

Certified Naturally Grown Aquaponic Produce Application

We provide this document mainly so you can preview the application questions before initiating your online application. We prefer online applications, but if you aren't able or willing to submit the application online, you may print this document and complete the application offline, provided you submit it with a \$20 processing fee AND that you take care to print LEGIBLY.

Applicant's Details

Producer name(s):

Operation name:

Operation address:

Mailing address (if different):

City

State

Zip Code

County:

Country:

Day Phone:

Eve. Phone:

Fax (if any):

Email address (if any – won't be made public):

Website address (if any):

1.1 Please briefly tell us why you are applying to be part of the Certified Naturally Grown program.

1.2 Are you currently third party certified for your produce operation by any other organization?

If yes, please note which certification or agency: _____

1.3 Have you ever been certified in the past?

If yes, please specify dates & agency: _____

1.4 Have you ever been denied certification?

If yes, please note which agencies and reasons for denial: _____

1.5 How did you hear about Certified Naturally Grown?

Certified Naturally Grown is committed to an OPEN, HONEST and completely TRANSPARENT certification policy. The information you fill out on this form will be made available on your CNG profile if/when your application is accepted, except where it's specifically noted that the information will be kept private.

General Information

2.1 Please check all items you grow and will market as Certified Naturally Grown

- Greens
- Herbs
- Fruiting vegetables (e.g. cucumbers, tomatoes)
- Root crops
- Other _____

2.2 Please check all markets you grow for (this will be displayed on your farm profile to help potential buyers find you).

- Farmers market
- Farm stand
- Local restaurants
- Health food stores
- www.localharvest.org
- Other _____
- CSAs
- Coops
- Groceries
- Regional wholesalers
- Commodities

System Design and Management

3.1 Please indicate what kind of system you use (for hybrid systems, check all that apply):

- Deep Water Culture (also known as raft, deep flow, channel, float)
- Media-filled Beds (also known as Flood and Drain System)
- Nutrient Film Technique
- Aeroponics
- Vertical Systems (also known as tower)
- Other _____

3.2 Do you use wicking beds? If yes: Please describe how the water is handled after it is used in wicking beds. Does this water recirculate? If not, how is it disposed of?

3.3 What materials are used for root support, growing media, tubing and pipes, tanks, troughs, and other materials that come into direct contact with system water? (Check all that apply)

- Media & root support - mineral or plant-based (e.g. silica rock, expanded clay aggregate, perlite, vermiculite, sand, peat, or coir)
- Soil and compost*
- Polystyrene
- Rockwool
- Compressed grow plugs*
- Rigid PVC
- ABS totes and tanks (acrylonitrile butadiene styrene)
- Polyethylene, high, medium, or low density
- Fiberglass tanks with food grade resin
- Polyethylene film or tubing
- Propylene
- Cement*
- Wood*
- IBC totes (polyethylene), new*
- IBC totes (polyethylene), used*
- Vinyl hoses or liners
- Acrylic
- Plastics that contain BPA
- (EPDM) Ethylene propylene diene monomer liners
- Roofing materials
- Recycled plastics

3.4 Are there any other materials you use in your system that are not listed above? If so, please indicate them here.

3.5. If you use soil or compost in your system, where is it used? Is it used only in the dead-end portion, or also in the recirculating sections of the system?

3.6 If you use compressed grow plugs, which is/are the products/s name/s? Have you been able to confirm with the supplier that it/they do not contain synthetic nutrients?

3.7 If any of the components of your system are made of cement, does it come into direct contact with the water? Please describe how cement is part of your system.

3.8 If you use wood in your system, is it treated wood? Does it come into direct contact with the water? Please describe how wood is a part of your system.

3.9 If your system includes IBC totes purchased used, have you been able to confirm with your supplier that they were used only for food grade uses? If so, how have you confirmed this? If not, how do you intend to confirm this?

3.10 Please note that while IBC totes can be grandfathered in when they're already in use at the time CNG certification is sought, CNG standards prohibit the introduction of IBC totes once CNG status is obtained.

Please indicate that you understand this restriction on IBC totes by checking the box here.

3.11 Does water circulate at a rate sufficient so that the water volume of the fish tanks(s) recirculates each hour? If it recirculates at a lower rate, please explain.

3.12 Briefly describe how your system achieves appropriate aeration.

3.13 Briefly describe how your system achieves appropriate degassing.

3.14 Does your system include any of the following: roofing materials, recycled plastics, or plastics that contain BPA? **These materials are prohibited in CNG aquaponics operations. Please use this space to tell us about your use of these materials.

Water Sources

CNG standards vary according to water source. Please indicate below ALL water sources you use for your aquaponic system, and answer the corresponding questions.

4.1 If you use municipal water...

4.1.1 Does it contain chlorine? If so, how is it removed?

4.1.2 Does it contain chloramine? If so, how it it removed?

4.2 If you use well water...

4.2.1 What are the ground water contaminants of concern in your region?

4.2.2 What experts did you consult to determine contaminants of concern?

4.2.3 Have you tested your well within the past year, and if so, what were the results? If no, are you willing to start testing annually?

4.2.4 Do you treat or filter the water before adding it to the system? If so, what methods are used?

4.3 If you use rainwater...

4.3.1 Of what materials are the catchment surfaces and storage tanks made?

4.3.2 Do you use a flush diverter? If yes, how many gallons does it divert? What is the surface area of the catchment area in square feet?

4.3.3 How often do you test for contaminants?

4.3.4 Do you store rainwater before adding it to the system? If yes, is the storage container closed and food grade? Do you use the water within 3 days?

4.3.5 Do you treat or filter the water before adding it to the system? If so, what methods were used?

4.4 Do you use surface water?

4.5 If you use a water source that is not named above, please elaborate.

Water Quality: Nutrients, pH, solids

- 5.1 How do you ensure a good match between stocking density and crop production?

- 5.2 Please describe how you design and operate your system to provide biofiltration that corresponds to production of fish waste and crops.

- 5.3 Do you ever add supplemental nutrients? If so, what materials or products have you used? List ingredients and product names. How much of these do you use? How frequently?

- 5.4 Do you use worms in your system? If so, what steps do you take to ensure worms do not introduce pathogenic bacteria to your system?

- 5.5 What materials do you use to buffer pH?

- 5.6 What methods do you use to prevent the build up of waste solids in your system?

5.7 Please indicate how often you monitor each of the following:

	<u>Daily</u>	<u>Weekly</u>	<u>Monthly</u>	<u>Other*</u>
pH	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temperature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissolved oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ammonia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nitrites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nitrates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.8 Use this space if you'd like to share additional information about your water quality and monitoring practices.

Seeds, Transplants, and Crop Health

- 6.1 Do you grow some or all of your own transplants? If yes...
 - 6.1.1 What growing media do you use? Please list the ingredients.

 - 6.1.2 Do you use any chemically-treated or genetically modified seeds?

6.2 Do you purchase some or all of your transplants? If yes...

6.2.1 From what sources do you purchase your transplants?

6.2.2 How have you confirmed that the transplants were grown without the use of synthetic fertilizers, wetting agents, pesticides, or fungicides? (Crops from these transplants may not be marketed as Certified Naturally Grown, unless they're perennials, and in that case only after twelve months of management according to CNG practices.) Outline here what you know about the supplier's production practices.

6.2.3 Please list any purchased transplants not grown according to CNG standards (which crops). This produce may not be sold as Certified Naturally Grown (except, in the case of perennials, after twelve months of CNG cultivation). If all your purchased transplants meet CNG standards, put "None".

6.3 Describe your primary insect pest challenges AND methods of prevention and control. (Do not answer "none". You MUST indicate actual pest challenges or LIKELY challenges, and you must ALSO indicate how you manage or how you would manage them. If you indicate a product, also specify how often it's used.)

6.4 Describe your primary plant disease challenges AND methods of prevention and control. (Do not answer "none". You MUST indicate actual pest challenges or LIKELY challenges, and you must ALSO indicate how you manage or how you would manage them. If you indicate a product, also specify how often it's used.)

6.5 CNG certification requires the use of certified organic or Certified Naturally Grown seeds whenever available. Please indicate the suppliers from which you source - or will source - your seeds if your application is accepted and you continue the certification process.

6.6 Please indicate, by entering your initials, that you understand that CNG strictly prohibits the use of chemically treated or GMO seeds.

6.7 Please indicate, by entering your initials, that you will as a general rule purchase organically grown seeds, AND that you will only purchase conventional seed when the variety you wish to grow is not available in certified organic or CNG form. For each variety purchased in conventional form, you will identify (and keep records of) at least three commercial organic seed suppliers who do not carry that variety.

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Fish Management

We do not offer certification for fish, but do set some limited standards for fish management where they might affect the produce and or quality of life for the fish.

7.1 Does hormonal sex reversal treatment ever occur on-line / within the recirculating system?

7.2 Please describe the practices you use to prevent and treat fish disease.

7.3 Have you ever found it necessary to use antibiotics? If yes...

7.3.1 Please describe when you have treated with antibiotics in the past three years: the circumstances of each use including how many fish, what antibiotic, for how long, and any other relevant information.

7.3.2 Was the treatment administered off-line/separate from the system? If so, what was the withdrawal period (the length of time treated fish were kept off-line)?

7.4 Please describe what kind of fish feed you use. Is it organically grown? (For aquaponic produce certification CNG standards do not require that the feed be organically grown, but we are interested to know what producers are using and to give credit to any producers who may be using organic feed)

7.5 Do you use black soldier fly larvae or duckweed as supplemental feed?

7.6 Do you use any supplemental feed besides BSF larvae or duckweed? If so, describe it here, and indicate how you protect against contamination of your system.

Protecting Against Contamination

8.1 Is your operation partially or entirely indoors? If yes...

8.1.1 What are the nearby land uses? Are there any that might pose risks of contamination?

8.1.2 How does your ventilation and air filtration system prevent possible contamination?

8.2 Do you share space (including fish tank, seedling starting, or plant production space) with other producers? If yes...

8.2.1 How do you protect your production area from potential contamination by fellow producers and any other likely sources?

8.3 Is your operation partially or entirely outdoors?

8.3.1 Please describe neighboring land uses to the north, south, east and west. Do they pose a risk of drift or contamination?

8.3.2 What is the distance between your production area and nearby sources of possible contamination?

8.3.3 What factors besides distance mediate the risk of contamination? (Prevailing wind patterns, windbreaks, method of spray, etc.)

Waste & Energy

These questions will not determine certification status, but are intended to encourage producers to review our recommendations in these areas and to give credit to producers who have made investments in the sustainability of their operation.

9.1 How do you dispose of fish solid wastes?

9.2 When necessary during system change over, how do you dispose of nutrient-rich water?

9.3 What measures have you taken to conserve energy, improve energy efficiency, and/or use energy from renewable sources? (This could include system design, siting, insulation, crop and fish species selection, and more.)

Inspections & Networks

A core requirement of CNG certification is the on-site peer-review. Getting this completed is facilitated if you're a part of a network of aquaponics producers who might serve as your inspector.

10.1 Are you a part of a network (informal or formal) of aquaponic producers in your geographic area? If so, tell us about it. Does it have a name? Roughly how many members, and what geographic area does it cover?

10.2 Who do you have in mind to ask to conduct your inspection? This answer will be kept completely private. Also, it is not required that you know now, but you'll need to identify someone within two months of your application being accepted.

10.3 What qualifications do they have to conduct an inspection of an aquaponic operation? (For example, they're an aquaponic producer, an aquaponics educator, a hydroponics producer, or a soil based farmer who is either CNG or organic.) This answer will also be kept completely private.

Agreements

11.1 Please indicate your agreement with the following statements by signing in the space provided.

I understand that only the produce, NOT the fish, can be labeled and sold as Certified Naturally Grown.	<hr/>
I will not label, or in any way lead consumers to believe that produce not raised in accord with CNG standards is Certified Naturally Grown.	<hr/>
I understand that I have to complete at least one Inspection(s) of another CNG aquaponic producer in my area each year, if there is one within a one hour drive.	<hr/>
I understand that the inspection I conduct will NOT be of the same producer that inspected me.	<hr/>
I have reviewed the Certified Naturally Grown aquaponic certification standards, I understand them, and I will abide by them. I understand that if I have any questions I may contact CNG for clarification.	<hr/>

Additional information

12.1 You may use this space to tell us anything else you think we should know about your operation.