs as well as a prohibition on tree removal and grading.
4. No restrictions.

Staff recommendation: option #3.
Agricultural Zones (LIA, LEA, DA)

- Primary use of lands in these zoning districts is agriculture. Zones include:
  - Land Intensive Agriculture (LIA)
  - Land Extensive Agriculture (LEA)
  - Diverse Agriculture (DA)
- These zoning districts are specifically protected under the Sonoma County Right to Farm Ordinance.
- Owners who buy property in these zoning districts or directly adjacent sign a disclosure statement.
Right to Farm Disclosure

“The undersigned do hereby further acknowledge that if the subject property is located near an agricultural operation on agricultural land, residents or users of the subject property may at times be subject to inconvenience or discomfort arising from that operation, including, without limitation, noise, odors, fumes, dust, smoke, insects, operation of machinery during any time of day or night, storage and disposal of manure, and ground or aerial application of fertilizers, soil amendments, seeds, and pesticides.”
Right to Farm Disclosure

“The undersigned do hereby further acknowledge that the County of Sonoma has determined in the Sonoma County Right to Farm Ordinance that inconvenience or discomfort arising from a properly conducted agricultural operation on agricultural land will not be considered a nuisance for purposes of the Sonoma County Code or County regulations, and that residents or users of nearby property should be prepared to accept such inconvenience or discomfort as a normal and necessary aspect of living in a county with a strong rural character and an active agricultural sector.”
Agricultural Zones (LIA, LEA, DA) Policy Options

1. Prohibit industrial hemp cultivation.
2. Require discretionary permit for industrial hemp cultivation.
3. Require local registration with recommended BMPs.
4. Require local registration with recommended BMPs and mandatory setbacks.
5. No restrictions.

Staff recommendation: option #3.
Post-Harvest Ancillary Agricultural Production

- Most zoning districts allow outdoor and indoor crop production/growing and harvesting of crops.
- Propose to add language to each zoning district that is not prohibiting industrial hemp to expressly include industrial hemp.
- Most zoning districts also allow post-harvest handling activities associated with the crops grown on site: incidental cleaning, grading, packing, polishing, sizing, storage, and similar preparation of crops which are grown on site.
- Post-harvest activities for industrial hemp include drying, grading, trimming, curing, storing and packaging which are already allowed under these provisions.
Propose to add language to the definition of agricultural processing to clarify the allowance for on-farm extraction of oil from industrial hemp.

Agricultural processing means the act of changing an agricultural product from its natural state to a different form, as grapes to wine, apples to juice or sauce, agricultural crops to extracted oils, etc.

Hemp oil is extracted from raw industrial hemp biomass using pressure and non-volatile solvents (CO2 and ethanol). Using pressure to perform these processes is similar to those practices used for making wine, olive oil, apple juices, and sauces.
Minimum Parcel Sizing for Hemp

- 2,000 feet x 2,000 feet combined setbacks = 4 million square feet of total setback area
- 4 million square feet = 91.82 acres
Ozone Concerns

▶ Ozone formation: https://growersnetwork.org/industry/connection-cannabis-ozone/.

▶ Study referenced in above article conducted in Colorado and focused on VOC emissions from indoor cannabis operations in urban areas and the affect on ozone formation.

▶ For ozone to form the lower atmosphere, NO\textsubscript{x} has to mix with VOCs in sunlight.

▶ “Rural areas generally have very low levels of NO\textsubscript{x} thus growing in farmland or rural locations will reliably avoid formation of ozone.”

▶ Carbon filters pull 98% – 99% of VOCs out of air; no major contribution to ozone production.
Questions
Parcels by Zoning District

<table>
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<tr>
<th>Zoning District</th>
<th>Number of Parcels</th>
<th>Parcels &lt;2 acres</th>
<th>Parcels 2 – 5 acres</th>
<th>Parcels 5 – 10 acres</th>
<th>Parcels &gt;10 acres</th>
<th>Total parcels over 2 acres</th>
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