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Hemp Production, Disposition and Income Survey

Interviewer's Manual February 2023

January 2023



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# Chapter 1 – General

The Hemp Production, Disposition and Income Survey (Hemp PDI) is a sample of every hemp operation in all states. The Hemp PDI Survey is conducted annually. The survey covers the entire 2022 crop year.

As defined in the 2018 Farm Bill, the term "hemp" means the plant species 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. Delta-9 tetrahydrocannabinol, or THC, is the primary intoxicating component of cannabis. Cannabis with a THC level exceeding 0.3 percent is considered marijuana, which remains classified as a schedule I controlled substance regulated by the Drug Enforcement Administration (DEA) under the Controlled Substances Act (CSA).

Under the Agricultural Act of 2014 (2014 Farm Bill), Public Law 113-79, State departments of agriculture and institutions of higher education were permitted to produce hemp as part of a pilot program for research purposes. The authority for hemp production provided in the 2014 Farm Bill was extended by the 2018 Farm Bill, which was signed into law on December 20, 2018. Hemp is a commodity that can be used for numerous industrial and horticultural purposes including fabric, paper, construction materials, food products, cosmetics, production of cannabinoids (such as cannabidiol or CBD), and other products.

# Chapter 2 – Terms and Definitions and Frequently Asked Questions

### Terms and Definitions

The following terms and definitions pertain to the hemp crop, practices and uses. Enumerators should be familiar with the terms and definitions listed below prior to conducting any interviews for the Hemp PDI Survey.

**Cannabinoids:** Chemical compounds in the cannabis sativa plant that give the user the desired effect when consumed in oil or smokable flower form. Hemp flower is often grown with certain cannabinoids in mind. The cannabinoids most commonly sought after in legal hemp production are cannabidiol (CBD), cannabigerol (CBG), and cannabinol (CBN). (Note: delta-9 tetrahydrocannabidiol—commonly known as "THC"—is also a cannabinoid, but a plant with THC content over a certain threshold is considered marijuana and illegal under federal law.)

**Hemp:** The plant species 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 (THC) concentration of not more than 0.3 percent on a dry weight basis

Other general information on the hemp crop is below:

- Hemp plants can be male or female
- Legal uses for hemp are for flower, grain, fiber, and seed

Hemp cannot be legally fed to livestock

**Hemp Fiber:** Used for clothes, pressed plastics, ropes, animal bedding paper, biofuel

The hemp stalk can be processed into rope or cloth and is typically grown in the open. It is cut and left to dry in the field like hay but dries much longer. This process is called retting and helps separate the bast from the woody core of the stem.

The same hemp plants can be harvested for other uses and again for fiber. If the crop tests higher than 0.3% THC, the crop may be eligible to be remediated, reducing the THC below the legal threshold and allowing it to be sold as shredded biomass for cannabinoid extraction for fiber/grain.

**Hemp Flower:** Used for human consumption, such as smokable hemp, the extraction of cannabinoids (such as CBD, CBG, CBN, etc.) or terpenes, often used in oils, lotions, cleansers, bath products, or other nutraceutical or topical products

### Hemp for flower:

- Is also referred to as floral hemp
- Can be grown in the open or under protection
- Oil is extracted from the female flower and leaf material, not seed
- Cannabinoid concentration in the flower stops after pollination

After harvesting, hemp can be immediately delivered to the processor fresh, but is usually dried. It can be hung up to dry like tobacco, kept in a forage box, baled, or left in the field to dry in desert states, like Arizona. Once dried, it must be bucked, which removes the leaves and flowers from the stems. It may also be trimmed, removing the leaves from around the buds and flowers. Once only the dried buds and flowers are left, the essential oil can be extracted.

**Hemp Grain:** Used for human consumption, such as crushed seed oil (not CBD oil), hemp hearts, protein supplements, or for other human consumption

Hemp for grain can be harvested from male or female plants and is typically grown in the open. It cannot be fed to livestock and is typically dried for storage.

# Hemp Seed: Seed produced to sell to others

Hemp can be grown for seed for planting, typically under protection. Essential oil can only be distilled from female plants, making feminized seed much more valuable than non-feminized seed. Hemp for seed includes other propagative materials, including transplants and clones.

**Terpenes:** Molecules in the cannabis sativa plant that are responsible for the aroma and flavor of the hemp plant. They may also have an effect on the user. Some growers may grow hemp flower with terpenes in mind.

Clones and transplants: Hemp plants that are typically started indoors and then moved outdoors to complete their growth. Some hemp growers may grow clones/transplants and sell them to other users to plant on their own.

- <u>Transplant</u>: grown from seed under protection to be transplanted into the field
- <u>Clone</u>: grown from a cutting of a parent plant with the same genetics as the original plant

# Frequently Asked Questions

NASS has developed a website devoted to the Hemp PDI Survey. Respondents can access the web self-reporting instrument from this website or view the Frequently Asked Questions (FAQs) about the survey. This site is a good resource for enumerators as well, to get an idea of what types of questions you might receive during an interview. The website can be accessed at the following link: <a href="https://www.nass.usda.gov/Surveys/Guide">https://www.nass.usda.gov/Surveys/Guide</a> to NASS Surveys/Hemp/index.php

In addition to the FAQs included on the website, a more comprehensive list is included below:

### What information does the 2022 Hemp Production, Disposition and Income survey collect?

- The Hemp Production, Disposition and Income Survey collects information on the total planted and harvested area, yield, production, and value of hemp in the United States.
   Data is collected for hemp grown in the open and hemp grown under protection. This survey will collect information for all utilizations of hemp:
  - Hemp flower, hemp grain for human consumption, fiber hemp, and seed hemp grown in open fields.
  - Hemp flower, hemp for transplant production, and hemp for seed production grown under protection.

### What kinds of questions will be on the survey?

 We are focused on hemp harvested during the 2022 crop year, which is identical to the 2022 calendar year (January 1 – December 31). Hemp planted acres in open fields, hemp harvested acres in open fields, which of the hemp products uses were hemp grown for: hemp flower for human consumption, hemp for grain for human consumption, hemp for fiber, and hemp seed to sell, and any other use not mentioned. Also, total pounds produced and sold for these five types of uses.

We have a section focused on Hemp grown under protection: Your Greenhouse and Nursery operations growing hemp. They will be asked the same questions as mentioned for hemp producers growing hemp in open fields, except square footage is asked instead of acreage, fiber and grain are not asked, and clones/transplants are asked. Lastly, there's a few demographic questions to better help USDA hemp program plans. Sex, race, how long you've been farming or ranching.

### How is hemp defined?

 As defined in the Agriculture Improvement Act of 2018 (2018 Farm Bill), the term "hemp" means the plant species Cannabis sativa L. and any part of that plant such as the seeds, all derivatives, and extracts, whether growing or not, with a delta-9 tetrahydrocannabinol concentration of not more than 0.3% on a dry weight basis. The Domestic Hemp Production Program established in the Agriculture Improvement Act of 2018 (2018 Farm Bill) allows for the cultivation of hemp under certain conditions.

### How do you know who the producers are and how many producers are getting the survey?

Within USDA, we have partnered with Agricultural Marketing Service (AMS), Farm
Service Agency (FSA), and Risk Management Agency (RMA) to share information of
hemp producers. NASS has 46 State Statisticians including Regional Field Directors and
they have worked with State Departments of Agriculture to share hemp growers list in
support of the survey and industry. The sample size for the Hemp Production,
Disposition and Income Survey is 9,110.

### Why is participation important?

 Participation among survey respondents means better data that inform decisions about the hemp industry. The data results from the hemp survey can help inform decisions about growing, harvesting, and selling hemp as well as the type of hemp growers decide to produce. The survey results may also impact policy decisions about the hemp industry.

### Why is NASS conducting this survey?

 We have a USDA Hemp program to support and information is power. AMS, RMA, and FSA will benefit from the final results to administer their Hemp program responsibilities. NASS intends to do our best to find out the facts for USDA and the Hemp Industry.

### Who uses these data/how are these data used?

• The Hemp Production, Disposition and Income Survey will assist regulatory agencies, producers, state governments, processors, and other key industry entities. The survey data will support the USDA Agriculture Marketing Service to administer and monitor States and Indian Tribes who are approved under the 2018 Farm Bill to grow domestic hemp that will supply production for this emerging industry. The survey data will also assist the USDA Farm Service Agency, USDA Economic Research Service, and USDA Risk Management Agency with their program support responsibilities related to domestic hemp production.

### What will we know about the hemp industry when results come in?

 We should know the number of hemp acres planted, harvested, and total production in 2022 for the US, by region, and state. Also, the breakdown between hemp acres in the open and hemp grown under production by the four major types: hemp flower for human consumption, hemp for grain for human consumption, hemp for fiber, and hemp seed to sell.

Why should survey recipients who may not be active hemp producers respond to the survey?

 All responses mean better data about the hemp industry, however even if a survey recipient is not currently growing hemp, their response means NASS will not contact them regarding hemp in the future.

### What's the best way for a producer to respond to the survey?

 We encourage producers to complete the survey online at agcounts.usda.gov – online response is fast and secure. Online response's saves tax-payers dollars. All respondents will need is their unique survey code located on the front of the questionnaire to complete their survey online. They may also complete and return the survey by mail using the return envelope provided.

# Chapter 3 – Enumerator Procedures

### **Questionnaire Overview**

The Hemp PDI Survey questionnaire is designed for collection of data by mail, phone, or personal interview. You may need to phrase some questions in your own words if using the paper questionnaire for enumeration, since it is designed for self-reporting. A web instrument has also been created for respondent self-reporting.

This manual should be reviewed before beginning work on the survey and referred to as necessary during enumeration. The following guidelines should also be followed:

- Review the questionnaire (including routing and instructions) carefully before starting data collection.
- There is no specific reference date for this survey. **The reported data should include** all hemp harvested in 2022.
- This survey targets operations that grow hemp for any purpose. If question #2 on the first page of the survey is answered "No," indicating that no hemp was grown on the operation, skip to page 16 and conclude the survey.
- This survey is <u>operation</u> dominant.
  - If the operation is still in business, but the operator is different, please proceed with collecting the data.
  - If the existing sampled operation is completely out of business, but the operation that took over is still growing hemp, please collect the data.
  - You can collect data for newly discovered operations on a blank form.

### **Native American Tribe Operations**

Your Regional Field Office (RFO) will determine the best data collection strategies for Native American Tribes. There is not a special questionnaire version for them. Please follow the instructions provided by your RFO.

### **Retail Operations and/or Vertically Integrated Operations**

It is difficult to accurately characterize 'types' of hemp growers because there is so much variability in their scale, technology, and production systems. Because of this reality, please do

not assume that the operation is retail-only. Allow the survey questionnaire to either screen them in or screen them out.

### **Burden Statement**

Federal regulations require that an estimate of the average time required to complete the questionnaire be included on the form. The burden statement regulation also provides the public with an opportunity to respond to the Office of Management and Budget (OMB) regarding any aspect of a survey. This regulation is administered by the OMB which has the duty of approving and overseeing government data collection efforts. For this survey, the estimated burden is 15 minutes.

The average time requirement was based on cognitive interviews completed during the development of this project. If the respondent has problems with a questionnaire or with the time required to complete it, the issue may be conveyed to OMB at the address given in the burden statement. Since use of the burden statement is required by OMB regulations, any questions a respondent may have about the burden statement or the Paperwork Reduction Act (of which the burden statement is a part) should be addressed in writing to the OMB.

The burden statement will appear on all questionnaires. When each respondent is mailed the questionnaire (including sample copies), the enumerator collecting data does not need to present a copy of the burden statement at the time of the interview. Respondents often ask, "How long will this take?" Enumerators should not directly contradict the average time in the burden statement. However, enumerators may provide additional information, such as, "The official average for this survey is 15 minutes, but the interviews I have been doing in this area are averaging around 10 minutes."

### Methods of Data Collection

All modes of data collection are available for this survey.

A CAPI instrument will be available for mobile Computer Assisted Telephone Interviewing (mCATI) by field enumerators, and a Computer Assisted Telephone Interviewing (CATI) instrument will be available for call center enumerators to complete phone follow-up.

### Interview and Call Back Procedures

Important: Interview the farm or ranch operator, if at all possible. Information collected from persons other than the operator often turns out to be less accurate.

In some rare cases, you can contact the operator and complete the interview on the first attempt, but you likely will need to make one or more callbacks. The following instructions are a guide.

### 1. First Attempt

- a. If the farm operator is not present but is expected shortly, wait for the interview. If the operator is not available or is extremely busy, set up an appointment. It is very important to keep the appointment or call back if it cannot be kept.
- b. Make notes on any information learned while trying to contact the operator.
- c. If the operator will not be available until after the survey is over, interview a well-informed person such as the spouse, partner, child, or hired person. Try to interview the person most knowledgeable about the farming operation.

### 2. Second Attempt

a. If a second attempt is required, try again to interview the operator. Try to set up an appointment. You may try to interview a well-informed person associated with the operation.

# 3. Final Attempt

a. If, after all previous attempts, the operator is not available, interview a well-informed person about the operation. At the very least, try to find out if the person or operation named on the label is still farming or ranching. Write notes on the questionnaire to explain unusual circumstances.

### **CAPI** and mCATI Basics

Please review the guidelines below before completing the survey using Computer Assisted Personal Interview (CAPI) or mobile Computer Assisted Telephone Interview (mCATI) using the iPad.

- **Never** use commas when keying harvested area or production in CAPI. The numbers will not show up in CAPI on the backend.
- Any notes regarding an operation (out-of-business, new contact information, etc.) or data should be entered in CAPI.
- Check your iPad frequently each day. NASS deactivates mail, fax, and online reports in CAPI. They are noted as "received by field office" in your listing in CAPI.
- If you conduct your interviews using paper questionnaires, enter the data in CAPI ASAP.
- Check with your supervisor about whether they want to review your completed surveys.

# Chapter 4 – Survey Materials

All questionnaires will be mailed with a survey cover letter to sampled respondents in mid-January, and the web instrument will be open for self-reporting on the mail date. A reminder mailing will be sent to respondents later in the enumeration period, encouraging respondents to report online or by mail. An email reminder will also be sent a couple of weeks prior to data collection ending. A copy of the cover letter and reminder letter are included below for your information:



#### United States Department of Agriculture National Agricultural Statistics Service

What should I do next?

ways:

Complete your survey in one of the following

enclosed form to begin.

to 855-415-3687.

Online at agcounts.usda.gov through

reporting is fast and secure. You just

need your unique survey code on the

questionnaire and mail it back in the prepaid envelope provided or fax it

the Respondent Portal. Online

By mail or fax. Complete the



January 19, 2023

#### Why am I getting this letter?

You have been selected to participate in the 2022 Hemp Production and Disposition Inquiry. Please complete the survey at your earliest convenience. If you are not an active hemp producer, please respond to the first few survey questions to ensure we will not contact you regarding hemp in the future.

You may receive an email reminder to complete your questionnaire. If we do not hear from you by January 31, we may call you to arrange an interview.

#### How do hemp data impact me?

- The data from this hemp survey can help inform your decisions about growing, harvesting, and selling hemp as well as the type of hemp you decide to produce.
- The survey results will also assist regulatory agencies, state governments, processors, and other key industry
  entities that impact you, the producer. For more information about this survey, visit <u>nass.usda.gov/go/hemp</u>.

Hemp means the plant species Cannabis sativa L. with a delta-9 tetrahydrocannabinol concentration of not more than 0.3% on a dry weight basis. The Domestic Hemp Production Program established in the Agriculture Improvement Act of 2018 (2018 Farm Bill) allows for the cultivation of hemp under certain conditions.

We recommend you respond online through the new Respondent Portal. On the portal, you can complete your surveys, track upcoming surveys, access data visualizations and reports of interest, link to other USDA agencies, and more.

The information you provide will be used for statistical purposes only. In accordance with federal law, your responses will be kept confidential and will not be disclosed in identifiable form. We will publish the survey data April 19, 2023, on the NASS website at nass.usda.gov and in NASS's Quick Stats database at quickstats.nass.usda.gov.

Sincerely,

Joseph L. Parsons

Chair, Agricultural Statistics Board

USDA National Agricultural Statistics Service

Enclosure

1400 Independence Ave, SW – Washington, DC 20250 www.nass.usda.gov

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### Reminder Letter

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Dear Producer,

OMB No. 0535-0270 Exp. Date 8/31/2024

You should have recently received your 2022 Hemp Production and Disposition Inquiry. If you have already responded, thank you. If not, there is still time. You are encouraged to respond online at agcounts.usda.gov, by phone, mail, or fax.

The hemp survey data could influence your decisions about growing and selling hemp as well as policy decisions that impact you, the producer.

The information you provide will be used for statistical purposes only. In accordance with federal law, your responses will be kept confidential and will not be disclosed in identifiable form. For more information on this survey, visit <a href="mailto:nass.usda.qov/qo/hemp">nass.usda.qov/qo/hemp</a>. If you have any questions or need assistance completing your survey, please call 888-424-7828.

Sincerely,

Hubert Hamer

Administrator, National Agricultural Statistics Service

Online reporting is fast and secure. All you need is your survey code to begin. To complete your survey, follow these steps:

- Go to agcounts.usda.gov
- 2. Enter your Survey Code:
- 3. Select Submit & Get Survey(s).
- Find the HEMP PRODUCTION AND DISPOSITION INQUIRY and select Start Survey.
- Follow the survey prompts.
- Complete the survey through the conclusion section and select Submit Survey.

# Chapter 5 – Completing the Questionnaire

#### General

The Hemp PDI questionnaire is structured in 4 sections:

- 1. Harvested from Open Fields for flower, grain, fiber, seed, and other
- 2. Harvested from Under Protection for flower, clones/transplants, seed, and other
- 3. Operator Characteristics
- 4. Conclusion

As you complete the interview, keep the following in mind:

- Mark the appropriate units for all questions.
- If an operation is out-of-business or has been purchased by another company, please try to find out who bought/took over the business and their contact information.
- There are several skips in the questionnaire that route you to different questions/sections. Review the skips prior to conducting any interviews to become knowledgeable on the skips. This will help reduce respondent burden by only asking the required questions for that operation.
  - NOTE: Answering "No" to question #2 on the front page, skips the respondent to the conclusion and screens them out of the survey.

# Section 1 – Hemp Harvested from Open Fields

This section collects data for operations that plant or seed hemp outdoors in open field.

### Skips

• If the respondent answers "No" to question 1, Skip to page 9

### Acres Planted and Harvested

- These questions ask respondents about how many acres they planted and how many acres they harvested. Both questions ask at the tenth of an acre; some growers will be smaller and may report under one acre. If the respondent reports to the nearest quarter, always round up to the nearest tenth. For example, if the respondent reports a quarter of an acre, record 0.3 acres on the questionnaire.
- Note: It is possible that these numbers very different, including a possibility that they would have not harvested any acres at all. Hemp is a relatively new commodity, so some operators are new to the crop and may lose a lot of their crop as they learn the best methods. In addition, hemp crops are tested for THC content by the federal government to ensure it is not marijuana under federal law (marijuana is hemp with a THC content above 0.3% delta-9 THC). If the plant tests above this threshold, it must be destroyed or re-purposed. This is another reason why many acres may be planted but not harvested.

- Mark all products and/or uses that apply for the operation. More than one selection can be made.
- Additional questions for each product or use selected, will be asked on subsequent pages as indicated for each category. Each section should take between 2-5 minutes to complete.
- INCLUDE:
  - Primary and secondary uses of the crop (for example, if you harvested for flower and sold the hemp stalks for fiber, choose "hemp flower" and "hemp fiber")
- EXCLUDE:
  - Anything grown in a greenhouse, a nursery, indoors with climate control, a hoop house, or tunnel; those products are reported starting on Page 9.
- If a reported product or use is not listed, please write in the product or use under "Other hemp, specify."

### **Hemp Flower for Human Consumption (page 4)**

Only ask questions on this page if "Hemp flower for human consumption" was selected in #4 above.

- Question 1 Acres Harvested
  - Report only the acres harvested for hemp flower harvested outdoors. This can be reported to the tenth of an acre.
- Question 2-5 Processing steps for 2022 hemp flower crop harvested from open fields. These are processing steps that may be done by the operation for hemp flower or done by someone else on behalf of the operation (paid or unpaid). Answer "yes" or "no" for each item. Do not leave any item blank, if possible.
- **Question 6** How did you acquire the hemp seeds or plants that you used to grow hemp flower in open fields in 2022?
  - Select only one option
  - "Other, specify" is highlighted in this manual to draw your attention to it. Use the space provided to describe the other way they were acquired.
  - □₁ I bred, cloned, or bought my own hemp seeds or plants (i.e., I owned them).
     □₂ I was provided the hemp seeds or plants to grow for another person or organization, who owned them. Sometimes called a "production contract."
     □₃ Other, specify (119)
- **Question 7** How many **TOTAL pounds** of hemp flower did you or will your harvest from open fields in 2022?
  - Enter to the whole pound. Do not include decimals.

- Question 7a Asks whether the answer in Question 7 is the dry weight. Dry weight means whether they dried the hemp before they weighed it. This information is important context for us, since hemp flower is estimated to lose about 70% of its weight during the drying process.
- **Question 8** Of the **total pounds** of hemp flower harvested (reported in Question 7 above), from open fields in 2022:
  - Record the pounds sold, expected to sell, and harvested but will remain unsold.
     Report to the whole pound.
  - NOTE: The sum of what is reported in Question 8a, 8b, and 8c should equal the total pounds reported in Question 7
  - Record the Average Price per Pound or Total Dollars
    - Average Prices per Pound should be recorded to the nearest cent
    - Total dollars should be recorded to the whole dollar
  - NOTE: Respondents may have trouble determining whether they expect to sell or expect it will remain unsold. If this is the case, please make a note and continue.

# **Hemp Grain for Human Consumption (Page 5)**

Only ask questions on this page if "Hemp grain for human consumption" was selected in question #4 on page 3.

- Question 1 Acres Harvested
  - Report only the acres harvested for hemp grain harvested outdoors. This can be reported to the tenth of an acre.
- **Question 2** Was grain dried prior to sale.
- **Question 3** How did you acquire the hemp seeds or plants that you used to grow hemp grain in open fields in 2022?
  - Select only one option
  - Specify how they were acquired if acquired through other sources. Use the space provided to describe the other way they were acquired.
  - □₁ I bred, cloned, or bought my own hemp seeds or plants (i.e., I owned them).
  - □₂ I was provided the hemp seeds or plants to grow for another person or organization, who owned them. Sometimes called a "production contract."
  - Other, specify (119)
- **Question 4** How many **TOTAL pounds** of hemp grain did you or will your harvest from open fields in 2022?
  - Enter to the whole pound. Do not include decimals.

- Question 4a Asks whether the answer in Question 4 is the dry weight. Dry weight means whether they dried the hemp before they weighed it.
- Question 5 Of the total pounds of hemp grain harvested (reported in Question 4 above), from open fields in 2022:
  - Record the pounds sold, expected to sell, and harvested but will remain unsold.
     Report to the whole pound.
  - NOTE: The sum of what's reported in Question 5a, 5b, and 5c should add to the total pounds reported in Question 4
  - Record the Average Price per Pound or Total Dollars
    - Average Prices per Pound should be recorded to the nearest cent
    - Total dollars should be recorded to the whole dollar
  - NOTE: Respondents may have trouble determining whether they expect to sell or expect it will remain unsold. If this is the case, please make a note and continue.

# **Hemp Fiber (Page 6)**

Only ask questions on this page if "Hemp fiber used for clothes, pressed plastics, ropes, animal bedding paper, bio fuel" was selected in question #4 on page 3.

- Question 1 Acres Harvested
  - Report only the acres harvested for hemp fiber harvested outdoors. This can be reported to the tenth of an acre.
- **Question 2** Retting process
  - Check "yes" or "no." A definition for retting is provided with the question.
- **Question 3** How did you acquire the hemp seeds or plants that you used to grow hemp fiber in open fields in 2022?
  - Select only one option
  - Specify how they were acquired if acquired through other sources. Use the space provided to describe the other way they were acquired.
  - □₁ I bred, cloned, or bought my own hemp seeds or plants (i.e., I owned them).
  - I was provided the hemp seeds or plants to grow for another person or organization, who owned them.
    Sometimes called a "production contract."
  - Other, specify (119)
- **Question 4** How many **TOTAL pounds** of hemp fiber did you or will your harvest from open fields in 2022?
  - Enter to the whole pound. Do not include decimals.

- Question 4a Asks whether the answer in Question 4 is the dry weight. Dry weight means whether they dried the hemp before they weighed it.
- **Question 5** Of the **total pounds** of hemp fiber harvested (reported in Question 4 above), from open fields in 2022:
  - Record the pounds sold, expected to sell, and harvested but will remain unsold.
     Report to the whole pound.
  - NOTE: The sum of what's reported in Question 5a, 5b, and 5c should add to the total pounds reported in Question 4
  - o Record the Average Price per Pound or Total Dollars
    - Average Prices per Pound should be recorded to the nearest cent
    - Total dollars should be recorded to the whole dollar

# Hemp Seed to Sell to Others (Page 7)

Only ask questions on this page if "Hemp seed to sell to others" was selected in question #4 on page 3.

Note: Some respondents may think of "hemp seed" as alternative phrase for "hemp grain." The distinction between this section and hemp grain is that this is seed that will be sold to other growers who then will plant it in the ground to grow. Hemp seed that is intended to be consumed by a person rather than planted in the ground should be reported in the "hemp grain" section.

- Question 1 Acres Harvested
  - Report only the acres harvested for hemp fiber harvested outdoors. This can be reported to the tenth of an acre.
- Question 2 Seed feminization
  - Check "yes" or "no."
- **Question 3** How did you acquire the hemp seeds or plants that you used to grow hemp seed in open fields in 2022?
  - Select only one option
  - Specify how they were acquired if acquired through other sources. Use the space provided to describe the other way they were acquired.

<b>□</b> 1	I bred, cloned, or bought my own hemp seeds or plants (i.e., I owned them).
<b>□</b> 2	I was provided the hemp seeds or plants to grow for another person or organization, who owned them
	Sometimes called a "production contract."
Пз	Other specify (119)

- **Question 4** How many **TOTAL pounds** of hemp seed did you or will your harvest from open fields in 2022?
  - o Enter to the whole pound. Do not include decimals.
- Question 4a Asks whether the answer in Question 4 is the dry weight. Dry weight means whether they dried the hemp before they weighed it.
- **Question 5** Of the **total pounds** of hemp seed harvested (reported in Question 4 above), from open fields in 2022:
  - Record the pounds sold, expected to sell, and harvested but will remain unsold.
     Report to the whole pound.
  - NOTE: The total pounds reported in Question 5 should add to the total pounds reported in Question 4
  - Record the Average Price per Pound or Total Dollars
    - Average Prices per Pound should be recorded to the nearest cent
    - Total dollars should be recorded to the whole dollar

### Hemp for Other Uses (Page 8)

Only ask questions on this page if "Other hemp" was selected in question #4 on page 3.

- Question 1 Acres Harvested
  - Report only the acres harvested for hemp fiber harvested outdoors. This can be reported to the tenth of an acre.
- **Question 2** How did you acquire the hemp seeds or plants that you used to grow hemp for other uses in open fields in 2022?
  - Select only one option
  - Specify how they were acquired if acquired through other sources. Use the space provided to describe the other way they were acquired.
  - □ I bred, cloned, or bought my own hemp seeds or plants (i.e., I owned them).
  - I was provided the hemp seeds or plants to grow for another person or organization, who owned them. Sometimes called a "production contract."
  - □₃ Other, specify (119)
- **Question 3** How many **TOTAL pounds** of hemp for other uses did you or will your harvest from open fields in 2022?
  - o Enter to the whole pound. Do not include decimals.
- Question 3a Asks whether the answer in Question 3 is the dry weight. Dry weight means whether they dried the hemp before they weighed it.
- **Question 4** Of the **total pounds** of hemp for other uses harvested (reported in Question 3 above), from open fields in 2022:

- Record the pounds sold, expected to sell, and harvested but will remain unsold.
   Report to the whole pound.
  - NOTE: The sum of what's reported in Question 4a, 4b, and 4c should equal the total pounds reported in Question 3
- Record the Average Price per Pound or Total Dollars for pounds sold and expected to sell
  - Average Prices per Pound should be recorded to the nearest cent
  - Total dollars should be recorded to the whole dollar.

# Section 2 – Hemp Under Protection

This section collects data for operations that plant or seed hemp indoors or under protection, including in:

- a greenhouse
- a hoop house
- a low or high tunnel
- indoors with climate and/or light control
- under any other protection

### Skips

If the respondent answers "No" to question 1 on Page 9, Skip to page 15

# Square Feet Seeded or Planted Under Protection

- INCLUDE square feet that were abandoned
- Record as whole numbers

### Hemp Products and/or Uses Grown Under Protection (Question #4)

- Mark all products and/or uses that apply for the operation. More than one selection can be made.
- Additional questions for each product or use selected, will be asked on subsequent pages as indicated for each category. Each section should take between 2-5 minutes to complete.
- INCLUDE:
  - Primary and secondary uses of the crop
- EXCLUDE:
  - Anything grown in outdoors in open fields; those products are reported on Page 3.
- If a reported product or use is not listed, please write in the product or use under "Other hemp, specify."

# **Hemp Flower Harvested Under Protection (page 10)**

Only ask questions on this page if "Hemp flower harvested under protection" was selected in #4 on page 9.

- Question 1 Square Feet Harvested Under Protection
  - o Report square feet to the whole foot of hemp flower harvested under protection
- Questions 2-5 Processing steps for 2022 hemp flower crop harvested from under protection. These are processing steps that may be done by the operation for hemp flower or done by someone else on behalf of the operation (paid or unpaid). Answer "yes" or "no" for each item. Do not leave any item blank, if possible.
- **Question 6** How did you acquire the hemp seeds or plants that you used to grow hemp grain in open fields in 2022?
  - Select only one option
  - Specify how they were acquired if acquired through other sources. Use the space provided to describe the other way they were acquired.
  - □₁ I bred, cloned, or bought my own hemp seeds or plants (i.e., I owned them).
  - □₂ I was provided the hemp seeds or plants to grow for another person or organization, who owned them. Sometimes called a "production contract."
  - ☐3 Other, specify (119)
- **Question 7** How many **TOTAL pounds** of hemp flower did you or will your harvest under protection in 2022?
  - Enter to the whole pound. Do not include decimals.
- Question 7a Asks whether the answer in Question 7 is the dry weight. Dry weight means whether they dried the hemp before they weighed it.
- **Question 8** Of the **total pounds** of hemp flower harvested (reported in Question 4 above) under protection in 2022:
  - Record the pounds sold, expected to sell, and harvested but will remain unsold.
     Report to the whole pound.
    - **NOTE**: The sum of what is reported in Questions 8a, 8b, and 8c should add to the total pounds reported in Question 7
  - Record the Average Price per Pound or Total Dollars for pounds sold and expected to sell
    - Average Prices per Pound should be recorded to the nearest cent
    - Total dollars should be recorded to the whole dollar

# Hemp Clones or Transplants Grown Under Protection (page 11)

Only ask questions on this page if "Hemp clones or transplants grown and sold to other growers" was selected in #4 on page 9.

- Question 1 Square Feet Harvested Under Protection
  - Report square feet to the whole foot of hemp clones or transplants grown under protection

- Question 2 Did you produce clones, transplants, or both?
  - Select only one response
- **Question 3** How did you acquire the hemp seeds or plants that you used to produce hemp clones or transplants under protection in 2022?
  - Select only one option
  - Specify how they were acquired if acquired through other sources. Use the space provided to describe the other way they were acquired.
  - □₁ I bred, cloned, or bought my own hemp seeds or plants (i.e., I owned them).
  - □2 I was provided the hemp seeds or plants to grow for another person or organization, who owned them. Sometimes called a "production contract."
  - ☐3 Other, specify (119)
- **Question 4** How many **TOTAL** hemp clones and/or transplants did you or will your grow under protection in 2022?
  - Note: this question is asking for the number of **plants** produced, not the weight.

**Question 5 –** Of the total hemp clones and transplants grown (reported in Question 4 above) under protection in 2022?

- Record the number of plants sold as of the date of the interview.
  - **NOTE**: The sum of what is reported in Questions 5a, 5b, and 5c should equal the amount reported in Question 4
- Record the Average Price per Plant or Total Dollars for plants sold and expected to sell
  - Average Prices per Plant should be recorded to the nearest cent
  - Total dollars should be recorded to the whole dollar
- As with Question 4 in this section, this is asking about the number of plants and the price per plant.

# Hemp Seed to Sell to Others Harvested Under Protection (Page 12)

Only ask questions on this page if "Hemp seed to sell to other growers" was selected in #4 on page 9.

- Question 1 Square Feet Harvested Under Protection
  - Report square feet to the whole foot of hemp seed to sell to others grown under protection
- Question 2 Seed feminization
  - Check "yes" or "no."
- **Question 3** How did you acquire the hemp seeds or plants that you used to grow hemp seed under protection in 2022?
  - Select only one option

- Specify how they were acquired if acquired through other sources. Use the space provided to describe the other way they were acquired.
- □ I bred, cloned, or bought my own hemp seeds or plants (i.e., I owned them).
- □₂ I was provided the hemp seeds or plants to grow for another person or organization, who owned them. Sometimes called a "production contract."
- Other, specify (119)
- Question 4 How many TOTAL pounds of hemp seed harvested did you or will you
  harvest under protection in 2022?
  - Enter to the whole pound. Do not include decimals.
- Question 4a Asks whether the answer in Question 4 is the dry weight. Dry weight means whether they dried the hemp before they weighed it.
- **Question 5** Of the total **pounds** of hemp seed harvested (reported in Question 4 above), under protection in 2022:
  - Record the pounds sold, expected to sell, and harvested but will remain unsold.
     Report to the whole pound.
    - NOTE: The total pounds reported in Question 5 should add to the total pounds reported in Question 4
  - Record the Average Price per Pound or Total Dollars for pounds sold and expected to sell
    - Average Prices per Pound should be recorded to the nearest cent
    - Total dollars should be recorded to the whole dollar

### Other Hemp Harvested Under Protection (Page 13)

Only ask questions on this page if "Other hemp" was selected in #4 on page 9.

- Question 1 Square Feet Harvested Under Protection
  - Report square feet to the whole foot of hemp for other uses grown under protection
- **Question 2** How did you acquire the hemp seeds or plants that you used to grow other hemp under protection in 2022?
  - Select only one option
  - Specify how they were acquired if acquired through other sources. Use the space provided to describe the other way they were acquired.
  - □₁ I bred, cloned, or bought my own hemp seeds or plants (i.e., I owned them).
  - □₂ I was provided the hemp seeds or plants to grow for another person or organization, who owned them. Sometimes called a "production contract."
  - □₃ Other, specify (119)

- **Question 4** How many TOTAL **pounds** of other hemp did you or will you harvest under protection in 2022?
  - o Enter to the whole pound. Do not include decimals.
- Question 4a Asks whether the answer in Question 4 is the dry weight. Dry weight means whether they dried the hemp before they weighed it.
- **Question 5** Of the total pounds of other hemp harvested (reported in Question 4 above), under protection in 2022:
  - Record the pounds sold, expected to sell, and harvested but will remain unsold.
     Report to the whole pound.
    - NOTE: The sum of what is reported in Question 5a, 5b, and 5c should add to the total pounds reported in Question 4
  - Record the Average Price per Pound or Total Dollars for pounds sold and expected to sell
    - Average Prices per Pound should be recorded to the nearest cent
    - Total dollars should be recorded to the whole dollar

# Section 3 – Operator Characteristics

A series of Operator Characteristic questions are on the Hemp Production, Disposition and Income questionnaire. These responses are necessary to describe the operator demographically. They will help to ensure that all demographic sectors of agriculture are represented in the survey indications.

All questions in this section must be asked if the respondent answers "Yes" to question 2 on the face page of the questionnaire. If there is more than one operator involved with the operation, try to collect the information of the principal operator if possible. If there is no principal operator or more than one principal operator, then collect the information on the person who would be making a majority of the decision of the farming operation.

If the respondent refuses to answer these questions, then leave the questions blank. These questions may be sensitive for the respondent, but they follow the guidelines provided by the Office of Management and Budget for demographic and race questions.

**NOTE**: Skip this section if the respondent answers "No" to question 2 on the face page of the questionnaire.

**Item 1** – **Sex of Operator**: Record the sex, male or female, of the operator. Remember, the respondent may not be the operator.

**Item 2** – **Year of Birth** for the operator reported in item 1.

• Record the 4-digit year of birth (YYYY).

**Item 3** – *Ethnicity of Operator*: Check the correct answer for the operator. This question is a separate response from Item 4 - Race of Operator because an individual can be Spanish, Hispanic or Latino and be a specified race.

**Item 4 – Race of Operator**: Check all races that apply. A respondent may be a combination of races. In those cases, check all races that are reported and enter the series of codes in the code box. For example, an operator that reports both White and Asian should have Code box 823 = 14 (White=1, Asian=4).

# Item 5 - In what year did the operation begin to operate any part of this operation?

Record the 4-digit year (YYYY)

# Item 6 – At which occupation did the operator spend the majority (50 percent or more) of his/her time in 2022?

Select only one option

# Item 7 – Is the operator retired from farming or ranching?

Section 4 – Conclusion

# **Survey Results**

Agency wide, paper copies of the results are no longer sent to respondents. A link to publications is now given and the email release question was added to all survey instruments (paper, web, CAPI and CATI) beginning August 1, 2018. This enhancement allows NASS to move away from mailing hard copies of results while meeting the needs of our customers through electronic media.

### **Operation Email and Operation Phone**

Record the email address of the operation if different from the email provided for survey results. Also, record the operation phone number and indicate whether it is a cell phone.

### Respondent Name, Phone, and Date

Record the name of the person who responded to the survey, the best phone number to use to get in touch with them and whether it is a cell phone, and the date that the survey was completed.

### Thank You!

Thank the respondent for their time and assistance. In closing, remind the respondent the data they provided are confidential and used only in combination with similar reports from other producers.

### **Completion Code Boxes**

Code the response box (9901) with one of the following codes:

- Code 1 (Complete): Respondent completed all or the majority of the questionnaire
- Code 2 (Refusal): Respondent refused to participate
- Code 3 (Inaccessible): Respondent was not available to participate

Code the respondent box (9902) with the description that best fits the respondent who completed the questionnaire.

Code the Mode box (9903) with the format in which the interview occurred. If the interview was conducted in person (when available), code 9903=1 (face-to-face). If the interview was conducted by phone on paper, code 9903=2 (paper assisted telephone interview). If conducted by phone using the iPad, code 9903=9 (mobile computer assisted telephone interview).

Code the Enumerator box (9998) with your assigned enumerator ID number.

The Evaluation box (9900) will be coded by your supervisor or Regional Field Office personnel.

# Chapter 6 – Notes

A notes page is included in the paper questionnaire on page 14. If completing the survey on paper, utilize this space to note any comments or special situations regarding that interview or operation. If completing the interview via CATI or mCATI, please enter notes and comments in Blaise or CAPI regarding the interview that would be of use to the RFO or Headquarters' staff.