Procedural Guidelines for FDACS Continuing Education
Category: Limited Urban Fertilizer

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Background and Continuing Education Category Standards

Florida Statute s. 482.152 requires all commercial fertilizer applicators to have a Limited Commercial Fertilizer Applicator Certificate (LCFAC) from the Florida Department of Agriculture and Consumer Services (FDACS).

Florida Statute s. 403.9338 – FDEP, in cooperation with UF/IFAS shall provide training and testing programs in urban landscape BMPs and may issue certificates demonstrating satisfactory completion of the training. Individuals who have successfully completed the Green Industries Best Management Practices (GI-BMP) training must apply for the LCFAC if they want to (for-hire) apply fertilizer.

The LCFAC is NOT required if one is making fertilizer applications on: Property used for agriculture production; golf courses; non-commercial applications to property that their employer owns, for example, an apartment complex; state, county or local government property, for example, parks and schools; qualifies as a yardman, uses equipment and fertilizer purchased and owned by the property owner.

The LCFAC must be renewed every four years. Prior to renewal, a person must obtain 4 hours of approved continuing education training under the following combinations:

1. Two (2) hours must be in category BMP Topics
2. Additional two (2) hours in Chapter 482 core topics
3. Or a total of 4 category BMP hours

It is important to note that CEU credits are ONLY approved for actual instruction time that relates directly to pesticide/fertilizer certification (category) standards. A minimum of 50 minutes of instruction time is required for 1 CEU. Also, counties with local ordinances may require additional CEUs.

This document is intended to assist the training provider with a working knowledge of FDACS policy and protocols as well as examples of pre-approved topics. Other topics will be given consideration, so providers are encouraged to submit topics that are not found on this list.

In general, approved CEUs for the Fertilizer Applicator category include any CEU topics pertaining to proper fertilization procedures or issues related to water quality. For a list of topics see page 4 “Criteria for the Limited Urban Fertilizer Category”.

Training providers seeking renewal criteria and procedures for the new Fertilizer Applicator Category should contact FDACS Pesticide Certification Section who is responsible for reviewing submittals for CEU programs. If you have any specific questions related to this issue, contact the following:

Pesticide Certification Section
3125 Conner Blvd., Bldg. 8 (L-29)
Tallahassee, FL 32399-1650
(850) 617-7870
(850) 617-7895 Fax
AESCares@FreshFromFlorida.com
Guidelines for CEU Programming: Limited Urban Fertilizer Category

The guidance provided is intended to assist approved Florida Department of Agriculture Consumer Services (FDACS) Continuing Education program/class providers with a set of procedural guidelines specifically for the new Limited Urban Fertilizer Category. The purpose is to highlight the fundamental requirements and key components necessary to receive Limited Urban Fertilizer (LF) CEU program approval and maximum hours requested.

Fundamental Requirement

☑ Approved Program Provider or Designated Co-Provider

Guidance: According to FDACS: Any private company, public entity, professional association, or other organization or training provider may apply to have a program approved by the Pesticide Certification Section to award CEUs to program attendees.

Key Components

According to FDACS form 13326 Rev. 10/13: Request for Granting Continuing Education Units, terms for approval are dependent on the submitting provider agreeing to comply to set standards and requirements.

1. The subject matter to be presented for CEU credit must relate directly to the certification standards and specific target audience.

Guidance: “Criteria for the Limited Urban Fertilizer Category” has been published by IFAS Extension/FFL and DACS to ensure the provider is aligned with content standards.

2. The program provider is responsible for submitting each of the following for verification of program content, applicability and assignment of CEU credits:

☑ Program agenda including a list of the contact hours of instruction time.

Guidance: For each session for which approval is requested, the provider will specify the duration (time) and request the number of CEUs to be allowed. This is normally 1 CEU for each 50 minutes of instruction time in order to meet CEU requirement.

☑ Brief description of the specific program contents as noted on the agenda.

Guidance: Consider using the published criteria for the Limited Urban Fertilizer category to insure proper titles and descriptions of the specific program/segments are adequately apparent. For list of topics see page 4 “Criteria for the Limited Urban Fertilizer Category”.

☑ Documentation that attests the expertise of each trainer or presenter (brief resume).

Guidance: The trainer or presenter must possess the expertise requirement to impart the specified information to the attendees. The agenda requires the speakers name, title, institution, agency or company he/she is affiliated along with a brief bio containing background, education, experience and other credentials where appropriate. Speaker selection and placement regarding expertise and content presented should be reviewed before submission.
Criteria for Chapter 482 and 487 Core

Applicable 487 and 482 Core Competency Standards (from Rule5E-9.023, F.A.C.)

1. Pesticide labels and labeling comprehension, including:
   a. The general format and terminology of pesticide labels and labeling;
   b. The understanding of instructions, warnings, terms, symbols, and other information appearing on pesticide labels;
   c. Classification of the product (unclassified or restricted use); and
   d. Necessity for use consistent with the label.

2. Pesticide safety, including:
   a. Pesticide toxicity, hazards to man, and common exposure routes;
   b. Common types and causes of pesticide accidents;
   c. Precautions necessary to guard against injury to applicators and other individuals in or near treated areas;
   d. Need for and use of protective clothing and personal protective equipment;
   e. Signs and symptoms of pesticide poisoning;
   f. First aid and other procedures to be followed in case of a pesticide accident; and
   g. Proper identification, storage, transport, handling, mixing and loading procedures and disposal methods for pesticides and empty pesticide containers, including management actions and precautions to be taken to prevent children or other individuals from having access to pesticides or pesticide containers.

3. Environmental - The potential environmental consequences of the use and misuse of pesticides and fertilizers as may be influenced by factors such as:
   a. Weather and climate;
   b. Terrain, geological features, and soil type;
   c. Presence of fish or other wildlife, and other non-target organisms; and
   d. Wetlands, other bodies of water, and soil drainage patterns.
   e. Pest features, including:
      f. Common features of pest organisms and characteristics of damage needed for pest recognition;
      g. Identifying features of relevant pests; and
      h. Pest development and biology relevant to problem identification or pest control.

4. Application methodology, including:
   a. Methods used to apply various formulations of pesticides/fertilizers, and the knowledge of which formulation and application method should be used in a given situation;
   b. Characteristics that distinguish between proper and improper pesticide/fertilizer applications; and
   c. Methods of minimizing or preventing pesticide drift into the environment.

5. Laws and regulations - applicable state and federal laws and regulations.
Criteria for the Limited Urban Fertilizer Category

1. Introduction/Overview Summary
   Should include topics related to Florida-Friendly Landscaping™ Principles and cultural/fertilizer practices that protect Florida’s water resources, including: nonpoint source pollution, laws, and effects on water quality; effects on business, economy, and quality of life; and best management practices as both good business and environmental benefit.

   a. Florida-Friendly Landscaping™ Principles
   b. Laws that protect watersheds, wetlands, and other bodies of water (stormwater management)
   c. Reducing nonpoint source pollution
   d. Runoff and Leaching: distinguish landscape maintenance practices which can contribute to it

2. Lawn and Landscape Summary
   Should include topics related to Florida turfgrass species and characteristics and Florida landscape plants and characteristics, including: fertilizer requirements; the effects of landscape design, mowing, irrigation, shade, wear, pests, disease, cold and heat stresses; and conversely, the effects of fertilization on these cultural aspects as well as direct effects on water quality (e.g., nutrient pollution, erosion and sedimentation, and water usage rates). In addition, topics as stated below and related to the trimming and alterations of mangroves according to the 1996 Mangrove Trimming and Preservation Act could be included.

   a. Landscape cultural and fertilizer practices for ornamentals/turfgrass
   b. Abiotic/Biotic turfgrass and ornamental plant stress management
   c. Plant selection, installation and establishment
   d. Proper mangrove pruning, diagnosing plant problems
   e. State laws that protect mangrove ecology & importance
   f. Shoreline protection: sustainability and mitigation

3. Irrigation Topics Summary
   Should include topics related to irrigation systems and the effects of irrigation on nitrogen volatilization, leaching and runoff; excessive withdrawal and water quality issues; effects of over or under irrigation on plants and fertilizer needs; effects of irrigation water quality and reclaimed water issues; diagnoses of irrigation and fertilizer problems; and the importance of proper repair to maintain distribution uniformity to prevent spot leaching and fertilizer/chemical runoff that results in more applications and pollution.

   a. State and local regulatory requirements
   b. Effects of irrigation on nitrogen volatilization, leaching, and runoff
   c. Irrigation scheduling (options) and calibration to reduce nitrogen loss in the landscape
   d. Troubleshooting to prevent nitrogen leaching and runoff.
   e. Appropriate reclaimed water use and nutrient budgeting
4. Fertilizer Topics Summary

Should include topics related to fertilizer characteristics and selection, including: physical and chemical properties; soil type, pH, temperature, and moisture effects on release rates; calculation of application rates; spreader calibration; and handling materials and spills.

a. Application methods and calculations
b. Laws and regulations - applicable state and federal laws and regulations
c. Types of nutrient sources
d. Nutrient release mechanisms and technology
e. Soil and water pH, compaction, other soil characteristics
f. Soil testing
g. Buffer zones: minimizing or preventing fertilizer movement into the environment
h. Spill/accident management
i. Mixing and loading
j. Calibration
k. Storage
Training Protocol

For Quality assurance purposes and consistency, CEU programs submitted required speaker biographies, class training background information pertaining to who and how it will be carried out. Here is a sample outline:

Green Industries Best Management Practices Training  
(English)  
Protocols 2015

Donald P. Rainey, UF/IFAS Extension FFL/GI-BMP Program – Statewide Coordinator  
Laurie Trenholm, UF, Environmental Horticulture Dept – Program Senior Advisor  
Michael Thomas, Florida Dept of Environmental Protection – NPSP Program Manager

Certification in the Green Industries Best Management Practices (BMPs) or approved third-party training equivalent is mandatory statewide for commercial fertilizer applicators. Due to State and local regulation and certification requirements, GI-BMP training for attendee certification must follow standard guidelines. These training programs are funded and overseen by the Florida Department of Environmental Protection (FDEP) and they require that certain protocols be followed when conducting these trainings.

The following protocols must be followed for FDEP recognition of GI-BMP training:

Certified Instructors: In order to conduct a BMP training where attendees will receive a Certificate of Training, the training must be done by a certified instructor. To become certified, instructor candidates are required to achieve a 90% score on the program post-test, attend an instructor class or individual tutorial, and participate in presenting one or more trainings under the supervision of a Senior Instructor. Program instructors are predominantly Extension horticulture agents and Green Industry professionals.

Content and Agenda

The official BMP program content is provided to certify instructors through an instructor log-in website. Instructors are required to use the current approved version. While this program may be expanded to reflect local issues, it is important that the topics be adhered to. It is also important that the tone of the talks not be changed to reflect any outside agendas - the topics are not to be changed in this sense. The FDEP has funded this program and will not allow for major changes.

Trainings may be done in an all-day session. A typical agenda is included below. In order to meet CEU requirements, each topic must take a minimum of 50 minutes (Module 3 – Lawn and Landscape must take a minimum of 80 minutes): these sessions cannot be shortened. In some cases, it may be more practical to deliver the training over time, one module at a time. In this case, it is imperative that all modules be attended before a Certificate of Training or pesticide CEUs will be issued.

CEU Attendance Form Procedure: It is important that CEU attendance forms are only given out at the end of the program. Have the official CEU attendance forms already printed out (you may photocopy it on colored paper). Hand them out to attendees before the post-test. Have the attendee fill out the top
and return to you for your signature. Sign and return them after the posttest. The attendee will retain their signed form and turn it in when they renew their pesticide license. The recommended recordkeeping is to enter the attendees into the FDACS website after the class is over (requires the attendee's pesticide license # with the 2-letter prefix). Instructions are available for entering attendees into the website. If you do not enter attendees into the website, you should keep a sign-in sheet or a photocopy of the attendance form for your records that includes the attendee’s name and pesticide license number with the 2-letter prefix.

Other CEUs (CCA, FNGLA) may be obtained and this class has been approved for them in the past. Contact the organizations directly for more information on this.

BMP Certification Paperwork to Turn In:

Green Industries BMP Training Records:
• Each attendee must fill out a Green Industries BMP Training Record in order to be listed as Certified in the BMPs and receive a Certificate of Training.
• Have attendees fill the form out completely; remind attendees to write legibly or they may not receive a Certificate of Training.
• Individual training records are maintained for GI-BMP verification by FDEP or municipalities.

Surveys:
End of class evaluations should be filled out. These are compiled and reported to FDEP.

Pre and Post Test:
All classes begin with the pre-test and end with the post-test. Attendees must receive a score of 75% or better on the post-test to receive a Certificate of Training.

All of these materials should be mailed to the GI-BMP Program State Office, PO Box 110675, Gainesville, FL 32611 at the conclusion of the training. Instructor should keep a copy of Training Records and post-tests until the original materials have been received and processed at the State Office.

Attendee Handouts:
Manuals are available in English and Spanish. Other handouts pertaining to local issues or other considerations may be used, but please make sure that they are consistent with the topics discussed. Please contact the GI-BMP State Office at gi.bmp@ifas.ufl.edu or 352-273-4517 if you need manuals or help obtaining other official class materials.

Charges and Lunch:
A typical charge for the program is $0 - $30 per person, payable to the county office or organization hosting the class. This fee is not mandatory and may be waived or reduced at the discretion of the trainer. The fee covers attendee handouts, refreshments/lunch and other direct program expenses. On occasion, speakers may ask for and receive travel reimbursement,
Example: English Speakers Bio:

Introduction: Don Rainey  
Green Industries-BMP Statewide Coordinator  
UF/IFAS Extension

Overview: Don Rainey  
Green Industries-BMP Statewide Coordinator  
UF/IFAS Extension

Lawn & Landscape: Dr. Laurie Trenholm  
Urban Turfgrass Specialist  
Environmental Hort. Dept.  
UF/IFAS Extension

Irrigation: Don Rainey  
Green Industries-BMP Statewide Coordinator  
UF/IFAS Extension

Fertilization: Dr. Laurie Trenholm  
Urban Turfgrass Specialist  
Environmental Hort. Dept.  
UF/IFAS Extension

Pesticide: Don Rainey  
Green Industries-BMP Statewide Coordinator  
UF/IFAS Extension
Example: Record of Attendance for GI-BMP Program CEUs