

2018 Farm Bill: What's Next for Hemp?

The new rules and business opportunities
from nationwide legalization



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From the Editor

Prohibition is over. Kind of.

After decades of being treated like an illegal drug, industrial hemp was removed from the Controlled Substances Act (CSA) on Dec. 20, 2018.

Seven little words at the end of the 2018 Farm Bill—"The term 'marihuana' does not include hemp"—amount to the most significant change to American drug policy since the CSA was enacted in 1971. For the first time, Congress has acknowledged that not all varieties of the plant *cannabis sativa* L. are intoxicating. Instead, the law now says, cannabis varieties with trace amounts of THC—no more than 0.3%—should be treated like any other crop.

This change unleashes enormous business opportunities. Hemp can be grown legally anywhere and sold anywhere in the United States. Interstate commerce is guaranteed. Entrepreneurs working with the plant will see banking and regulatory barriers fall away, just as new opportunities for crop insurance and loan acquisition become available.

But are riches guaranteed for the newly legal hemp industry? Absolutely not.

Big questions remain about how federal agencies will regulate hemp's commercial applications.

This report is a first step to helping the hemp industry navigate uncharted waters.

Inside you'll find:

- Details on the next steps for the hemp industry, including specifics about the federal agencies now in charge of regulating hemp and its products.
- A full breakdown of what the Farm Bill does (and doesn't) do.
- Updated market estimates for hemp-derived CBD.
- An updated crop report detailing U.S. hemp production.
- A look at the Farm Bill's impact on publicly traded hemp companies.
- Global opportunities in hemp and CBD.

This report gives anyone interested in starting or growing a hemp or CBD business key market information they'll need to thrive in this unexplored territory.

Prohibition may be over for industrial hemp. But here's what's not changing: uncertainty about hemp's market potential and the role of CBD and other nonintoxicating cannabinoids found in the plant.

Another constant is *Hemp Industry Daily's* commitment to bringing clear-eyed analysis to market forces that will determine hemp's future. As the hemp industry enters a new legal era, the need for objective coverage has never been greater. A good starting point is this Special Report about the ramifications of the 2018 Farm Bill.

And as always, if you have any questions, please let me know: kristenn@hempindustrydaily.com.



Kristen Nichols
Hemp Industry Daily
Editor

Best Regards,

Kristen Nichols

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Industry Impact

WHAT THE FARM BILL DOES:

- Removes the plant cannabis sativa L. from the Controlled Substances Act if it or a plant contains no more than 0.3% THC on a dry-weight basis. This applies to any and all parts of the plant.
- Tells the U.S Department of Agriculture (USDA) to come up with national hemp regulations “as expeditiously as practicable.”
- Leaves marijuana a Schedule 1 drug.
- Allows states, territories and Indian tribes to submit hemp-growing regulations plans to the USDA, with no deadline for doing so. The plans must include:
 - ♦ THC testing procedures, including inspections done at least annually.
 - ♦ Bookkeeping procedures to keep track of land approved for hemp cultivation.
 - ♦ Plans for “effective disposal” of hemp plants with too much THC.
- Gives the USDA the ability to approve or reject those cultivation regulations within 60 days.
- Gives the USDA one year to study the 42 existing hemp states’ progress with the plant and “determine the economic viability of the domestic production and sale of industrial hemp,” with the findings due to Congress.
- Bans hemp cultivation by people with drug felonies in the past 10 years.
- Guarantees that hemp and hemp products can be moved from state to state to state and imported and exported the same as any other crop

WHAT THE FARM BILL DOESN'T DO:

- Give states any guidelines about regulating hemp manufacturing or processing.
- Guarantee interstate commerce for products containing CBD, not just the molecule itself.
- Limit the U.S. Food and Drug Administration (FDA)’s authority to ban CBD from foods, drugs and cosmetics, which the agency has done.
- Explain whether the clause guaranteeing interstate commerce for “hemp products” affects the FDA’s ability to limit CBD use in foods, drugs and cosmetics.

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A close-up photograph of cannabis plants, showing several serrated green leaves and a developing bud with visible trichomes. The lighting is soft, highlighting the texture of the leaves.

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Meet the New Bosses

The 2018 Farm Bill sets up business opportunities that would have been unimaginable to hemp entrepreneurs even a few months ago. But it's important to remember that the new hemp industry will remain a regulated one, subject to rules and inspections by government regulators who may know little about hemp.

Here's a look at hemp's new bosses and what to expect from each agency.

U.S. Department of Agriculture

The 2018 Farm Bill gives hemp cultivation authority to the U.S. Department of Agriculture, which also oversees other commodity crops. Here's how the USDA is going to be involved in the hemp business and what hemp entrepreneurs need to know about it:

- The USDA must develop its hemp regulations “as expeditiously as practicable.”
- The agency must consult with the U.S. attorney general on the new hemp rules, though it is not clear in the Farm Bill what authority the AG could exert.
- Once the USDA receives a plan on hemp oversight, the agency has 60 days to approve or reject it.
- If states, territories or American Indian tribes fail to submit hemp-oversight plans, or if their plans are rejected by the USDA, farmers in those jurisdictions will have to follow the as-yet-unwritten federal guidelines for hemp production.
- Farmers who commit multiple violations of THC limits—defined as three times in a five-year period—could lose the ability to grow hemp for five years.
- Farmers who exceed THC limits and show a “culpable mental state greater than negligence” must be reported to state or tribal law enforcement authorities.



USDA Secretary Sonny Perdue

Meet the New Bosses [continued]

U.S. Food and Drug Administration

Once hemp plants are harvested, federal agencies other than the USDA have a say in how hemp can be manufactured and sold.

The most important agency for the industry to watch is the U.S. Food and Drug Administration, which oversees a wide range of pharmaceuticals and consumer packaged goods, from snack bars to supplements.

Here's how the FDA is going to be involved in the hemp sector or industry and what hemp entrepreneurs need to know about it:

- The Farm Bill specifically notes that the FDA retains its authority over food, drugs and cosmetics. In other words, just because all hemp is legal does not mean that hemp can be manufactured and sold in any preparation.
- The FDA has announced plans to review CBD use in food, drugs and cosmetics "in the near future."
- The FDA has repeatedly asserted that CBD (whether from hemp or marijuana) cannot be used in a food or dietary supplement because CBD is listed as "an active ingredient in a drug product." This refers to Epidiolex, an FDA-approved treatment for rare types of epilepsy.
- The FDA considers all CBD products except for Epidiolex to be "adulterated" or "misbranded."
- The FDA has only sporadically enforced its ban on adding CBD to food, drugs and cosmetics, with enforcement so far limited to a handful of warning letters to CBD manufacturers making possible medical claims.
- One state, Colorado, has specifically passed a law declaring that "food and cosmetics are not adulterated or misbranded by virtue of containing industrial hemp," including CBD. That rule is in direct conflict with the FDA's interpretation, but the conflict hasn't been tested in court.
- Other states, including California and New York, have said that CBD cannot be added to food until the FDA updates its CBD posture, though CBD manufacturers in those states report only limited enforcement of the rules.



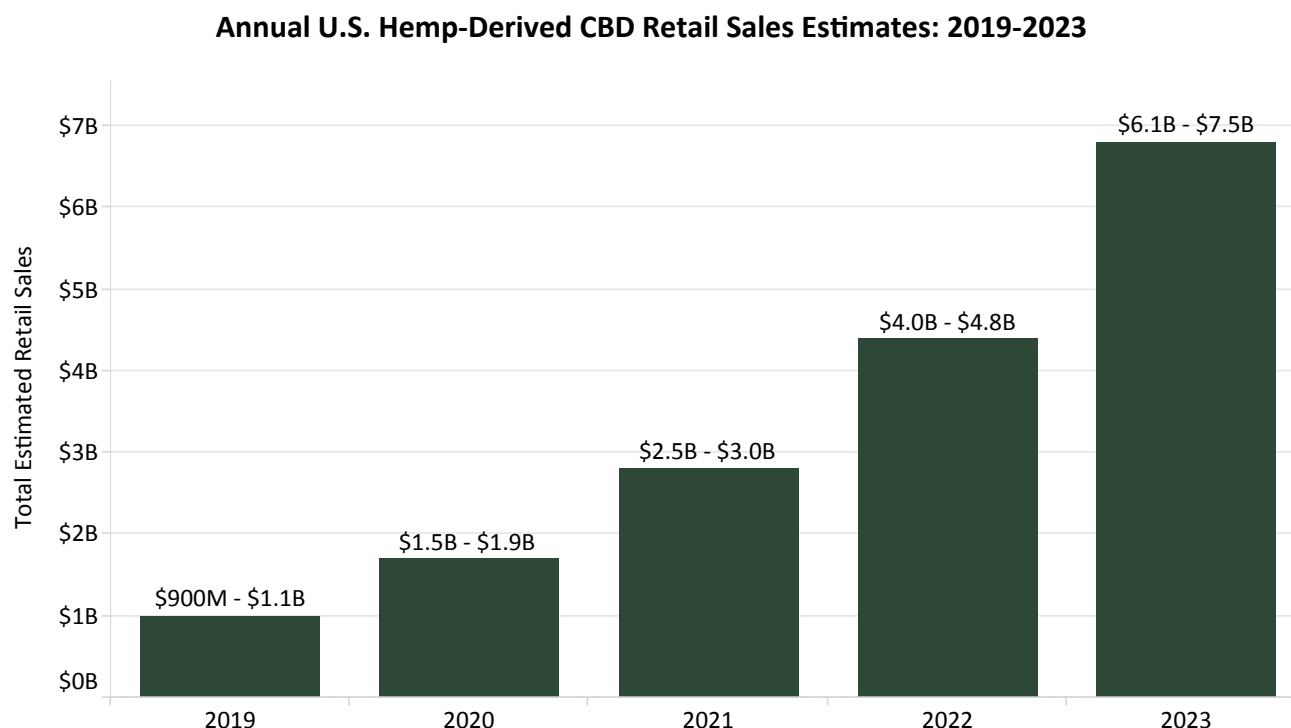
FDA Commissioner Dr. Scott Gottlieb

Is this a first step to full, nationwide marijuana legalization?

Could the 2018 Farm Bill portend the end of marijuana prohibition? Absolutely.

Consider:

- Marijuana and hemp are the same plant, cannabis sativa L.
- Marijuana and hemp have different cannabinoid levels at different stages of life, so the same plant could be legal one day but illegal the next.
- The plant's versatility—a food source, fuel source and pharmacological agent all in one—has long bedeviled regulators wondering how to treat cannabis. Hemp's new legality gives those government officials a nonthreatening version to try regulating this complicated plant, while giving cannabis pioneers room to err without facing prison time.
- Cannabis critics have warned for decades that legalization would empower criminals. However, the 2018 Farm Bill will attract established consumer brands to the cannabis sector, dispelling myths that only criminals would touch the plant.
- Mainstream news coverage of hemp will increase. Every newspaper article and TV segment about the hemp industry gives cannabis skeptics a face that doesn't match old, (or maybe) outdated, stoner stereotypes, and the coverage could help change minds about how a fully legal marijuana industry might work.
- Hemp sales will certainly rise because of the 2018 Farm Bill. That bigger market will help gird arguments that marijuana legalization would help the overall economy.
- Availability breeds familiarity. Familiarity breeds acceptance.

Chart 1: Annual U.S. Hemp-Derived CBD Retail Sales Estimates: 2019-23

Source: Hemp Industry Daily

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The hemp-derived CBD market has soared in recent years. But a lack of data regarding existing hemp-derived CBD sales—combined with many unanswered questions about how hemp-derived CBD will be regulated and sold—makes it very difficult to accurately predict sales.

But after extensive conversations with lawyers, regulators, analysts, executives and entrepreneurs in the hemp and CBD industry, we've made a few key assumptions to guide our estimates:

- Products containing CBD will likely appear on the shelves of mainstream retailers such as Target or Walmart, but the selection will be limited.
 - ♦ CBD is an active ingredient in an FDA-approved drug, and the agency has made it clear that selling food and dietary supplements containing an active medical ingredient remains illegal. It's less clear, however, how the FDA will treat non-ingestible products containing CBD such as lotion or conditioner.
- The rollout of products containing CBD in national retailers will be slow.
 - ♦ Although hemp-derived CBD is no longer a Schedule 1 controlled substance, CBD derived from a marijuana plant containing more than 0.3% THC remains federally illegal. Any national

retailer selling a product that contains CBD will want absolute certainty that the CBD was derived legally, which means they'll likely buy only from sophisticated, domestic manufacturers with strict quality-control standards. It's not clear how many CBD manufacturers currently meet such criteria—and these relationships take time to develop—but it's likely well short of the number it would take to support a national product rollout.

- Existing CBD retailers and manufacturers will likely benefit in the short term.
 - ♦ Current CBD consumers purchase highly concentrated tinctures, edibles and vaporizers, a far cry from the type of products containing CBD that are likely to show up in traditional retail outlets. This benefits existing CBD retailers that are willing to take the risk and sell products that the FDA still considers illegal, allowing traditional retail outlets to function as something of a marketing platform for CBD in general.

Crucial components of the 2018 Farm Bill have yet to be finalized, and several key questions—such as how long it will take the U.S. Department of Agriculture to issue regulations on industrial hemp cultivation and how aggressively the FDA will enforce restrictions on CBD in food and dietary supplements—remain unanswered.

Chart 2: Hemp Acreage by State

STATE	ACRES PLANTED 2016	ACRES PLANTED 2017
Colorado	5,921	9,890
Hawaii	1	0
Kentucky	2,525	3,200
Maine	1	30
Minnesota	51	1,205
Montana	0	542
Nevada	216	435
New York	30	2,000
North Carolina	0	2,135
North Dakota	70	3,020
Oregon	500	3,000
Pennsylvania	0	36
Tennessee	225	130
Vermont	180	300
Virginia	37	78
Washington	0	186
West Virginia	10	30
Total	9,767	26,217

Hemp Acreage By State

The number of states that established industrial hemp pilot programs boomed in the past few years, spurring a major uptick in domestic production. In addition to new states authorizing hemp, existing hemp states stepped up production—largely a result of increasing demand for CBD and farmers looking for alternatives to traditional commodity crops.

Farmers planted nearly 10,000 acres of hemp in Colorado in 2017, placing it atop the list of hemp-producing states last year. Kentucky was a distant second, but preliminary

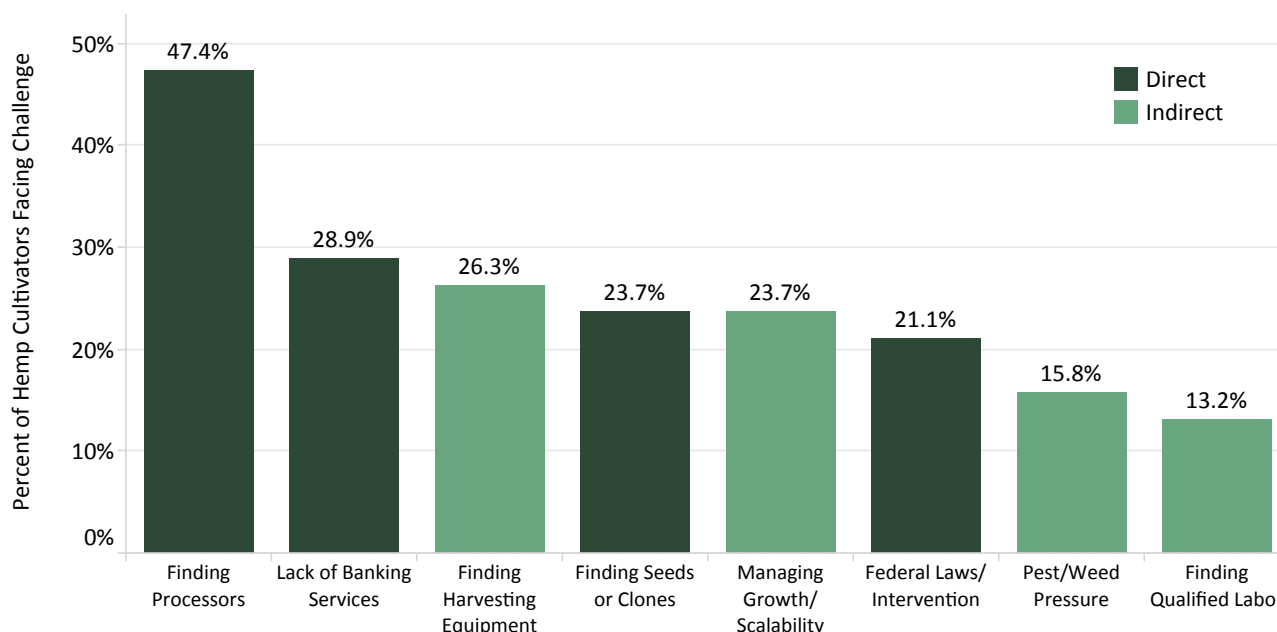
data shows the Bluegrass State's hemp acreage more than doubled in 2018, up to 6,700 acres from 3,200 in 2017.

Montana is another notable callout, as the number of acres of hemp planted in the state skyrocketed from just under 550 in 2017 to 22,000 in 2018—a fortyfold increase.

More 2018 production data will be filtering in throughout the year, and while the type of massive gains seen in a state such as Montana will likely not be the norm, big gains are expected across the board.

Chart 3: Direct and Indirect Impacts of 2018 Farm Bill on Hemp Cultivators' Top Challenges

Direct & Indirect Impacts of 2018 Farm Bill on Hemp Cultivators' Top Challenges



Source: Hemp Industry Factbook

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Several major hurdles undermining hemp cultivators' ability to run successful, profitable businesses are set to crumble now that President Donald Trump has signed the 2018 Farm Bill.

Challenges such as finding processors or accessing banking services—problems attributable to the patchwork of

state laws and regulations that have so far underpinned the industry—will be directly addressed by the 2018 Farm Bill.

In addition, issues such as finding adequate harvesting equipment or qualified management could be resolved over time as a result of hemp and CBD's new federally legal status.

Chart 3: Direct and Indirect Impacts of 2018 Farm Bill on Hemp Cultivators' Top Challenges (continued)

Expanding access for the hemp side of the cannabis industry could have a positive effect on the marijuana industry, as well, in that it will provide a pathway for growers to experiment with a variety of the plant that is federally legal—which could lead to improved processes for all cultivators.

Data regarding hemp cultivators' top challenges was published earlier this year in the Hemp & CBD Industry Factbook, before any significant movement on the federal level.

The report showed that the top challenge—by a wide margin—was finding processors, largely a function of the inability to look outside their home states.

But once the 2018 Farm Bill is signed, growers will be free to ship their products to processors across the nation.

“While the new provisions allow states to adopt their own plans for regulating hemp, no state can prohibit the transport of hemp across its lines,” said Shawn Hauser, chair of the hemp and cannabinoid group at Denver’s Vicente Sederberg law firm.

“There’s an express protection in the final language prohibiting interference with interstate transport, regardless of what kind of plan states choose to adopt.”

That provision allows growers in a state such as North Dakota—where just five hemp processors were licensed in 2018—to ship their crop to Oregon, which has more than 150 licensed processors.

The 2018 Farm Bill will also directly alleviate hemp

cultivators’ lack of banking services, opening the door to increased access to investment capital and low-interest loans—financial vehicles that businesses in the mainstream economy can readily employ.

It is worth noting, however, that while concerns around federal laws and intervention are directly addressed in the Farm Bill, uncertainty around the legality of CBD remains.

The Farm Bill removes hemp and its derivatives from the Controlled Substances Act, though CBD will still be regulated by the FDA.

That means CBD will still be subject to the provisions of the Federal Food, Drug and Cosmetic Act (FFDCA), which may ultimately limit the ways the extract can be marketed and sold commercially.

“It’s significant to acknowledge that the 2018 Farm Bill expressly doesn’t do anything to amend the FFDCA that still governs all food and drugs, cosmetics and devices sold in commerce,” Hauser said.

While these direct impacts will likely play a significant role in moving the hemp industry forward, multiple other challenges will be indirectly impacted as well.

Access to equipment, managing growth and scalability as well as to qualified labor may improve through the introduction of new public and private investment.

Financial losses to pest and weed pressure can also be reduced by allowing hemp cultivators access to traditional crop insurance products.

Hemp Business Do's and Don'ts

The door has been flung wide to new business opportunities, but before you throw caution to the wind and invest your life savings in a new endeavor, here are some things you should keep in mind.

DO

- Buy federally backed crop insurance. Terms are much more reasonable for a USDA-backed crop than for a crop with only state-level protection.
- Read FDA guidance closely. If you're making a food product, follow all federal and local food-production guidelines. If you're making a dietary supplement, follow the FDA's production and marketing rules for dietary supplements. Strict adherence could help your company survive any changing rules from the FDA.
- Advertise. Social media marketing and traditional display advertising has been stymied for years because those channels hesitate to take money from an industry deemed illegal under federal law. The end of hemp prohibition means that newspapers, TV stations and social networks have no legal barriers to accepting hemp dollars.
- Look for proven genetics. Kentucky and Colorado have researched the best hemp cultivars for CBD-rich flower production, with those varieties legal for sale in any state.
- Apply for other aid. The 2018 Farm Bill streamlines existing USDA programs to support beginning and socially disadvantaged farmers and triples the spending on those programs to \$435 million over the next 10 years. The new Farmer Opportunity Training and Outreach Program gives new farmers help completing loan applications and provides grants for agronomic training for new farmers.
- Keep meticulous records. Hemp is legal now, but marijuana is not. Business owners at every layer of the hemp and CBD supply chain need a paper trail to prove that their products are derived from legal hemp.

DON'T

- Think you'll get rich quick. Hemp cultivation techniques take as long to perfect as those for any other crop. Devoting huge acreage to hemp if you've never grown it before is an enormous gamble.
- Make health claims. Don't imply your product can cure or treat any specific disease, and watch your testimonials. If a customer raves that your product cured an ailment and you put that testimonial on your website or social media page, the FDA considers you guilty of making an unproven health claim.
- Tune out. The DEA doesn't care what drug producers think about regulations. The USDA and FDA, on the other hand, often look to product manufacturers for help crafting guidelines. Your participation in state and local work groups could prove invaluable in terms of knowing what rules are coming and helping craft guidelines that work.
- Ignore market forces. Hemp's pilot-program status insulated many hemp entrepreneurs from global market forces. Now that nagging uncertainty about interstate commerce and the FDA's role in product oversight have been resolved, hemp businesses will see new competition from other states and countries.
- Play with the word "organic." One of hemp's big advantages over marijuana has long been its ability to seek USDA Organic certification. That ability will remain. But remember that hemp is a "bio-accumulator"—meaning that pesticides and heavy metals in soils can show up in the plant even when a farmer tries to avoid them. Make sure your plants qualify as organic before using the "O" word.
- Link to studies. Nothing helps market a product like flaunting scientific studies showing the product's value. But the FDA has a limited list of studies that are acceptable for use in advertising. Get to know those guidelines before touting a study.

Investor Insights

Before the Farm Bill was signed into law, CBD sales were on pace to exceed \$1 billion by 2020, according to estimates by *Hemp Industry Daily*.

With this policy shift, rapid growth is expected as traditional financing and advertising ramp up and thousands of chain retailers consider stocking products—including CBD-infused beverages, cosmetics and pet foods—on their shelves across the U.S.

The bill's removal of heavy tax burdens and interstate supply limitations will help boost investor confidence for an industry that's already gained keen interest among retail and consumer packaged goods giants.

Consider the landscape:

- In September, the world's largest beverage maker, The Coca-Cola Co., confirmed it's eyeing the CBD market.
- The world's largest retailer, Walmart, confirmed in October it's pursuing "preliminary fact-finding" as it considers selling CBD products in Canada.

The Farm Bill also paves the way for Canada's largest public cannabis operators to enter the U.S. market—a maneuver the firms can't try in the marijuana sector because of the plant's federally illegal status in America.

In October, Canopy Growth spent \$19.3 million to acquire Colorado-based Ebbu—a research firm working on THC-free hemp.

Meanwhile, investors can expect to see a flurry of activity among U.S.-based hemp and cannabis operators that will be competing to gain market share and scale nationally.

By the Numbers

A look at some of the largest hemp-derived CBD companies

The largest hemp firms have already experienced record revenue gains this year. Their sales, however, pale in comparison to the consumer packaged goods giants eyeing the industry, such as Coca-Cola, which posted annual revenue of \$35.4 billion in 2017.

Charlotte's Web (CSE: CWEB)

OPERATIONS: Colorado-based maker of hemp-derived CBD products that are sold in more than 3,000 stores in the U.S.

Q3 REVENUE: \$17.7 million, up 57% from the same period last year.

Medical Marijuana Inc. (OTC: MJNA)

OPERATIONS: Based in San Diego, the firm owns a portfolio of companies that provide hemp and CBD-based products.

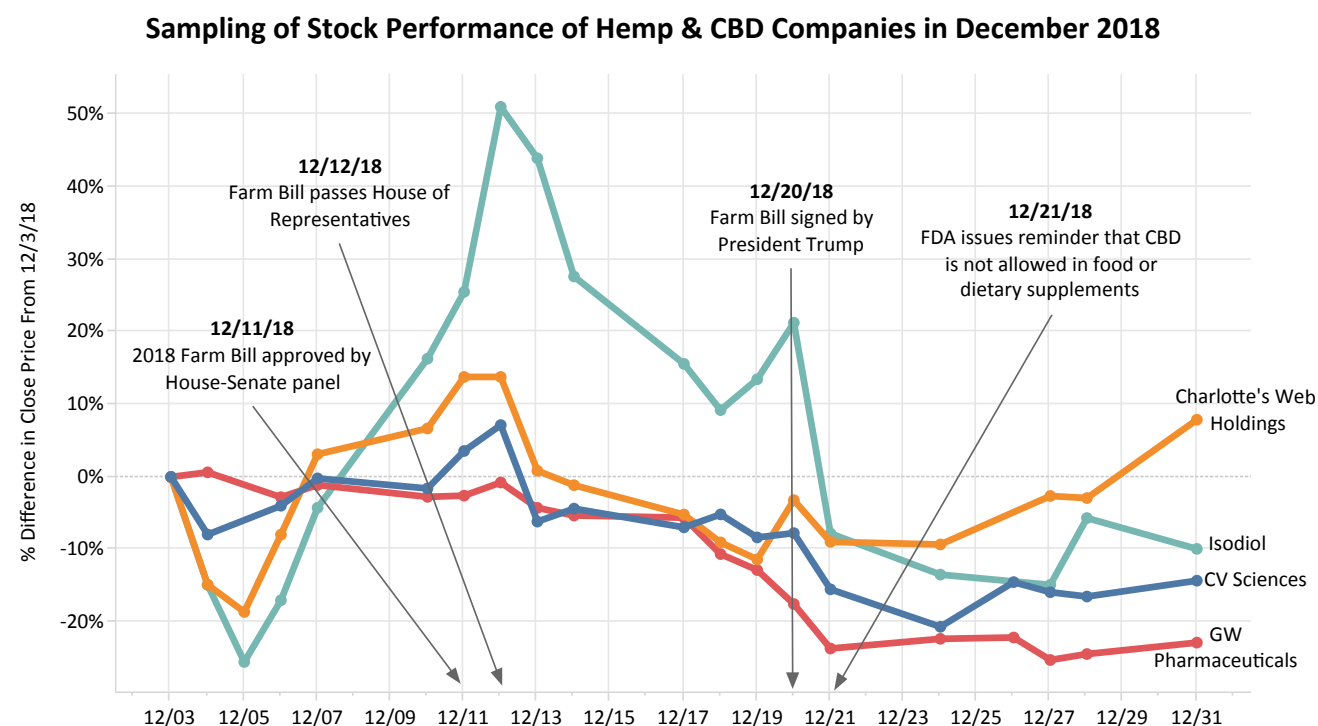
Q3 REVENUE: \$16.8 million, up 116% over Q3 2017

CV Sciences (OTC: CVSI)

OPERATIONS: The San Diego-based company makes Plus CBD oil products, which is sold in nearly 2,000 organic and natural health food stores.

Q3 REVENUE: \$13.6 million

Sources: Company earnings reports and Securities and Exchange filings

Chart 4: Sampling of Stock Performance of Hemp & CBD Companies in December 2018

Source: Yahoo Finance

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Stock prices of companies operating in the hemp and CBD industry oscillated throughout December, with investors seemingly undecided on how the Farm Bill will affect the business landscape.

On Dec. 12, the day the 2018 Farm Bill passed the House of Representatives, stock prices for Charlotte's Web Holdings, Isodiol International, CV Sciences and GW Pharmaceuticals all reached December highs. Those gains, however, proved to be short-lived, as stock prices for all four companies steadily declined the following week.

On Dec. 20—the day President Trump signed the 2018 Farm Bill into law—stock prices got a boost, which was

erased the very next day, after the FDA issued a reminder that it remains illegal to introduce food containing added CBD into interstate commerce or to market CBD products as, or in, dietary supplements, regardless of whether the substances are hemp-derived.

The removal of hemp and CBD from the list of controlled substances is a major win for the industry at large, as companies should now expect easier access to capital, banking services, equipment and qualified staff. But for individual businesses—especially those that found success in the previous regulatory environment—the 2018 Farm Bill introduces a great deal of uncertainty.

Retail Landscape and Opportunity

Sales of hemp-derived CBD products have largely been relegated to small or independent retail channels, such as e-commerce sites, cannabis and smoke accessory shops as well as natural wellness stores.

They have also picked up traction in alternative health settings—acupuncture, massage and pain management clinics, for example.

Hemp-derived CBD products fare less well in medical or adult-use marijuana dispensaries because of the competition there with cannabis-derived CBD and THC products.

This landscape has kept the industry relatively small. Still, specialized retailers claim there is strong demand for hemp-derived CBD products.

“They have a hard time keeping these products on shelves,” said Bethany Gomez, the director of research at Brightfield Group.

One area of explosive growth: Natural-food stores have had a 162% increase in sales of CBD products in the past 12 months, Brightfield Group reports.

Case in point: Lucky’s Market, a Colorado-based multistate chain of natural food shops backed by supermarket giant Kroger, carries hemp-derived CBD products in roughly two dozen of its stores.

Mainstream retail potential

To date, mainstream retailers have mostly stayed out of the mix, with some notable—albeit short-lived—exceptions:

- Minneapolis-based Target briefly advertised hemp-derived CBD products for sale through its online store—and then quickly yanked the product with no explanation as to why.
- 7-Eleven swiftly distanced itself from a Colorado company that claimed its hemp-derived CBD products would be sold in 4,500 of the well-known convenience stores nationwide—but that hasn’t stopped roughly 140 franchisees from carrying CBD, one expert told *Hemp Industry Daily*.

Now that hemp has been removed from the Controlled Substances Act, mainstream retailers and consumer packaged goods manufacturers will want clarity on what they can and can’t do.

But the absence of clarity won’t necessarily stop some retailers from forging ahead and capitalizing on the market momentum for hemp-derived CBD products.

Retailers have less product liability than manufacturers and are consequently more likely to take risks.

Once mainstream retailers have some indication that dissonant state and federal regulations or federal intervention won’t disrupt sales or jeopardize business, expect rapid growth in the number of stores selling these products.

Mainstream retailers and beauty and department stores—Target, Costco, Walgreens, Sephora and Bloomingdale’s, to name a few—are more likely to carry products that have established a brand name and have a record of manufacturing pesticide-free products that undergo rigorous third-party testing.

A second wave of growth will happen when large consumer packaged goods companies enter the mix—think beverage, beauty product, supplement and over-the-counter drugmakers.

Because of increased product liability, manufacturers are more likely to hold out until the U.S. Food and Drug Administration provides some guidance on hemp-derived CBD products.

Competition between mass-market retail and specialized retail

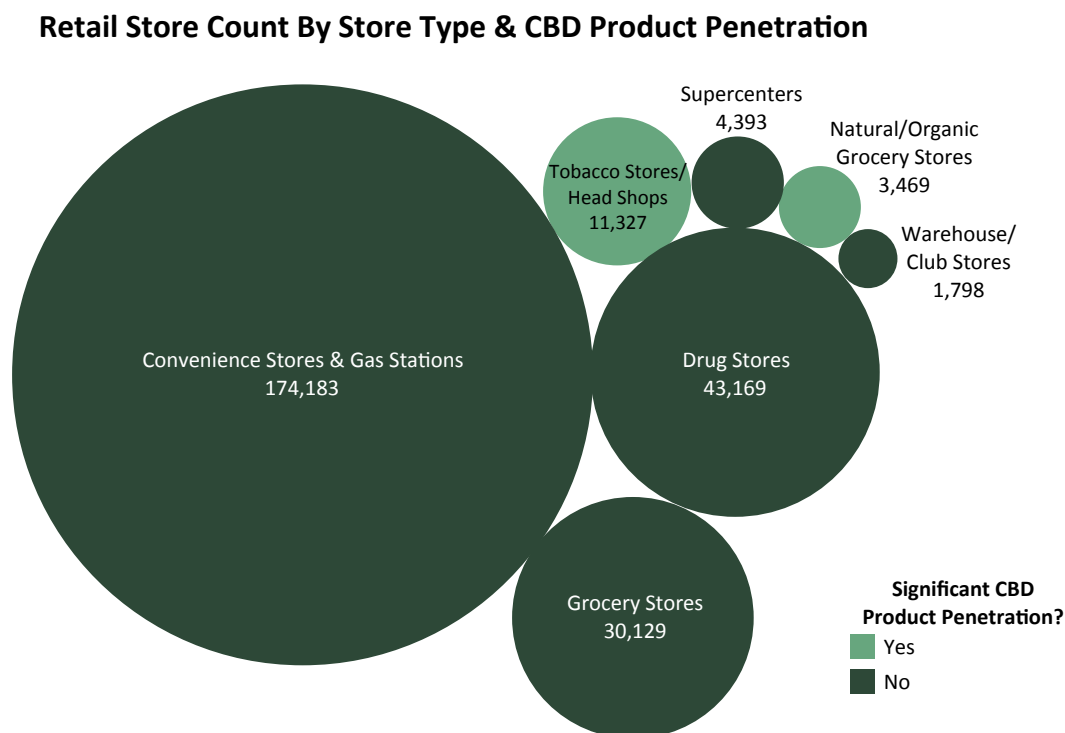
Mainstream retailers will control most of the market for hemp-derived CBD products—but the widespread availability of those products won’t radically alter current consumer behavior.

That is to say, if a consumer shops in an independent natural food store and buys hemp-derived CBD products there, the sale of those products in Target or Costco isn’t likely to change that consumer’s buying habits.

Yes, there will be more competition for specialized retail—but that already exists in the form of e-commerce.

As availability and awareness of hemp-derived CBD products grow, expect moderate to strong growth in small, specialized retail channels.

Chart 5: Retail Store Count By Type & CBD Product Penetration



Source: U.S. Census Bureau, National Association of Convenience Stores, Pharmacy Times, Progressive Grocer
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Though products containing CBD are gaining significant traction, their presence on the shelves of physical retail stores remains limited. Online retailers currently account for the vast majority of CBD sales, but the tide could shift if national retailers begin stocking CBD products.

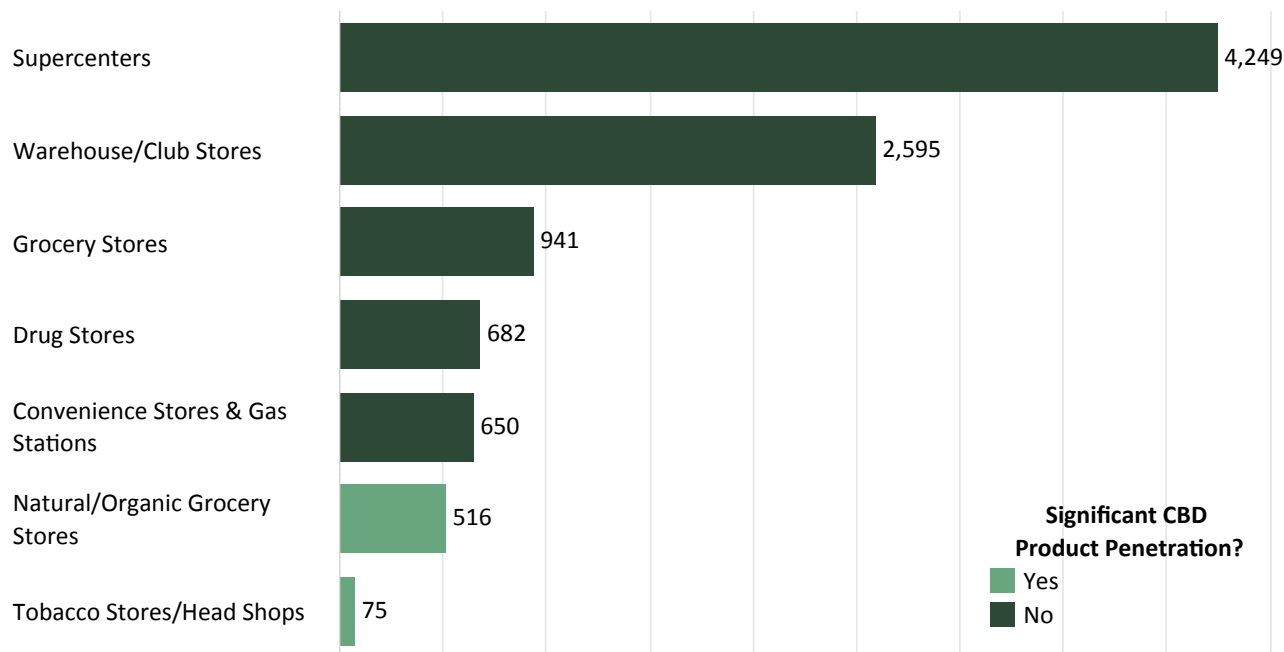
While exact numbers are hard to pin down, many tobacco stores/head shops and natural grocery stores are currently selling products that contain CBD.

If, for example, 20% of natural grocery stores and 80% of tobacco stores/head shops carry CBD products now, that

would result in a retail footprint of just over 9,700 stores.

A 20% CBD product penetration rate applied to other conventional retail channels—including convenience stores/gas stations, drug stores, supercenters, warehouse/club stores and grocery stores—would result in CBD products appearing in nearly 51,000 retail stores—a fivefold increase.

It will likely take several years for products containing CBD to gain a significant toehold in traditional retail outlets, but it could open an opportunity for CBD manufacturers to serve a significantly larger market than they have now.

Chart 6: Average Number of Daily Customers Per Store By Store Type & CBD Product Penetration**Average Number of Daily Customers Per Store By Store Type & CBD Product Penetration**

Source: Food Marketing Institute, National Association of Convenience Stores, Nielsen, Progressive Grocer, Pharmacy Times, Statista, VapeMentors © 2019 Hemp Industry Daily, a division of Anne Holland Ventures Inc. All rights reserved.

Gaining shelf space in traditional retail outlets, such as a grocery store or supercenter, would also be a major boon for CBD product manufacturers due to the sheer amount of foot traffic these stores receive—typically much more than stores where products containing CBD are more readily available now.

On average, supercenters see nearly 60 times more

customers per day relative to a tobacco store. While a customer in a tobacco store/head shop may be more likely to purchase CBD than someone making a quick trip to the grocery store to pick up some milk, most shoppers make multiple visits per week to grocery stores and supercenters—providing many opportunities to expose new consumers to the CBD category.

Business Opportunities: Cultivation

Some small, traditional-crop farmers are no doubt watching the Farm Bill news with dollar signs in their eyes. With corn at less than \$4 a bushel, a pivot to a new crop can seem mighty appealing.

U.S. farmers have seemed eager to jump into this market. National hemp acreage jumped 168% between 2016 and 2017, according to state crop reports (national 2018 figures are so far unavailable or incomplete).

However, hemp remains a niche crop. While the U.S. planted roughly more than 26,000 acres of hemp in 2017, farmers planted nearly 90 *million* acres of corn that same year. Still, hemp's meteoric rise has caught the attention of many small farms.

But is it a good idea for a small farmer to jump into the hemp market when large corporate agriculture operations are poised to dominate?

It could be if you keep a few things in mind:

- Smaller hemp farmers who are strictly growing need to make sure they're getting the best deal possible if they're contracting with a processor. Get paid first. Don't rely on the profits the processor is going to make with your raw material.

- Research whom you're working with. Don't buy any genetics until you've had them tested. Don't get scammed by buying bunk seeds. It happens more often than you think.
- Focus on small-batch quality to differentiate yourself from the large, production-focused corporate operations. The CBD market is going to be insatiable for the immediate future.
- Follow the lead of the wine industry and advertise your hemp with a focus on terroir. If the region you're growing in has special, beneficial environmental qualities, market your hemp accordingly.
- But be realistic in your expectations for returns. New hemp farmers are not likely to turn a massive profit on an untested crop the first year out. In fact, in 2017, only 36% of hemp farmers surveyed by *Hemp Industry Daily* reported generating any revenue from their crops.
- The market for products—particularly those outside CBD—is still developing. Consider developing partnerships at the outset rather than hoping to find buyers after harvest.

Business Opportunities: Ancillary Products and Services

The sky's the limit when it comes to ancillary business opportunities related to the hemp industry. If it's needed for another business, it will likely be needed for hemp as well.

Essentially any mainstream business sector can be applied to this space, including:

- Insurance
- Banking
- Accounting
- Tax preparation
- Equipment leasing
- Investment counseling
- Consulting
- Packaging and labeling
- Human resources management

To date, the hemp industry has had a few tall hurdles, mainly banking, insurance and loans. Expect to see smaller companies, such as credit unions, making some of the first plays in the banking space.

Hemp growers should also welcome the prospect of federally backed crop insurance.

As hemp becomes a true industrial-scale crop in the U.S., the market for commercial agricultural equipment should be ripe. Agriculture equipment giants, such as John Deere or Case IH, have yet to roll out a complete line of U.S. hemp farming equipment—machines that don't get bound up by the strong fibers and stalks of hemp plants.

While some commercial hemp farming equipment has been developed in Canada and Europe, there may be a window of opportunity for smaller domestic equipment manufacturers to make inroads before the behemoth agriculture corporations get involved. Domestic firms already have built equipment such as mobile decortication systems to strip the outer bark, or fiber, from the woodier core of the plant, known as the hurd.

Harvesting remains one of the largest challenges for hemp farmers. More than half of American hemp farmers, 56%, surveyed by *Hemp Industry Daily* reported harvesting the plant exclusively by hand in 2017, according to the Annual Hemp & CBD Industry Factbook. Just 4% used harvesting equipment, with the remainder using a combination of hand and machine harvesting.

Another large opportunity is in infrastructure for storage and processing of hemp oil, grain and fiber. It's no stretch to imagine hemp silos and elevators evenly dispersed across the rural U.S.

Farmers will also be looking for a solution when it comes to field testing for THC content. They'll want to conduct their own field tests to monitor cannabinoid levels so they're not surprised by a state-run test—or to contest failed tests.

There is also money to be made for laboratories that secure the state government testing contracts. Regulators will be watching THC levels very closely in the early days of the industry.

Business Opportunities: Hemp Genetics

As a deluge of small companies—and a number of big ag companies—try to break into the hemp genetics market, competition and business opportunities in the United States should intensify, posing new challenges to existing hemp genetics businesses.

For the near- and midterm, however, business that are already operating in this area may have a bit of an edge to capitalize on the legal changes quickly.

One of the biggest challenges for new markets has been finding cultivars that grow well—and within the legal THC range. For example, 25% of hemp acres tested in Colorado in 2016 failed THC compliance, according to the Annual Hemp & CBD Industry Factbook. In 2017, that figure dropped to 8% as growers found seeds better suited to the climate and desired end uses.

Research and development takes time, so companies that have already invested in the process may also find themselves the target of acquirers looking to get a boost. Some early examples include:

- In October, cannabis giant Canopy Growth Corp. of Canada acquired a Colorado hemp-genetics firm, Ebbu, for \$25 million Canadian dollars (\$19.3 million) and 6.2 million shares, for a total upfront value of more than CA\$320 million.
- A month later, MariMed, a multistate marijuana operator based in Massachusetts, invested \$30 million in GenCanna, a Kentucky company that breeds hemp varieties for CBD production.

But hemp genetics breeders say the industry is still too small for many large agricultural companies—which is likely why we haven't seen many major headlines in that space. The question is: How long will that remain the case?

Bayer (which acquired Monsanto in 2018) pulled back from the cannabis market in Canada—specifically on recommending its pesticides for usage on cannabis crops—but noted that it is working to understand the market better.

Hemp genetics executives are also considering cooperation with mainstream food companies, such as Coca-Cola and Pepsi, that want to quickly create CBD-infused product lines. But for that to happen, big ag likely will need to play a role in meeting increased product demand.

Research Impact

The new Farm Bill will boost hemp genetics research, too. Many plant geneticists who may have had an interest in hemp but stayed out because of legal uncertainty will now feel free to come in.

In addition, the Farm Bill makes hemp eligible for USDA research grants. The agency spent more than \$1.6 billion on agricultural research in 2018, a much larger pool than could be accessed by the industry under a patchwork of state hemp programs.

The Global Hemp Marketplace

Roughly 30 countries in Asia, Europe, and North and South America already allow hemp cultivation.

The United Nations' Food and Agriculture Organization, which tracks global farming, reports that global acreage in hemp cultivation in 2016—the most recent year available—was 192,000 acres.

The U.N. estimated total hemp production in 2016 at 355 million pounds.

But those numbers are incomplete. Not all nations report hemp acreage to the U.N.

Among the producers left out of the U.N.'s hemp count:

- Canada, where industry groups say about 138,000 acres of hemp were planted in 2018.
- Uruguay, where 2,471 acres of hemp were licensed in 2018.
- Colombia, where acreage counts are not available.

With those exceptions, global acreage in hemp cultivation in 2016 was 192,000 acres, with total production of 355 million pounds. Leading hemp producers are:

- *European Union
- China
- South Korea
- Russia

(*Most production takes place in France, the Netherlands, Lithuania and Romania.)

Many of the Latin American countries that have been developing cannabis legislation have been cautious to allow cultivation and started with restrictive, import-only programs of CBD products—which opens the door for new hemp producers to enter the market.

These include:

- Brazil
- Argentina
- Paraguay
- Mexico

But legislation is evolving rapidly, and only Brazil has no plans in place to eventually allow cultivation.

Global investment

The Farm Bill is certain to trigger a global shift in cannabis investing.

That's because U.S.-based hemp companies now have full access to the largest and most prestigious exchanges, Nasdaq and the New York Stock Exchange.

Will Wall Street create hemp giants that will leverage their capital and competitive edge overseas?

According to Preston Gardner, an analyst with CVC Partners, U.S. hemp investors should expect:

- Significant M&A activity.
- Hemp activity in the agricultural, pharmaceutical and technology industries.
- American hemp companies seeking a global edge through quality control.

The last point could be the best way for U.S. hemp entrepreneurs to compete against larger hemp producers around the globe.

"Our cost to cultivate is going to be greater compared with international competitors," Gardner said. He believes American hemp producers will tout "a quality differentiation factor," particularly their expertise cultivating high-CBD cultivars.

Instituting quality considerations, such as Good Manufacturing Practice and standard operating procedures, will be key for American hemp to find markets overseas.

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SEC. 10113. HEMP PRODUCTION.

The Agricultural Marketing Act of 1946 (7 U.S.C. 1621 et seq.) is amended by adding at the end the following:

“Subtitle G—Hemp Production

“SEC. 297A. DEFINITIONS.

“In this subtitle:

“(1) HEMP.—The term ‘hemp’ means the plant Cannabis sativa L. and any part of that plant, including the seeds thereof and all derivatives, extracts, cannabinoids, isomers, acids, salts, and salts of isomers, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis.

“(2) INDIAN TRIBE.—The term ‘Indian tribe’ has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

“(3) SECRETARY.—The term ‘Secretary’ means the Secretary of Agriculture.

“(4) STATE.—The term ‘State’ means—

“(A) a State;

“(B) the District of Columbia;

“(C) the Commonwealth of Puerto Rico; and

“(D) any other territory or possession of the United States.

“(5) STATE DEPARTMENT OF AGRICULTURE.—The term ‘State department of agriculture’ means the agency, commission, or department of a State government responsible for agriculture in the State.

“(6) TRIBAL GOVERNMENT.—The term ‘Tribal government’ means the governing body of an Indian tribe.

“SEC. 297B. STATE AND TRIBAL PLANS.

“(a) SUBMISSION.—

“(1) IN GENERAL.—A State or Indian tribe desiring to have primary regulatory authority over the production of hemp in the State or territory of the Indian tribe shall submit to the Secretary, through the State department of agriculture (in consultation with the Governor and chief law enforcement officer of the State) or the Tribal government, as applicable, a plan under which the State or Indian tribe monitors and regulates that production as described in paragraph (2).

“(2) CONTENTS.—A State or Tribal plan referred to in paragraph (1)—

“(A) shall only be required to include—

“(i) a practice to maintain relevant information regarding land on which hemp is produced in the State or territory of the Indian tribe, including a legal description of the land, for a period of not less than 3 calendar years;

“(ii) a procedure for testing, using post-decarboxylation or other similarly reliable methods, delta-9 tetrahydrocannabinol concentration levels of hemp produced in the State or territory of the Indian tribe;

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“(iii) a procedure for the effective disposal of—

“(I) plants, whether growing or not, that are produced in violation of this subtitle; and

“(II) products derived from those plants;

“(iv) a procedure to comply with the enforcement procedures under subsection (e);

“(v) a procedure for conducting annual inspections of, at a minimum, a random sample of hemp producers to verify that hemp is not produced in violation of this subtitle;

“(vi) a procedure for submitting the information described in section 297C(d)(2), as applicable, to the Secretary not more than 30 days after the date on which the information is received; and

“(vii) a certification that the State or Indian tribe has the resources and personnel to carry out the practices and procedures described in clauses (i) through (vi); and

“(B) may include any other practice or procedure established by a State or Indian tribe, as applicable, to the extent that the practice or procedure is consistent with this subtitle.

“(3) RELATION TO STATE AND TRIBAL LAW.—

“(A) NO PREEMPTION.—Nothing in this subsection preempts or limits any law of a State or Indian tribe that—

“(i) regulates the production of hemp; and

“(ii) is more stringent than this subtitle.

“(B) REFERENCES IN PLANS.—A State or Tribal plan referred to in paragraph (1) may include a reference to a law of the State or Indian tribe regulating the production of hemp, to the extent that law is consistent with this subtitle.

“(b) APPROVAL.—

“(1) IN GENERAL.—Not later than 60 days after receipt of a State or Tribal plan under subsection (a), the Secretary shall—

“(A) approve the State or Tribal plan if the State or Tribal plan complies with subsection (a); or

“(B) disapprove the State or Tribal plan only if the State or Tribal plan does not comply with subsection (a).

“(2) AMENDED PLANS.—If the Secretary disapproves a State or Tribal plan under paragraph (1)(B), the State, through the State department of agriculture (in consultation with the Governor and chief law enforcement officer of the State) or the Tribal government, as applicable, may submit to the Secretary an amended State or Tribal plan that complies with subsection (a).

“(3) CONSULTATION.—The Secretary shall consult with the Attorney General in carrying out this subsection.

“(c) AUDIT OF STATE COMPLIANCE.—

“(1) IN GENERAL.—The Secretary may conduct an audit of the compliance of a State or Indian tribe with a State or Tribal plan approved under subsection (b).

“(2) NONCOMPLIANCE.—If the Secretary determines under an audit conducted under paragraph (1) that a State or Indian tribe is not materially in compliance with a State or Tribal plan—

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“(A) the Secretary shall collaborate with the State or Indian tribe to develop a corrective action plan in the case of a first instance of noncompliance; and

“(B) the Secretary may revoke approval of the State or Tribal plan in the case of a second or subsequent instance of noncompliance.

“(d) TECHNICAL ASSISTANCE.—The Secretary may provide technical assistance to a State or Indian tribe in the development of a State or Tribal plan under subsection (a).

“(e) VIOLATIONS.—

“(1) IN GENERAL.—A violation of a State or Tribal plan approved under subsection (b) shall be subject to enforcement solely in accordance with this subsection.

“(2) NEGLIGENT VIOLATION.—

“(A) IN GENERAL.—A hemp producer in a State or the territory of an Indian tribe for which a State or Tribal plan is approved under subsection (b) shall be subject to subparagraph (B) of this paragraph if the State department of agriculture or Tribal government, as applicable, determines that the hemp producer has negligently violated the State or Tribal plan, including by negligently—

“(i) failing to provide a legal description of land on which the producer produces hemp;

“(ii) failing to obtain a license or other required authorization from the State department of agriculture or Tribal government, as applicable; or

“(iii) producing Cannabis sativa L. with a delta-9 tetrahydrocannabinol concentration of more than 0.3 percent on a dry weight basis.

“(B) CORRECTIVE ACTION PLAN.—A hemp producer described in subparagraph (A) shall comply with a plan established by the State department of agriculture or Tribal government, as applicable, to correct the negligent violation, including—

“(i) a reasonable date by which the hemp producer shall correct the negligent violation; and

“(ii) a requirement that the hemp producer shall periodically report to the State department of agriculture or Tribal government, as applicable, on the compliance of the hemp producer with the State or Tribal plan for a period of not less than the next 2 calendar years.

“(C) RESULT OF NEGLIGENT VIOLATION.—A hemp producer that negligently violates a State or Tribal plan under subparagraph (A) shall not as a result of that violation be subject to any criminal enforcement action by the Federal Government or any State government, Tribal government, or local government.

“(D) REPEAT VIOLATIONS.—A hemp producer that negligently violates a State or Tribal plan under subparagraph (A) 3 times in a 5-year period shall be ineligible to produce hemp for a period of 5 years beginning on the date of the third violation.

“(3) OTHER VIOLATIONS.—

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“(A) IN GENERAL.—If the State department of agriculture or Tribal government in a State or the territory of an Indian tribe for which a State or Tribal plan is approved under subsection (b), as applicable, determines that a hemp producer in the State or territory has violated the State or Tribal plan with a culpable mental state greater than negligence—

“(i) the State department of agriculture or Tribal government, as applicable, shall immediately report the hemp producer to—

“(I) the Attorney General; and

“(II) the chief law enforcement officer of the State or Indian tribe, as applicable; and

“(ii) paragraph (1) of this subsection shall not apply to the violation.

“(B) FELONY.—

“(i) IN GENERAL.—Except as provided in clause (ii), any person convicted of a felony relating to a controlled substance under State or Federal law before, on, or after the date of enactment of this subtitle shall be ineligible, during the 10-year period following the date of the conviction—

“(I) to participate in the program established under this section or section 297C; and

“(II) to produce hemp under any regulations or guidelines issued under section 297D(a).

“(ii) EXCEPTION.—Clause (i) shall not apply to any person growing hemp lawfully with a license, registration, or authorization under a pilot program authorized by section 7606 of the Agricultural Act of 2014 (7 U.S.C. 5940) before the date of enactment of this subtitle.

“(C) FALSE STATEMENT.—Any person who materially falsifies any information contained in an application to participate in the program established under this section shall be ineligible to participate in that program.

“(f) EFFECT.—Nothing in this section prohibits the production of hemp in a State or the territory of an Indian tribe—

“(1) for which a State or Tribal plan is not approved under this section, if the production of hemp is in accordance with section 297C or other Federal laws (including regulations); and

“(2) if the production of hemp is not otherwise prohibited by the State or Indian tribe.

“SEC. 297C. DEPARTMENT OF AGRICULTURE.

“(a) DEPARTMENT OF AGRICULTURE PLAN.—

“(1) IN GENERAL.—In the case of a State or Indian tribe for which a State or Tribal plan is not approved under section 297B, the production of hemp in that State or the territory of that Indian tribe shall be subject to a plan established by the Secretary to monitor and regulate that production in accordance with paragraph (2).

“(2) CONTENT.—A plan established by the Secretary under paragraph (1) shall include—

“(A) a practice to maintain relevant information regarding land on which hemp is produced in the State or

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territory of the Indian tribe, including a legal description of the land, for a period of not less than 3 calendar years;

“(B) a procedure for testing, using post-decarboxylation or other similarly reliable methods, delta-9 tetrahydrocannabinol concentration levels of hemp produced in the State or territory of the Indian tribe;

“(C) a procedure for the effective disposal of—

“(i) plants, whether growing or not, that are produced in violation of this subtitle; and

“(ii) products derived from those plants;

“(D) a procedure to comply with the enforcement procedures under subsection (c)(2);

“(E) a procedure for conducting annual inspections of, at a minimum, a random sample of hemp producers to verify that hemp is not produced in violation of this subtitle; and

“(F) such other practices or procedures as the Secretary considers to be appropriate, to the extent that the practice or procedure is consistent with this subtitle.

“(b) LICENSING.—The Secretary shall establish a procedure to issue licenses to hemp producers in accordance with a plan established under subsection (a).

“(c) VIOLATIONS.—

“(1) IN GENERAL.—In the case of a State or Indian tribe for which a State or Tribal plan is not approved under section 297B, it shall be unlawful to produce hemp in that State or the territory of that Indian tribe without a license issued by the Secretary under subsection (b).

“(2) NEGLIGENT AND OTHER VIOLATIONS.—A violation of a plan established under subsection (a) shall be subject to enforcement in accordance with paragraphs (2) and (3) of section 297B(e), except that the Secretary shall carry out that enforcement instead of a State department of agriculture or Tribal government.

“(3) REPORTING TO ATTORNEY GENERAL.—In the case of a State or Indian tribe covered by paragraph (1), the Secretary shall report the production of hemp without a license issued by the Secretary under subsection (b) to the Attorney General.

“(d) INFORMATION SHARING FOR LAW ENFORCEMENT.—

“(1) IN GENERAL.—The Secretary shall—

“(A) collect the information described in paragraph (2); and

“(B) make the information collected under subparagraph (A) accessible in real time to Federal, State, territorial, and local law enforcement.

“(2) CONTENT.—The information collected by the Secretary under paragraph (1) shall include—

“(A) contact information for each hemp producer in a State or the territory of an Indian tribe for which—

“(i) a State or Tribal plan is approved under section 297B(b); or

“(ii) a plan is established by the Secretary under this section;

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“(B) a legal description of the land on which hemp is grown by each hemp producer described in subparagraph (A); and

“(C) for each hemp producer described in subparagraph (A)—

“(i) the status of—

“(I) a license or other required authorization from the State department of agriculture or Tribal government, as applicable; or

“(II) a license from the Secretary; and

“(ii) any changes to the status.

“SEC. 297D. REGULATIONS AND GUIDELINES; EFFECT ON OTHER LAW.

“(a) PROMULGATION OF REGULATIONS AND GUIDELINES; REPORT.—

“(1) REGULATIONS AND GUIDELINES.—

“(A) IN GENERAL.—*The Secretary shall promulgate regulations and guidelines to implement this subtitle as expeditiously as practicable.*

“(B) CONSULTATION WITH ATTORNEY GENERAL.—*The Secretary shall consult with the Attorney General on the promulgation of regulations and guidelines under subparagraph (A).*

“(2) REPORT.—*The Secretary shall annually submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate a report containing updates on the implementation of this subtitle.*

“(b) AUTHORITY.—*Subject to subsection (c)(3)(B), the Secretary shall have sole authority to promulgate Federal regulations and guidelines that relate to the production of hemp, including Federal regulations and guidelines that relate to the implementation of sections 297B and 297C.*

“(c) EFFECT ON OTHER LAW.—*Nothing in this subtitle shall affect or modify—*

“(1) the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.);

“(2) section 351 of the Public Health Service Act (42 U.S.C. 262); or

“(3) the authority of the Commissioner of Food and Drugs and the Secretary of Health and Human Services—

“(A) under—

“(i) the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.); or

“(ii) section 351 of the Public Health Service Act (42 U.S.C. 262); or

“(B) to promulgate Federal regulations and guidelines that relate to the production of hemp under the Act described in subparagraph (A)(i) or the section described in subparagraph (A)(ii).

“SEC. 297E. AUTHORIZATION OF APPROPRIATIONS.

“There are authorized to be appropriated such sums as are necessary to carry out this subtitle.”

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SEC. 10114. INTERSTATE COMMERCE.

(a) *RULE OF CONSTRUCTION.*—*Nothing in this title or an amendment made by this title prohibits the interstate commerce of hemp (as defined in section 297A of the Agricultural Marketing Act of 1946 (as added by section 10113)) or hemp products.*

(b) *TRANSPORTATION OF HEMP AND HEMP PRODUCTS.*—*No State or Indian Tribe shall prohibit the transportation or shipment of hemp or hemp products produced in accordance with subtitle G of the Agricultural Marketing Act of 1946 (as added by section 10113) through the State or the territory of the Indian Tribe, as applicable.*

SEC. 10115. FIFRA INTERAGENCY WORKING GROUP.

Section 3(c) of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 13a(c)) is amended by adding at the end the following:

“(11) INTERAGENCY WORKING GROUP.—

“(A) DEFINITION OF COVERED AGENCY.—In this paragraph, the term ‘covered agency’ means any of the following:

“(i) The Department of Agriculture.

“(ii) The Department of Commerce.

“(iii) The Department of the Interior.

“(iv) The Council on Environmental Quality.

“(v) The Environmental Protection Agency.

“(B) ESTABLISHMENT.—The Administrator shall establish an interagency working group, to be comprised of representatives from each covered agency, to provide recommendations regarding, and to implement a strategy for improving, the consultation process required under section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1536) for pesticide registration and registration review.

“(C) DUTIES.—The interagency working group established under subparagraph (B) shall—

“(i) analyze relevant Federal law (including regulations) and case law for purposes of providing an outline of the legal and regulatory framework for the consultation process referred to in that subparagraph, including—

“(I) requirements under this Act and the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.);

“(II) Federal case law regarding the intersection of this Act and the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.); and

“(III) Federal regulations relating to the pesticide consultation process;

“(ii) provide advice regarding methods of—

“(I) defining the scope of actions of the covered agencies that are subject to the consultation requirement referred to in subparagraph (B); and

“(II) properly identifying and classifying effects of actions of the covered agencies with respect to that consultation requirement;

“(iii) identify the obligations and limitations under Federal law of each covered agency for purposes of pro-

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viding a legal and regulatory framework for developing the recommendations referred to in subparagraph (B);

“(iv) review practices for the consultation referred to in subparagraph (B) to identify problem areas, areas for improvement, and best practices for conducting that consultation among the covered agencies;

“(v) develop scientific and policy approaches to increase the accuracy and timeliness of the process for that consultation, in accordance with requirements of this Act and the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), including—

“(I) processes to efficiently share data and coordinate analyses among the Department of Agriculture, the Department of Commerce, the Department of the Interior, and the Environmental Protection Agency;

“(II) a streamlined process for identifying which actions require no consultation, informal consultation, or formal consultation;

“(III) an approach that will provide clarity with respect to what constitutes the best scientific and commercial data available in the fields of pesticide use and ecological risk assessment, pursuant to section 7(a)(2) of the Endangered Species Act of 1973 (16 U.S.C. 1536(a)(2)); and

“(IV) approaches that enable the Environmental Protection Agency to better assist the Department of the Interior and the Department of Commerce in carrying out obligations under that section in a timely and efficient manner; and

“(vi) propose and implement a strategy to implement approaches to consultations under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) and document that strategy in a memorandum of understanding, revised regulations, or another appropriate format to promote durable cooperation among the covered agencies.

“(D) REPORTS.—

“(i) PROGRESS REPORTS.—

“(I) IN GENERAL.—Not later than 18 months after the date of enactment of this paragraph, the Administrator, in coordination with the head of each other covered agency, shall submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate a report describing the progress of the working group in developing the recommendations under subparagraph (B).

“(II) REQUIREMENTS.—The report under this clause shall—

“(aa) reflect the perspectives of each covered agency; and

“(bb) identify areas of new consensus and continuing topics of disagreement and debate.

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“(ii) *RESULTS.*—

“(I) *IN GENERAL.*—Not later than 1 year after the date of enactment of this paragraph, the Administrator, in coordination with the head of each other covered agency, shall submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate a report describing—

“(aa) the recommendations developed under subparagraph (B); and

“(bb) plans for implementation of those recommendations.

“(II) *REQUIREMENTS.*—The report under this clause shall—

“(aa) reflect the perspectives of each covered agency; and

“(bb) identify areas of consensus and continuing topics of disagreement and debate, if any.

“(iii) *IMPLEMENTATION.*—Not later than 1 year after the date of submission of the report under clause (i), the Administrator, in coordination with the head of each other covered agency, shall submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate a report describing—

“(I) the implementation of the recommendations referred to in that clause;

“(II) the extent to which that implementation improved the consultation process referred to in subparagraph (B); and

“(III) any additional recommendations for improvements to the process described in subparagraph (B).

“(iv) *OTHER REPORTS.*—Not later than the date that is 180 days after the date of submission of the report under clause (iii), and not less frequently than once every 180 days thereafter during the 5-year period beginning on that date, the Administrator, in coordination with the head of each other covered agency, shall submit to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Nutrition, and Forestry of the Senate a report describing—

“(I) the implementation of the recommendations referred to in that clause;

“(II) the extent to which that implementation improved the consultation process referred to in subparagraph (B); and

“(III) any additional recommendations for improvements to the process described in subparagraph (B).

“(E) *CONSULTATION WITH PRIVATE SECTOR.*—In carrying out the duties under this paragraph, the working group shall, as appropriate—

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“(i) consult with, representatives of interested industry stakeholders and nongovernmental organizations; and

“(ii) take into consideration factors, such as actual and potential differences in interest between, and the views of, those stakeholders and organizations.

“(F) *FEDERAL ADVISORY COMMITTEE ACT.*—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the working group established under this paragraph.

“(G) *SAVINGS CLAUSE.*—Nothing in this paragraph supersedes any provision of—

“(i) this Act; or

“(ii) the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), including the requirements under section 7 of that Act (16 U.S.C. 1536).”.

SEC. 10116. STUDY ON METHYL BROMIDE USE IN RESPONSE TO AN EMERGENCY EVENT.

(a) *DEFINITIONS.*—In this section:

(1) *EMERGENCY EVENT.*—The term “emergency event” means a situation—

(A) that occurs at a location on which a plant or commodity is grown or produced or facility providing for the storage of, or other services with respect to, a plant or commodity;

(B) for which the lack of availability of methyl bromide for a particular use would result in significant economic loss to the owner, lessee, or operator of the location or facility or the owner, grower, or purchaser of the plant or commodity; and

(C) that, in light of the specific agricultural, meteorological, or other conditions presented, requires the use of methyl bromide to control a pest or disease in the location or facility because there are no technically feasible alternatives to methyl bromide easily accessible by an entity referred to in subparagraph (B) at the time and location of the event that—

(i) are registered under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.) for the intended use or pest to be so controlled; and

(ii) would adequately control the pest or disease presented at the location or facility.

(2) *PEST.*—The term “pest” has the meaning given the term in section 2 of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136).

(b) *STUDY.*—

(1) *IN GENERAL.*—The Secretary, in consultation with the Secretary of State and the Administrator of the Environmental Protection Agency, shall complete a study on the potential use of methyl bromide in response to an emergency event.

(2) *REQUIREMENTS.*—The study under paragraph (1) shall include—

(A) a risk-benefit analysis of authorizing State, local, or Tribal authorities, in accordance with appropriate requirements and criteria, such as the recommendations developed under subparagraph (E)—

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(i) to determine when the use of methyl bromide is required; and

(ii) to authorize such use;

(B) a risk-benefit analysis of authorizing the Secretary, in accordance with appropriate requirements and criteria, such as the recommendations developed under subparagraph (E)—

(i) to determine when the use of methyl bromide is required; and

(ii) to authorize such use;

(C) a historic estimate of situations occurring on or after September 15, 1997, that could have been deemed emergency events;

(D) a detailed assessment of the adherence of the United States to international obligations of the United States with respect to the prevention of ozone depletion; and

(E) an assessment and recommendations on appropriate requirements and criteria to be met to authorize the use of methyl bromide in response to an emergency event (including any recommendations for revising the definition of the term “emergency event” in subsection (a)) in a manner that fully complies with the Montreal Protocol on Substances that Deplete the Ozone Layer, including Decision IX/7 of the Ninth Meeting of the Conference of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer.

(c) *REPORT.*—Not later than 2 years after the date of enactment of this Act, the Secretary shall submit a report on the study under subsection (b) to the Committee on Agriculture of the House of Representatives and the Committee on Agriculture, Forestry, and Nutrition of the Senate.

TITLE XI—CROP INSURANCE

SEC. 11101. DEFINITIONS.

Section 502(b) of the Federal Crop Insurance Act (7 U.S.C. 1502(b)) is amended—

(1) by redesignating paragraphs (6), (7), (8), (9), (10), and (11) as paragraphs (7), (8), (10), (11), (12), and (13) respectively;

(2) by inserting after paragraph (5) the following:

“(6) *COVER CROP TERMINATION.*—The term ‘cover crop termination’ means a practice that historically and under reasonable circumstances results in the termination of the growth of a cover crop.”; and

(3) by inserting after paragraph (8) (as so redesignated) the following:

“(9) *HEMP.*—The term ‘hemp’ has the meaning given the term in section 297A of the Agricultural Marketing Act of 1946.”.

SEC. 11102. DATA COLLECTION.

Section 506(h)(2) of the Federal Crop Insurance Act (7 U.S.C. 1506(h)(2)) is amended—

(1) by striking “The Corporation” and inserting the following: