

# 2019 GAP Connections Certification Program Standards

---

INTRODUCTION .....	2
TYPES OF CERTIFICATIONS.....	2
CERTIFICATION STANDARDS.....	2
APPENDIXES .....	3
APPENDIX 1: Hazardous Lists Reference.....	3
APPENDIX 2: Resources and Examples .....	4
CROP MANAGEMENT STANDARDS .....	10
NUTRIENT MANAGEMENT.....	10
INTEGRATED PEST MANAGEMENT .....	10
CROP AND OPERATIONS MANAGEMENT .....	11
CURING AND BARN MANAGEMENT .....	12
NON-TOBACCO RELATED MATERIAL (NTRM) .....	13
ON-FARM TOBACCO STORAGE .....	14
ENVIRONMENTAL MANAGEMENT STANDARDS.....	15
AGROCHEMICAL MANAGEMENT .....	15
SOIL AND WATER MANAGEMENT .....	16
LABOR MANAGEMENT STANDARDS .....	17
RECRUITING, HIRING AND TERMINATION .....	17
FAMILY WORKING ON THE FARM.....	18
HIRED WORKERS .....	19
WAGE, BENEFITS, AND WORKING HOURS .....	19
FARM LABOR CONTRACTORS (FLCs) .....	21
FORCED LABOR AND HUMAN TRAFFICKING .....	22
WORKER RIGHTS AND RESPONSIBILITIES AND WORKER CONCERN PROCESS .....	22
FREEDOM OF ASSOCIATION .....	23
HARRASSMENT AND DISCRIMINATION .....	24
SANITATION, HOUSING AND TRANSPORTATION.....	24
FARM SAFETY .....	25
TRAINING .....	26
SAFETY EQUIPMENT .....	26

## Introduction

---

GAP Connections (GAPC) develops, maintains, and provides leadership for agricultural standards and practices. We seek to promote production that is competitive, sustainable, fair, compliant, and responsive to changing industry conditions and stakeholder needs.

The GAP Connections Grower Certification Program is a voluntary program to help domestic tobacco growers be recognized for their excellence in the areas of Crop, Environment and Labor practices. This document outlines requirements and measurable standards associated with the voluntary GAP Connections Certification Program. Growers can follow GAP Connections Certification Standards and choose not to participate in the GAP Connections Certification Program.

GAP Connections Certification Standards do not replace or supersede contract requirements between growers and purchasing companies but instead offer the industry a set of guiding principles that identify and promote best practices for on-farm production and post-production processes which produce a quality crop while protecting, sustaining or enhancing the environment with regard to soil, water, air, animal and plant life as well as protecting and ensuring the rights of farm laborers.

Growers can learn more about the voluntary GAPC Certification Program by contacting GAP Connections at 865.622.4606 or by visiting [www.gapconnections.com](http://www.gapconnections.com).

## Types of Certifications

---

Growers may choose one of two types of GAP Connections Certification to achieve:

- United States (U.S.) Certification
- International Certification

To be certified, a grower must adhere to the GAP Connections Certification Standards set forth for each Certification.

## Certification Standards

---

Within each of the types of GAP Connections Certifications, Certification Standards are defined as Critical or Additional.

- **Critical Standards** - are aligned to current legal requirements or otherwise deemed necessary for the quality of the crop, or protection of the environment or workers. Compliance with Certification Standards does not guarantee compliance with Federal, State or local law
- **Additional Standards** - are aligned to best practices in the industry.

## Appendixes

---

### APPENDIX 1: Hazardous Lists Reference

#### List A: DOL Hazardous Tasks List Items Related to Tobacco Production<sup>1</sup>

- Operating a tractor of over 20 power-take-off (PTO) horsepower, or connecting or disconnecting an implement or any of its parts to or from such a tractor.
- Operating or assisting to operate (including starting, stopping, adjusting, feeding or any other activity involving physical contact associated with the operation) any of the following machines: the unloading mechanism of a non-gravity-type self-unloading wagon or trailer or power post hole diggers, power post driver, or non-walking type rotary tiller.
- Operating or assisting to operate (including starting, stopping, adjusting, feeding, or any other activity involving physical contact associated with the operation) any of the following machines: trencher or earthmoving equipment; forklift; or power-driven circular, band, or chain saw.
- Working from a ladder or scaffold (painting, repairing, or building structures, pruning trees, picking fruit, etc.) at a height of over 20 feet.
- Driving a bus, truck, or automobile when transporting passengers or riding on a tractor as a passenger or helper.
- Handling or applying toxic agricultural chemicals (including cleaning or decontaminating equipment, disposal or return of empty containers, or serving as a flagman for aircraft applying such chemicals). Such toxic chemicals are identified by the word “poison,” or “warning,” or are identified by a “skull and crossbones” on the label.

#### List B: International Restricted Tasks (for youth under 18 years of age)

- Harvesting, topping, suckering tobacco.
- Operating machinery with moving parts or moving vehicles.
- Use of tools requiring motion for cutting (e.g., machete) or shears.
- Handling and application of crop protection agents (agrochemical) or fertilizers.
- Lifting and handling heavy loads unless the load is less than 10% of the person’s body mass.
- Working at heights greater than four feet without approved fall protection equipment.
- Work at night (30 minutes after sundown to 30 minutes before sunrise).
- Working in intense hot weather, humidity or direct sunlight unless guidance on the GTS and Heat Stress Bulletin and precautions in the OSHA Heat Safety Tool and “Using the Heat Index: A Guide to Employees” are followed. Ready access to cool, potable water is required.
- Working long hours (more than 8 hours in a 24-hour period).

---

<sup>1</sup> Source: <https://www.dol.gov/whd/regs/compliance/whdfs40.pdf>

## APPENDIX 2: Resources and Examples

### 1. Resources for Agrochemical Label and SDS Information

- List of pesticide product labels approved by the Environmental Protection Agency (EPA)
  - <https://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1>
- Database that allows a search for different types of pesticides, the active ingredient, application recommendations, and states that approve its use
  - <http://www.agrian.com/labelcenter/results.cfm>
- List of common chemicals used in tobacco production
  - [https://darktobacco.ca.uky.edu/files/2018\\_tobacco\\_chemical\\_list\\_for\\_website\\_-\\_updated\\_6-22-2018.pdf](https://darktobacco.ca.uky.edu/files/2018_tobacco_chemical_list_for_website_-_updated_6-22-2018.pdf)

### 2. Production Guides and Resources for Selection of Tobacco Varieties

- 2017 Burley and Dark Tobacco Production Guide:
  - <http://www2.ca.uky.edu/agcomm/pubs/id/id160/id160.pdf>
- 2017 Flue-cured Tobacco Production Guide:
  - <https://content.ces.ncsu.edu/flue-cured-tobacco-information>
- Flue-Cured Tobacco Variety Information
  - <https://tobacco.ces.ncsu.edu/tobacco-agronomics-varieties/>
- Flue Cured Tobacco Variety Evaluation in Georgia
  - <http://caes2.caes.uga.edu/commodities/fieldcrops/tobacco/guide/documents2014/VarietyInformationFor2014.pdf>
- 2017 Virginia Tech Flue Cured Tobacco Production Guide
  - [http://arec.vaes.vt.edu/content/dam/arec\\_vaes\\_vt\\_edu/southern-piedmont/Documents/01-COVER-2017.pdf](http://arec.vaes.vt.edu/content/dam/arec_vaes_vt_edu/southern-piedmont/Documents/01-COVER-2017.pdf)

### 3. Example of Documented Scouting Program

Date of Scouting	Pests Observed	Percent of plants affected/infested	Action Taken	Effectiveness (very good, good, fair, poor)
6/27/2017	<i>Budworms found in field A and B.</i>	20%	<i>Blackhawk sprayed in fields A and B on 6/28/2017. See CPA field records for more detail.</i>	<i>Good</i>

### 4. Resources for Crop Rotation Recommendations

- NC State Extension: Managing Diseases (Pages 120-121)
  - <https://content.ces.ncsu.edu/flue-cured-tobacco-information/managing-diseases>
- Flue Cured Tobacco Disease Control (Page 47)
  - [http://www.arec.vaes.vt.edu/content/dam/arec\\_vaes\\_vt\\_edu/southern-piedmont/Documents/04-Discon17.pdf](http://www.arec.vaes.vt.edu/content/dam/arec_vaes_vt_edu/southern-piedmont/Documents/04-Discon17.pdf)

## 5. Resources for Nutrient Management Regulations

- Liming and Fertilizing Burley Tobacco
  - <http://www2.ca.uky.edu/agcomm/pubs/agr/agr49/agr49.htm>
- NC State: Fertilizer Use, 2017 North Carolina Agricultural Chemicals Manual (page 43)
  - <https://content.ces.ncsu.edu/north-carolina-agricultural-chemicals-manual/fertilizer-use>
- NC State: New Tobacco Nutrient Disorder
  - <https://tobacco.ces.ncsu.edu/2017/01/new-tobacco-nutrient-disorder-ibook-available/>

## 6. Resources for guidelines on the use of animal manure and muriate of potash

- Burley and Dark Tobacco Production Guide (pages 28-29):
  - <http://www2.ca.uky.edu/agcomm/pubs/id/id160/id160.pdf>
- Liming and Fertilizing Burley Tobacco
  - <http://www2.ca.uky.edu/agcomm/pubs/agr/agr49/agr49.htm>
- The Agronomics of Manure use for Crop Production
  - <http://www2.ca.uky.edu/agcomm/pubs/agr/agr165/agr165.htm>

## 7. Resources on University recommended rates of MH in sucker control

- Air and Fire-cured Growers in Kentucky, North Carolina, Tennessee, Virginia: (Pages 44-45)
  - <http://www2.ca.uky.edu/agcomm/pubs/id/id160/id160.pdf>
- NC State: Topping and Sucker Control for Flue Cured Tobacco
  - <https://tobacco.ces.ncsu.edu/topping-sucker-control-chemical-sucker-control/>
- Topping and Chemical Sucker Control Programs for Georgia (Pages 123-142)
  - <http://www.caes.uga.edu/content/dam/caes-website/extension-outreach/commodities/tobacco/docs/growers-guide/2013/2013-Georgia-tobacco-growers-guide.pdf#page=132>
- Virginia Tech 2017 Flue-Cured Tobacco Production Guide (Pages 36-45)
  - [http://arec.vaes.vt.edu/content/dam/arec\\_vaes\\_vt\\_edu/southern-piedmont/Documents/01-COVER-2017.pdf](http://arec.vaes.vt.edu/content/dam/arec_vaes_vt_edu/southern-piedmont/Documents/01-COVER-2017.pdf)

## 8. Resources and rainfall and irrigation records and Examples

- University of Kentucky Numerical Rainfall Estimates
  - <http://www.wagwx.ca.uky.edu/gpdata.php>
- National Weather Service (Click on your state and then select “Past Weather”)
  - <http://www.weather.gov/>
- National Centers for Environmental Information: Climate Data Online Search (Select “global summaries of the month” as datatype)
  - <https://www.ncdc.noaa.gov/cdo-web/search>

Date of Weather Event	Farm Name	Amount of Precipitation	Crop Condition
6/17/17	Harmon Farm	0.25 inches	Good

## 9. Resources on Recommended measures to control weed seed contamination

- NC State Weed Seed Contamination in US Produced Flue-Cured Tobacco Leaf
  - <https://tobacco.ces.ncsu.edu/2014/02/weed-seed-contamination-in-us-produced-flue-cured-tobacco-leaf/>

## 10. Resources for proper methods for cleaning and sanitizing greenhouse trays:

- NC State Flue-cured Tobacco Greenhouse Guide:
  - <https://tobacco.ces.ncsu.edu/wp-content/uploads/2015/12/Tobacco-Greenhouse-Guide-2016.pdf?fwd=no>

## 11. Example of NTRM Inspection sheet

Date	Who did the inspection?	Areas Inspected <i>(ex: market prep facilities, baling equipment, break areas)</i>	Comments <i>(ex: No new sources of NTRM, added a trash can in break area)</i>
9/28/17	Xavier Harmon	Break Area	Added a trash can in break area
10/10/17	Xavier Harmon	Market Prep Facilities	No NTRM observed

## 12. Example of monitoring temperature and humidity in a flue-cured barn

Monitoring Humidity				
Date	Time	Barn/Structure ID	Temperature	Humidity
9/25/2017	7:30 am	Big Valley Barn	55°F	92%
9/25/2017	1:00 pm	Big Valley Barn	75°F	65%
9/26/2017	8:00 am	Big Valley Barn	57°F	94%
9/26/2017	1:15 pm	Big Valley Barn	75°F	65%
9/27/2017	7:15 am	Big Valley Barn	62°F	89%
9/27/2017	2:00 pm	Big Valley Barn	75°F	65%
9/28/2017	8:30 pm	Big Valley Barn	62°F	89%
9/28/2017	12:00 pm	Big Valley Barn	82°F	74%

## 13. Resources for label-required PPE

- AGRIAN Label Lookup
  - <http://www.agrian.com/labelcenter/results.cfm>

The screenshot shows the AGRIAN website's label lookup interface. At the top, there is a search bar with 'diPel' entered and a dropdown menu set to 'United States'. Below the search bar, there are tabs for 'RESULTS' and 'DETAILS', with 'RESULTS' selected. The search results show '4 Results Found For: diPel'. The first result is 'DiPel(r) DF Biological Insecticide'. Below the product name, there are tabs for 'General', 'Crop Specific', 'Documents', 'Safety', 'Registration', and 'Mfg. Info'. The 'Safety' tab is selected, displaying 'PPE Information: Personal Protective Equipment (PPE) Applicators and other handlers must wear: - Long-sleeved shirt and long pants - Waterproof gloves - Shoes plus socks Mixer/loaders and applicators must wear a dust/mist filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.'

## 14. Resources on Sprayer Calibration

- Virginia Tech: Fine Tuning a Sprayer with “Ounce” Calibration Method
  - [https://pubs.ext.vt.edu/442/442-453/442-453\\_pdf.pdf](https://pubs.ext.vt.edu/442/442-453/442-453_pdf.pdf)
- Georgia Extension: Sprayer Nozzle Selection (Pages 143-146)
  - <http://www.caes.uga.edu/content/dam/caes-website/extension-outreach/commodities/tobacco/docs/growers-guide/2013/2013-Georgia-tobacco-growers-guide.pdf#page=132>

## 15. Resources on proper pesticide storage

- Georgia Extension: Pesticide Storage and Mixing Facilities (Pages 167- 168)
  - <http://www.caes.uga.edu/content/dam/caes-website/extension-outreach/commodities/tobacco/docs/growers-guide/2013/2013-Georgia-tobacco-growers-guide.pdf#page=132>
- Storage and handling of pesticides and bulk fertilizer
  - <http://www.lrc.state.ky.us/kar/302/031/040.htm>
- North Carolina Pesticide Storage Regulations
  - <http://www.ncagr.gov/SPCAP/pesticides/storagebrochure.pdf>

## 16. Resources on barn efficiency and energy monitoring

- NC State Post Harvest Efficiency
  - <https://tobacco.ces.ncsu.edu/wp-content/uploads/2018/03/post-harvest-efficiency-guide.pdf?fw=no>

## 17. Resources for terms and conditions of work commitment

- United States Department of Labor Terms and Conditions of Employment
  - <https://www.dol.gov/whd/forms/wh516.pdf>

## 18. Resources on minimum wage requirements or adverse effect wage rates

- Adverse Effect Wage Rates for 2018
  - <https://www.foreignlaborcert.doleta.gov/adverse.cfm>
- Minimum Wage by state
  - <https://www.dol.gov/whd/minwage/america.htm>

State	Adverse Effect Wage Rate	Minimum Wage
Georgia	\$10.95	\$7.25*
Kentucky	\$11.19	\$7.25
Maryland	\$12.05	\$10.10
North Carolina	\$11.46	\$7.25
Ohio	\$12.93	\$7.25
Pennsylvania	\$12.05	\$7.25
South Carolina	\$10.95	\$7.25*
Tennessee	\$11.92	\$7.25*
Virginia	\$11.46	\$7.25


\*Indicates that the state prevailing minimum wage was lower than \$7.25 per hour, which means the Federal Minimum Wage Rate of \$7.25 per hour will take precedent  
 \*\*If you have annual gross receipts of \$305,000 or more, then the minimum wage rate in Ohio is \$8.30

## 19.Resources for I-9 forms

- US Department of Labor I-9 Form
  - [https://www.doleta.gov/ohr/forms/I-9\\_form.pdf](https://www.doleta.gov/ohr/forms/I-9_form.pdf)

## 20.Resources for wage statements and an Example

- US Department of Labor Wage Statement
  - [https://www.dol.gov/whd/forms/form\\_wh-501.pdf](https://www.dol.gov/whd/forms/form_wh-501.pdf)

Wage Statement (Optional Form)		U.S. Department of Labor Wage and Hour Division						 U.S. Wage and Hour Division	
Employee <b>Joe Jones</b>		Social Security No. <b>XXX-XX-XXXX</b>				OMB No.: 1235-0002		Expires: 06/30/2017	
Permanent Address <b>2184 Robert Jones Rd, Tompkinsville, KY 42167</b>								Workweek Ending	
Day/Date		Sun/	Mon/ 8/21/17	Tues/ 8/22/17	Wed/ 8/23/17	Thurs/	Fri/ 8/25/17	Sat/ 8/26/17	Total Hours Worked in Week
Starting Time			<b>7:00 AM</b>	<b>7:00 AM</b>	<b>7:00 AM</b>		<b>7:00 AM</b>	<b>7:00 AM</b>	<b>43</b>
Quitting Time			<b>6:30 PM</b>	<b>6:30 PM</b>	<b>2:15 PM</b>		<b>6:30 PM</b>	<b>1:00 PM</b>	Itemized Deductions
Hours Worked			<b>10.5</b>	<b>10.5</b>	<b>6.5</b>		<b>10.5</b>	<b>5.0</b>	FICA <b>\$ 37.10</b>
Crop/Task Units Done									Federal Tax <b>\$ 48.50</b>
Rate of Pay (Hourly or Piece Rate)			<b>\$10 / hr</b>	<b>\$10 / hr</b>	<b>\$10 / hr</b>		<b>\$10 / hr</b>	<b>\$10 / hr</b>	State Tax
Daily Pay			<b>\$ 105</b>	<b>\$ 105</b>	<b>\$ 65</b>		<b>\$ 105</b>	<b>\$ 105</b>	Rent
Employer <b>James Fowler</b>								Total Gross Pay	
Address <b>1234 New Hope Church Road, Tompkinsville, KY 42167</b>								Food	
Employer identification number <b>XX-XXXXXX</b>								Transportation	
								Other	
								Total Deductions <b>\$ 115.60</b>	
								Net Pay (Amount Due Employed) <b>\$ 369.40</b>	
								Date Paid <b>8/26/17</b>	

## 21.Resource for all legally required labor standards posters

- US Department of Labor Workplace Posters
  - Migrant and Seasonal Agricultural Worker Protection Act (MSPA):  
<https://www.dol.gov/whd/regs/compliance/posters/mspaensp.htm>
  - Notice of Employee Rights under the Fair Labor Standards Act:  
<https://www.dol.gov/whd/regs/compliance/posters/wh1386Agrcltr.pdf>
  - Employee Rights Under the H-2A Program:  
[https://www.dol.gov/whd/posters/pdf/WHD1491Eng\\_H2A.pdf](https://www.dol.gov/whd/posters/pdf/WHD1491Eng_H2A.pdf)
  - OSHA Occupational Safety and Health Poster:  
<https://www.osha.gov/Publications/poster.html>

## 22.Resources for housing certification

- US Department of Labor Housing Occupancy Certificate
  - <https://www.dol.gov/whd/forms/wh520.pdf>

## 23.Resource for the OSHA safety and health checklist

- GAP Connections Resource
  - <https://growersystem.gapconnections.com/LaborResources/OSHAHousingCheckList.html>

## 24.Examples of terms and conditions of occupancy

- US Department of Labor Housing Terms and Conditions



- <https://www.dol.gov/whd/forms/wh521.pdf>

## 25.Examples of vehicle inspection records

- US Department of Labor Vehicle Mechanical Inspection Report for Transportation
  - <https://www.dol.gov/whd/forms/wh514.pdf>
- US Department of Labor Transportation Fact Sheet
  - <https://www.dol.gov/whd/regs/compliance/whdfs50.pdf>

## 26.Resource for registered FLCs

- Registered Farm Labor Contractor Listing
  - <https://www.dol.gov/whd/regs/statutes/FLCList.htm>

## 27.Examples of FLC Certificate of Registration

**Example ONLY**

**Insert Farm Labor Contractor**

**Registration Here**

## 28.Resources on hours a child can work

- Youth Rules: Know the Rules
  - <https://www.youthrules.gov/know-the-limits/index.htm>

## 29.Resources on how to become certified in First Aid/CPR/AED

- Red Cross:
  - <http://www.redcross.org/m/phssmrd/take-a-class>
- American Heart Association:
  - [http://cpr.heart.org/AHA/ECC/CPRandECC/FindACourse/UCM\\_473162\\_Find-A-Course.jsp](http://cpr.heart.org/AHA/ECC/CPRandECC/FindACourse/UCM_473162_Find-A-Course.jsp)