

# Guidance on How to Become a Licensed UAV Pesticide Applicator

The Iowa Department of Agriculture and Land Stewardship (IDALS) is the lead regulatory agency for regulating pesticides and pesticide applicators in Iowa <sup>1</sup>. With the recent popularity of Unmanned Aerial Vehicles (UAV's) being used for pesticide applications, there is a need to communicate the regulations that a commercial UAV pesticide applicator must follow to legally apply pesticides. This document serves as guidance to become a licensed aerial applicator using a UAV commercially in Iowa.

## **FAA Component**

The Federal Aviation Administration (FAA) requires certification for commercial operation of UAV's <sup>2</sup>. The certification required to operate UAV's that weigh less than 55 pounds is 14 CFR Part 107 <sup>3</sup>. UAV's weighing 55 pounds or more can be operated under Part 107 with waivers and exemptions from 14 CFR Part 91 and require exemption from several 14 CFR Part 61, 91, and 137 regulations. The link is provided below for 49 U.S.C. §44807 exemptions <sup>4</sup>.

In addition, an applicator applying pesticides must also operate under 14 CFR Part 137 of the FAA regulations. 14 CFR Part 137 is a certificate that allows for dispensing economic poisons. The application process for a Part 137 certificate is now streamlined and available online, instead of through the Field Services District Office<sup>5</sup>.

Agricultural aircraft operations include:

- dispensing economic poisons
- dispensing any other substance intended for plant nourishment, soil treatment, propagation of plant life, or pest control, or
- engaging in dispensing activities directly affecting agriculture, horticulture, or forest preservation. Note: Dispensing of live insects is not included.

Dispensing any economic poison:

- The FAA defines an economic poison as any substance that acts as a pesticide, plant regulator, or defoliant.
- The FAA considers chemicals used as disinfectants for viruses to fall in the category of economic poisons as defined in Part 137.3.

A business entity can hold the 14 CFR Part 137 certification and have several applicators operating under the company's Part 137 certificate. The operator of the UAV will be required to pass a skills and knowledge test <sup>5</sup>. The UAV is required to be registered with the FAA and a registration number will be assigned to the UAV. The registration number must be legible and securely affixed to the UAV. You can apply for the registration number at the link listed below <sup>6</sup>.

Although the FAA has exclusive authority over the use of airspace in the United States, including the airspace used by UAV's, the Iowa Department of Transportation (IDOT) has the authority to implement and manage regulations pertaining to state laws concerning UAV operations within the state<sup>7</sup>. Unless specifically exempted, a certificate of registration from IDOT is required to operate an aircraft in Iowa, including UAVs (in addition to being registered with the FAA)<sup>8</sup>.

## **Disclaimer**

*All information provided concerning FAA requirements are for information only. You must contact the FAA for exact guidance with their regulations.*



# Guidance on How to Become a Licensed UAV Pesticide Applicator

## IDALS Component – Commercial Application

1. Any person who applies pesticides commercially by air from a manned fixed wing aircraft, rotary aircraft, or from an unmanned aerial vehicle (UAV) must hold an aerial applicator certification under a currently licensed aerial application business. The aerial applicator applicant must pass at a minimum.
  - Iowa 11F (full) exam (stand-alone test) for aerial ag plant pest control
  - **Or** Iowa core exam + categories 1A, 1B, 1C + 11R exam for ag plant pest control
  - **Or** Iowa core exam + 11R exam + the specialty category exam in which you will work if not ag plant pest control

IDALS administers the pesticide applicator exams and a link has been added below that will give you more information on the registration, exam options (online or in-person), and fees associated with taking the exam [9](#).

A link for study manuals for the exam(s) can be found below [10](#).

2. Any person engaged in the business of applying any pesticide to the lands or property of another is required to be licensed as a commercial pesticide company.  
More information about how to apply online for an Iowa Pesticide Company License is available through the link below [11](#).

The process of becoming a licensed UAV pesticide applicator can be lengthy, involving several licenses and certifications. **A person who applies pesticides commercially without the appropriate applicator certification and company licenses are subject to civil penalties.**

### Checklist

- FAA Part 107 (small UAV certificate less than 55 pounds) if greater than 55 pounds a waiver from FAA must be granted (§44807).
- FAA Part 137 (Economic Poisons) certificate (APPLY ONLINE)
- FAA Certificate of Authorization
- Registration of the Drone with FAA (nontransferable)
- IDOT Aircraft Registration
- Pass IDALS pesticide applicator exam(s)
- Iowa Pesticide Applicator Certification
- Working under an Iowa Pesticide Company License
- Aerial applicator secondary containment or exemption
- Certificate of Insurance clearly stating “Comprehensive Chemical” except Public & Non-Commercial license types
- Aerial Consultant if working under an out-of-state license
- Iowa Agent Designation Form if an out-of-state license

\*All forms [12](#) are made available through the online portal for licensing and certification as part of the application checklist. Completed online applications will be reviewed in 10 business days or less. Anything additional needed will be communicated by email through the online application process.

# Guidance on How to Become a Licensed UAV Pesticide Applicator

## IDALS Component - Private Applicators

“Certified private applicator” means a certified applicator who uses or supervises the use of any pesticide which is classified for **restricted use** (RUP) on property owned or rented by the applicator or the applicator’s employer or, if applied **without compensation** other than trading of personal services between producers of agricultural commodities, on the property of another person.

An applicator meeting the definition of a private applicator is required to be currently certified with IDALS by passing the Private Applicator Exam or Iowa Core Exam or is issued a private certification based on a current commercial certification<sup>12</sup>.

IDALS administers the pesticide applicator exams and a link has been added below that will give you more information on the registration, exam options (online or in-person), and fees associated with taking the exam <sup>9</sup> and the directions to apply for certification<sup>11</sup>.

A link for study manuals for the exam(s) can be found below <sup>10</sup>

A private applicator using only pesticides classified for **general use** (GUP) is not required to be certified with IDALS.

Any private applicator using a UAV under the definition above is required to meet all the same FAA and IDOT requirements as the commercial applicator under the **FAA Component** above as well as the IDALS licensing requirements as a certified private applicator. The private applicator would not be required to be licensed as a commercial applicator company or as a commercial applicator with IDALS unless applying pesticides for compensation. (See IDALS Component for Commercial Application above).

## Links

1. <https://iowaagriculture.gov/pesticide-bureau>
2. <https://www.faa.gov/uas>
3. <https://www.ecfr.gov/current/title-14/part-107>
4. [https://www.faa.gov/uas/advanced\\_operations/certification/section\\_44807](https://www.faa.gov/uas/advanced_operations/certification/section_44807)
5. [https://www.faa.gov/uas/advanced\\_operations/dispensing\\_chemicals](https://www.faa.gov/uas/advanced_operations/dispensing_chemicals)
6. <https://faadronezone-access.faa.gov/#/>
7. <https://iowadot.gov/aviation/Uncrewed-aircraft-systems>
8. <https://secure.iowadot.gov/Aviation/aircraftregistration/registration.aspx>
9. <https://iowaagriculture.gov/pesticide-bureau/applicator-licensing-certification>
10. <https://store.extension.iastate.edu/topic/crops/pesticide-safety-education-program?s=5&a=0&f=0>
11. <https://iowaagriculture.gov/pesticide-bureau/online-portal-help-guides>
12. [https://agriculture-iowa.my.salesforce.com/sfc/p/#t0000000TZYX/a/t0000002G8Us/vufJjJSHzhxFOOLJZuQAq5wHAq.Bbk4xST6WPqzi3\\_k](https://agriculture-iowa.my.salesforce.com/sfc/p/#t0000000TZYX/a/t0000002G8Us/vufJjJSHzhxFOOLJZuQAq5wHAq.Bbk4xST6WPqzi3_k)

*The IDALS Pesticide Bureau acknowledges the North Carolina Department of Agriculture & Consumer Services Pesticide Section for their assistance in creating this publication.*