



COLORADO

**Department of
Regulatory Agencies**

Colorado Office of Policy, Research &
Regulatory Reform

2022 Sunset Review

Pesticide Applicators' Act



October 14, 2022



COLORADO

**Department of
Regulatory Agencies**

Executive Director's Office

October 14, 2022

Members of the Colorado General Assembly
c/o the Office of Legislative Legal Services
State Capitol Building
Denver, Colorado 80203

Dear Members of the General Assembly:

The Colorado General Assembly established the sunset review process in 1976 as a way to analyze and evaluate regulatory programs and determine the least restrictive regulation consistent with the public interest. Pursuant to section 24-34-104(5)(a), Colorado Revised Statutes (C.R.S.), the Colorado Office of Policy, Research and Regulatory Reform (COPRRR) at the Department of Regulatory Agencies (DORA) undertakes a robust review process culminating in the release of multiple reports each year on October 15.

A national leader in regulatory reform, COPRRR takes the vision of their office, DORA and more broadly of our state government seriously. Specifically, COPRRR contributes to the strong economic landscape in Colorado by ensuring that we have thoughtful, efficient and inclusive regulations that reduce barriers to entry into various professions and that open doors of opportunity for all Coloradans.

As part of this year's review, COPRRR has completed an evaluation of the Pesticide Applicators' Act. I am pleased to submit this written report, which will be the basis for COPRRR's oral testimony before the 2023 legislative committee of reference.

The report discusses the question of whether there is a need for the regulation provided for under Article 10 of Title 35, C.R.S. The report also discusses the effectiveness of the Commissioner of Agriculture in carrying out the intent of the statutes and makes recommendations for statutory and administrative changes for the review and discussion of the General Assembly.

To learn more about the sunset review process, among COPRRR's other functions, visit coprrr.colorado.gov.

Sincerely,

Patty Salazar
Executive Director





COLORADO

**Department of
Regulatory Agencies**

Colorado Office of Policy, Research &
Regulatory Reform

October 14, 2022

FACT SHEET

Sunset Review: Pesticide Applicators' Act

Background

What is regulated?

The Pesticide Applicators' Act (Act) applies to anyone who uses or supervises the use of pesticides or pesticide devices, including entities and individuals that apply pesticides and are licensed or registered by the Commissioner of Agriculture (Commissioner) and the general public.

Why is it regulated?

The Commissioner regulates pesticide applicators to protect the public from the adverse effects of pesticides resulting from unsafe and incorrect pesticide use, including damage to humans, animals, property and the environment.

Who is regulated?

In fiscal year 20-21, there were a total of 9,856 individuals and 1,166 entities who were licensed or registered as pesticide applicators.

How is it regulated?

The Commissioner enforces the Act, in part, by licensing and registering pesticide applicators who use restricted use pesticides. Staff protects the public by conducting inspections and investigations to uncover problems with pesticide use and to prevent adverse effects on individuals and the environment, and it takes enforcement actions against pesticide applicators who have violated the Act or the Commissioner's rules.

What does it cost?

In fiscal year 20-21, the Commissioner expended over \$3 million in federal and state funds and allotted 25.2 full-time equivalent employees to implement the Act.

What disciplinary activity is there?

Over the five-year period, the Commissioner took the following enforcement actions against pesticide applicators: 3 letters of admonition, 393 cease and desist orders, 154 civil penalties and 1 permanent injunction.

Key Recommendations

- Continue the Act for 11 years, until 2034.
- Update the definition of "use" of pesticides to align with changes in federal law.
- Authorize individuals on the Pesticide Sensitive Registry to receive notification prior to a pesticide application in any turf, ornamental or structural category that is planned at their place of business or, if they are students, at their school address.
- Amend the requirement for notification of anyone on the Registry prior to a pesticide application in any turf or ornamental category on any property within 250 feet of the registrant's property line, rather than on an abutting property.

Table of Contents

Background	1
Sunset Criteria.....	1
Sunset Process	3
Methodology	3
Profile of Pesticide Applicators	5
Legal Framework.....	7
History of Regulation	7
Legal Summary	8
Federal Law	9
State Law	11
Program Description and Administration	22
Licensing & Registration	24
Examinations.....	30
Complaint and Disciplinary Activity	31
Audits/Inspections	36
Fining Activity	38
Collateral Consequences - Criminal Convictions.....	39
Pesticide Notification	39
Local Regulation.....	40
Analysis and Recommendations.....	42
Recommendation 1 - Continue the Pesticide Applicators’ Act for 11 years, until 2034.	42
Recommendation 2 - Update the definition of “use” of pesticides to align with changes in federal law.	45
Recommendation 3 - Authorize individuals on the Pesticide Sensitive Registry to receive notification prior to a pesticide application in any turf, ornamental or structural category that is planned at their workplaces or, if they are students, at their school addresses.	46
Recommendation 4 - Amend the requirement for notification of anyone on the Registry prior to a pesticide application in any turf or ornamental category on any property within 250 feet of the registrant’s property line, rather than on an abutting property.	48
Recommendation 5 - Modernize the Commissioner’s fining authority to adjust for inflation by increasing the maximum fine to \$2,500 per violation.	49
Recommendation 6 - Direct that civil penalties be credited to the General Fund..	50

Recommendation 7 - Require basic licensing information for licensed and registered pesticide applicators to be made available online.....	51
Recommendation 8 - Require the Commissioner to develop an online complaint process, in which complainants may easily fill out an online complaint form and submit it electronically.	52
Recommendation 9 - Authorize a former agricultural worker or an advocate for agricultural workers or representative of a community-based organization that serves agricultural workers to be appointed to the Advisory Committee, in case the Agricultural Commission is unable to appoint a representative who is currently engaged as an agricultural worker.	53
Recommendation 10 - Limit the number of terms that members of the Pesticide Advisory Committee may serve to no more than two consecutive three-year terms, with some exceptions.	55
Recommendation 11 - Duplicate the requirement to report local ordinances to the Commissioner in the sections of law that directly relate to local government.....	56
Administrative Recommendation 1 - The Department should eliminate the ongoing practice in which enforcement activities are primarily limited to issuing cease and desist orders and civil penalties, and it should instead apply the enforcement tool that is appropriate to each case and that best serves to protect the public.	56
Administrative Recommendation 2 - The Department should prioritize hiring inspectors who are bilingual.....	57
Administrative Recommendation 3 - The Department should immediately develop and implement a recordkeeping system to track and categorize complaints.	58
Appendix A - Local Government Survey	60
Appendix B - Customer Service Survey	62

Background

Sunset Criteria

Enacted in 1976, Colorado's sunset law was the first of its kind in the United States. A sunset provision repeals all or part of a law after a specific date, unless the legislature affirmatively acts to extend it. During the sunset review process, the Colorado Office of Policy, Research and Regulatory Reform (COPRRR) within the Department of Regulatory Agencies (DORA) conducts a thorough evaluation of such programs based upon specific statutory criteria¹ and solicits diverse input from a broad spectrum of stakeholders including consumers, government agencies, public advocacy groups, and professional associations.

Sunset reviews are guided by statutory criteria and sunset reports are organized so that a reader may consider these criteria while reading. While not all criteria are applicable to all sunset reviews, the various sections of a sunset report generally call attention to the relevant criteria. For example,

- In order to address the first criterion and determine whether a particular regulatory program is necessary to protect the public, it is necessary to understand the details of the profession or industry at issue. The Profile section of a sunset report typically describes the profession or industry at issue and addresses the current environment, which may include economic data, to aid in this analysis.
- To ascertain a second aspect of the first sunset criterion--whether conditions that led to initial regulation have changed--the History of Regulation section of a sunset report explores any relevant changes that have occurred over time in the regulatory environment. The remainder of the Legal Framework section addresses the third sunset criterion by summarizing the organic statute and rules of the program, as well as relevant federal, state and local laws to aid in the exploration of whether the program's operations are impeded or enhanced by existing statutes or rules.
- The Program Description section of a sunset report addresses several of the sunset criteria, including those inquiring whether the agency operates in the public interest and whether its operations are impeded or enhanced by existing statutes, rules, procedures and practices; whether the agency performs efficiently and effectively and whether the board, if applicable, represents the public interest.
- The Analysis and Recommendations section of a sunset report, while generally applying multiple criteria, is specifically designed in response to the tenth criterion, which asks whether administrative or statutory changes are necessary to improve agency operations to enhance the public interest.

¹ Criteria may be found at § 24-34-104, C.R.S.

These are but a few examples of how the various sections of a sunset report provide the information and, where appropriate, analysis required by the sunset criteria. Just as not all criteria are applicable to every sunset review, not all criteria are specifically highlighted as they are applied throughout a sunset review. While not necessarily exhaustive, the table below indicates where these criteria are applied in this sunset report.

Table 1
Application of Sunset Criteria

Sunset Criteria	Where Applied
(I) Whether regulation by the agency is necessary to protect the public health, safety, and welfare; whether the conditions that led to the initial regulation have changed; and whether other conditions have arisen that would warrant more, less, or the same degree of regulation;	<ul style="list-style-type: none"> • Profile • Legal Framework • Recommendation 1
(II) If regulation is necessary, whether the existing statutes and regulations establish the least restrictive form of regulation consistent with the public interest, considering other available regulatory mechanisms, and whether agency rules enhance the public interest and are within the scope of legislative intent;	<ul style="list-style-type: none"> • Legal Framework • Program Administration • Recommendations 1, 2 and 7
(III) Whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes, rules, procedures, and practices and any other circumstances, including budgetary, resource, and personnel matters;	<ul style="list-style-type: none"> • Legal Framework • Program Administration • Recommendations 3, 4, 5, 8 and 11 • Administrative Recommendation 2 and 3
(IV) Whether an analysis of agency operations indicates that the agency performs its statutory duties efficiently and effectively;	<ul style="list-style-type: none"> • Program Administration • Recommendations 8 and 11 • Administrative Recommendation 3
(V) Whether the composition of the agency's board or commission adequately represents the public interest and whether the agency encourages public participation in its decisions rather than participation only by the people it regulates;	<ul style="list-style-type: none"> • Legal Framework • Program Administration • Recommendation 9 and 10
(VI) The economic impact of regulation and, if national economic information is not available, whether the agency stimulates or restricts competition;	<ul style="list-style-type: none"> • Profile
(VII) Whether complaint, investigation, and disciplinary procedures adequately protect the public and whether final dispositions of complaints are in the public interest or self-serving to the profession;	<ul style="list-style-type: none"> • Program Administration • Recommendation 8 • Administrative Recommendation 1 and 3
(VIII) Whether the scope of practice of the regulated occupation contributes to the optimum use of personnel and whether entry requirements encourage affirmative action;	<ul style="list-style-type: none"> • Legal Framework • Program Administration

Sunset Criteria	Where Applied
(IX) Whether the agency through its licensing or certification process imposes any sanctions or disqualifications on applicants based on past criminal history and, if so, whether the sanctions or disqualifications serve public safety or commercial or consumer protection interests. To assist in considering this factor, the analysis prepared pursuant to subsection (5)(a) of this section must include data on the number of licenses or certifications that the agency denied based on the applicant's criminal history, the number of conditional licenses or certifications issued based upon the applicant's criminal history, and the number of licenses or certifications revoked or suspended based on an individual's criminal conduct. For each set of data, the analysis must include the criminal offenses that led to the sanction or disqualification.	<ul style="list-style-type: none"> • Legal Framework • Program Administration
(X) Whether administrative and statutory changes are necessary to improve agency operations to enhance the public interest.	<ul style="list-style-type: none"> • Recommendations 1-11 • Administrative Recommendations 1-3

Sunset Process

Regulatory programs scheduled for sunset review receive a comprehensive analysis. The review includes a thorough dialogue with agency officials, representatives of the regulated profession and other stakeholders. Anyone can submit input on any upcoming sunrise or sunset review on COPRRR's website at coprrr.colorado.gov.

The functions of the Commissioner of Agriculture (Commissioner) as enumerated in Article 10 of Title 35, Colorado Revised Statutes (C.R.S.), relating to the regulation of the application of pesticides, shall terminate on September 1, 2023, unless continued by the General Assembly. During the year prior to this date, it is the duty of COPRRR to conduct an analysis and evaluation of the regulatory program pursuant to section 24-34-104, C.R.S.

The purpose of this review is to determine whether the currently prescribed regulation of pesticide applicators should be continued and to evaluate the performance of the Commissioner and their staff. During this review, the Commissioner must demonstrate that the program serves the public interest. COPRRR's findings and recommendations are submitted via this report to the Office of Legislative Legal Services.

Methodology

As part of this review, COPRRR staff interviewed the Commissioner's staff, regulatory officials in other states, practitioners, and officials with state and national professional associations; attended advisory committee meetings; and reviewed complaint files, Colorado statutes and rules, and the laws of other states.

The major contacts made during this review include, but are not limited to:

- Boulder, the City of;
- Coloradans for Responsible Pesticide Application;
- Colorado Association of School Executives;
- Colorado Association of Wheat Growers;
- Colorado Department of Agriculture;
- Colorado Legal Services, Migrant Farm Worker Division;
- Colorado Municipal League;
- Colorado Pest Control Association;
- Colorado Potato Administrative Committee;
- Colorado Sugarbeet Growers Association;
- Connecticut Pesticide Management Program;
- CropLife America;
- Denver Audubon;
- Farm Bureau;
- Farmers Alliance for Integrated Resources;
- Healthy Babies Bright Futures;
- International Society of Arboriculture, Rocky Mountain Chapter;
- Maine Board of Pesticide Control;
- Marijuana Industry Group;
- National Association of Landscape Professionals;
- National Pest Management Association;
- Office of the Attorney General;
- Pennsylvania Bureau of Plant Industry;
- People and Pollinators Action Network;
- Pesticide Advisory Committee;
- Pesticide Regulatory Education Program;
- Rocky Mountain Agri-Business Association;
- Rocky Mountain Golf Course Superintendents Association;
- Sierra Club, Rocky Mountain Chapter;
- Vail, the Town of; and
- Wisconsin Bureau of Agrichemical Management.

Section 35-10-128, C.R.S., requires COPRRR to report on the extent of local regulation of pesticides in Colorado. Consequently, COPRRR staff surveyed municipalities and counties. The response rate was 31 percent, and the survey responses may be found in Appendix A.

Additionally, in the spring of 2022, COPRRR staff conducted a survey of all pesticide applicators, entities and individuals, who are licensed or registered by the Commissioner. The survey was sent to 8,368 pesticide applicators; 348 emails were returned as undeliverable. The survey received 932 responses, which is a 12 percent response rate. These survey results may be found in Appendix B.

Profile of Pesticide Applicators

In a sunset review, COPRRR is guided by the sunset criteria located in section 24-34-104(6)(b), C.R.S. The first criterion asks whether regulation by the agency is necessary to protect the public health, safety, and welfare; whether the conditions which led to the initial regulation have changed; and whether other conditions have arisen which would warrant more, less or the same degree of regulation.

In order to understand the need for regulation, it is first necessary to understand what the profession does, where they work, who they serve and any necessary qualifications.

Pesticides are toxic substances that are used to destroy, repel or control any organism that may damage crops or other plants or that may be harmful to the health of humans or animals. Pesticides include herbicides, insecticides, fungicides and fumigants.²

Pesticide products are labeled according to their acute toxicity: highly toxic, moderately toxic, slightly toxic or relatively nontoxic. Even though some pesticides are labeled slightly toxic or relatively nontoxic, all pesticides are poisonous and may be dangerous to humans, animals, other organisms and the environment and should be handled according to the directions on the product label.³

Pesticide applicators who work in agricultural settings, also referred to as pesticide handlers or pesticide sprayers, apply pesticides to vegetation using various methods, such as spraying, dusting and mixing pesticides into the soil.⁴ These workers must complete specialized training so that they can judge how much pesticide may be used without negatively affecting the area's plants and animals, and they must also wear safety gear and protective clothing to avoid contamination.⁵

The sixth sunset criterion requires COPRRR to evaluate the economic impact of regulation. One way this may be accomplished is to review the expected salary and growth of the profession.

As of May 2020, the median hourly wage of pesticide applicators who work in agricultural settings (pesticide handlers and pesticide sprayers) in Colorado was \$18.75 and the mean hourly wage was \$19.97.⁶

² Encyclopedia Britannica. *Pesticide*. Retrieved November 15, 2021, from www.britannica.com/technology/pesticide and National Institutes of Environmental Health Sciences. *Pesticides*. Retrieved September 26, 2022, from www.niehs.nih.gov/health/topics/agents/pesticides/index.cfm

³ Penn State Extension. *Toxicity of Pesticides*. Retrieved September 26, 2022, from extension.psu.edu/toxicity-of-pesticides

⁴ U.S. Bureau of Labor Statistics. *Occupational Employment and Wage Statistics: Pesticide Handlers, Sprayers, and Applicators, Vegetation*. Retrieved November 15, 2021, from www.bls.gov/oes/current/oes373012.htm#st

⁵ Career One Stop. *Pesticide Handlers, Sprayers and Applicators, Vegetation*. Retrieved November 15, 2021, from www.careeronestop.org/Videos/careeronestop-videos.aspx?videocode=37301200

⁶ U.S. Bureau of Labor Statistics. *May 2021 Occupational Employment and Wage Estimates: Colorado*. Retrieved September 28, 2022, from www.bls.gov/oes/2021/may/oes_co.htm

Another type of pesticide applicator, also referred to as an exterminator or pest control worker, endeavors to eradicate pests, such as insects and rodents, from buildings and nearby properties. Like pesticide applicators in agricultural settings, these workers must be trained in the safe use of pesticides, and they must also wear gloves, goggles and respirators to protect themselves.⁷

Most pesticide applicators who work in non-agricultural settings are trained on the job and start out as technicians, and they may specialize in areas such as rodent control or fumigation. Pesticide technicians are required to complete training in pesticide use and safety. Pesticide applicators with experience are often promoted to higher level positions within their companies. Because pesticide control methods evolve over time, pesticide applicators are usually required to complete continuing education.⁸

Pesticide applicators who work in non-agricultural settings are exposed to many occupational hazards, including pesticides, which can be harmful to their health.⁹

As previously stated, the sixth sunset criterion requires COPRRR to evaluate the economic impact of regulation. One way this may be accomplished is to review the expected salary and growth of the profession.

As of May 2021, pesticide applicators in non-agricultural settings (exterminators or pest control workers) earned a median wage of \$37,540 a year. Over the 10-year period between 2020 and 2030, pest control employment is projected to grow about 10 percent, which is close to the average projected growth of other occupations.¹⁰

Pursuant to federal law, each state regulates pesticide applicators. Licensure requirements vary by state, but most states require pesticide applicators to be trained and pass an examination.¹¹ Typically, state regulation of pesticide applicators is vested in the state's department of agriculture, but in some states, it is vested in an environmental agency or in another state agency.

⁷ U.S. Bureau of Labor Statistics. *Occupational Outlook Handbook: Pest Control Workers*. Retrieved on June 24, 2022, from www.bls.gov/ooh/building-and-grounds-cleaning/pest-control-workers.htm#

⁸ U.S. Bureau of Labor Statistics. *Occupational Outlook Handbook: Pest Control Workers*. Retrieved on June 24, 2022, from www.bls.gov/ooh/building-and-grounds-cleaning/pest-control-workers.htm#

⁹ U.S. Bureau of Labor Statistics. *Occupational Outlook Handbook: Pest Control Workers*. Retrieved on June 24, 2022, from www.bls.gov/ooh/building-and-grounds-cleaning/pest-control-workers.htm#

¹⁰ U.S. Bureau of Labor Statistics. *Occupational Outlook Handbook: Pest Control Workers*. Retrieved on June 24, 2022, from www.bls.gov/ooh/building-and-grounds-cleaning/pest-control-workers.htm#

¹¹ U.S. Bureau of Labor Statistics. *Occupational Outlook Handbook: Pest Control Workers*. Retrieved on June 24, 2022, from www.bls.gov/ooh/building-and-grounds-cleaning/pest-control-workers.htm#

Legal Framework

History of Regulation

In a sunset review, the Colorado Office of Policy, Research and Regulatory Reform (COPRRR) is guided by the sunset criteria located in section 24-34-104(6)(b), Colorado Revised Statutes (C.R.S.). The first sunset criterion questions whether regulation by the agency is necessary to protect the public health, safety, and welfare; whether the conditions which led to the initial regulation have changed; and whether other conditions have arisen that would warrant more, less or the same degree of regulation.

One way that COPRRR addresses this is by examining why the program was established and how it has evolved over time.

The Colorado General Assembly first regulated commercial pesticide applicators in 1953. Initial regulations required any person who was applying pesticides for hire by aircraft to obtain a license. Applicants were required to pass an examination and have surety in place. Since then, the statutes have been revised many times.

In 1967, three types of pesticide applicators were established: aerial agricultural applicators, ground agricultural applicators and commercial applicators. The General Assembly also repealed the surety bond requirement and mandated minimum liability insurance coverage of \$25,000 per person, \$50,000 per accident for bodily injury and \$5,000 for property damage.

In 1971, the General Assembly passed the Structural Pest Control Act. This law required any person preventing, controlling or eradicating pests in household structures, commercial buildings or other structures to be licensed. Along with the examination and liability insurance requirements, applicants were required to have either two years of experience in structural pest control or hold a college degree with a major in entomology, sanitary or public health engineering or related subjects.

In 1983, the Structural Pest Control Act was repealed, and the Pesticide Applicators' Act (Act) was adopted. The Act covered all commercial pesticide applicators including those who worked in the agricultural and structural settings. The Act incorporated the U.S. Environmental Protection Agency (EPA) requirements, including those in the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). The Act required the Colorado Commissioner of Agriculture (Commissioner) to certify commercial applicators that use, or supervise the use of, restricted use¹² pesticides.

¹² Restricted use: A classification for pesticides that are hazardous to human health or the environment and may only be used by certified pesticide applicators or under the supervision of a certified pesticide applicator.

Following a sunset review in 1989, the Act was amended to:

- Require training and passage of an examination for qualified supervisors and certified operators;
- Require applicators to provide training to their technicians;
- Require turf, ornamental and aquatic applicators to post signs identifying the applicator and the pesticide, when applying pesticides; and
- Create a registry of pesticide-sensitive persons (Registry).

In 1996, the General Assembly amended the Act to create a uniform, statewide system for the regulation of pesticide applicators.

In 2006, following a sunset review, the General Assembly adopted several recommended changes to the Act. The most important of these involved the use of the Registry and the authority to license and regulate private applicators.

In 2015, the Act was amended again following another sunset review. The most significant change concerned an increase in the number of advisory committee members from 11 to 15, including:

- An additional representative from Colorado Department of Public Health and Environment (CDPHE),
- A member of a state or national apiary or beekeeper association,
- A farm worker, and
- An organic farmer.

Finally, the sunset bill required limited commercial applicators¹³ and employees of public applicators¹⁴ to obtain training prior to applying general use pesticides.

Legal Summary

The second and third sunset criteria question

Whether the existing statutes and regulations establish the least restrictive form of regulation consistent with the public interest, considering other available regulatory mechanisms, and whether agency rules enhance the public interest and are within the scope of legislative intent; and

Whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes, rules, procedures and practices and any other circumstances, including budgetary, resource and personnel matters.

¹³ Limited commercial applicator: A business, which does not produce agricultural commodities, that applies pesticides in or on property owned or leased by the business.

¹⁴ Public applicator: A state or local government agency or political subdivision that applies pesticides.

A summary of the current statutes and rules is necessary to understand whether regulation is set at the appropriate level and whether the current laws are impeding or enhancing the agency's ability to operate in the public interest.

Federal Law

FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT

FIFRA is the federal law that controls the regulation, sale, distribution and use of pesticides. FIFRA authorizes the EPA to review and register pesticides and designate them for specified uses.

According to FIFRA, all pesticides sold or distributed in the United States must be registered with the EPA.¹⁵ To register a pesticide with the EPA, a pesticide company must submit an application that, among other things:¹⁶

- Identifies and quantifies all the chemicals in the product;
- Includes data on the potential risks to human health and the environment;
- Demonstrates that a reliable manufacturing process is in place; and
- Provides a label that addresses the pesticide's contents, directions for use and suitable warnings.

When an application for pesticide registration is received, the EPA reviews the application and conducts a scientific review that considers the human health and environmental risks associated with the pesticide. Following this, scientific experts conduct a peer review of the human health and environmental risk assessments. Prior to granting registration, the EPA considers the health and environmental risk assessments and the peer review, along with other research and any measures that are necessary to mitigate the identified risks.¹⁷

The EPA defines pesticides as either restricted use or general use pesticides. The general public cannot purchase restricted use pesticides since they may be hazardous to the environment and anyone exposed to them.¹⁸ Under FIFRA, the EPA requires anyone who works with restricted use pesticides, or supervises someone who does, to obtain certification. The EPA sets the minimum standards of competency for pesticide applicators and requires pesticide applicators to be certified in each state where they apply pesticides,¹⁹ and the Act satisfies these requirements.

¹⁵ U.S. Environmental Protection Agency. *About Pesticide Registration*. Retrieved July 7, 2022, from www.epa.gov/pesticide-registration/about-pesticide-registration

¹⁶ U.S. Environmental Protection Agency. *About Pesticide Registration*. Retrieved July 7, 2022, from www.epa.gov/pesticide-registration/about-pesticide-registration

¹⁷ U.S. Environmental Protection Agency. *About Pesticide Registration*. Retrieved July 7, 2022, from www.epa.gov/pesticide-registration/about-pesticide-registration

¹⁸ U.S. Environmental Protection Agency. *Restricted Use Products (RUP) Report*. Retrieved September 22, 2022, from www.epa.gov/pesticide-worker-safety/restricted-use-products-rup-report

¹⁹ U.S. Environmental Protection Agency. *How to Get Certified as a Pesticide Applicator*. Retrieved November 15, 2021, from www.epa.gov/pesticide-worker-safety/how-get-certified-pesticide-applicator

The EPA approves all pesticide label language, which must instruct pesticide applicators about how to effectively use the product and how to minimize any human health and environmental risks. Using a pesticide in a way that is inconsistent with the directions on the label is a violation of federal law.²⁰

WORKER PROTECTION STANDARD

Under the authority of FIFRA, the EPA established the Worker Protection Standard, a regulation that outlines occupational safety requirements to protect agricultural workers and pesticide handlers from illness or injury caused by exposure to pesticides.²¹

Employers are generally responsible for complying with the Worker Protection Standard, and they are required to provide, among other things:²²

- Annual safety training,
- Access to pesticide safety information during normal working hours,
- Decontamination supplies, and
- Emergency assistance in case of a pesticide-related injury or illness.

Employers are also required to provide oral warnings and post warning signs to notify workers about applications that are being done and areas that have been treated and to restrict entry to the agricultural fields when appropriate.²³

Finally, the Worker Protection Standard requires employers to:²⁴

- Provide Personal Protective Equipment,
- Take steps to make sure equipment is safe,
- Monitor pesticide handlers,
- Provide specific instructions to pesticide handlers, and
- Provide pesticide handlers with access to pesticide label information.

²⁰ U.S. Environmental Protection Agency. *About Pesticide Registration*. Retrieved July 7, 2022, from www.epa.gov/pesticide-registration/about-pesticide-registration

²¹ U.S. Environmental Protection Agency. *Agricultural Worker Protection Standard (WPS)*. Retrieved March 22, 2022, from www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps

²² U.S. Environmental Protection Agency. *Agricultural Worker Protection Standard (WPS)*. Retrieved March 22, 2022, from www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps

²³ U.S. Environmental Protection Agency. *Agricultural Worker Protection Standard (WPS)*. Retrieved March 22, 2022, from www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps

²⁴ U.S. Environmental Protection Agency. *Agricultural Worker Protection Standard (WPS)*. Retrieved March 22, 2022, from www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps

State Law

The Act, located in Article 10 of Title 35, Colorado Revised Statutes (C.R.S.), governs the use or supervision of pesticides or devices used to control pests,²⁵ and the Commissioner is charged with administering and enforcing the Act, which includes rulemaking authority.²⁶

The Act defines a pesticide as any substance or mixture that prevents, destroys, repels or mitigates pests, or that is used as a plant regulator, defoliant or desiccant.²⁷ A pest may be an insect, rodent, nematode, fungus, weed, plant, animal, virus, bacteria or other microorganism designated as a pest by the EPA or the Commissioner.²⁸

The Act distinguishes between restricted use and general use pesticides.²⁹ The Commissioner may also classify certain pesticides as limited use, but under the Act, limited-use pesticides are referred to as restricted use.³⁰

In addition to the Act, the Commissioner is also charged with administering and enforcing the Pesticide Act, located in Article 9 of Title 35, C.R.S., which governs the refilling, registration, labeling, transportation, distribution, storage, use and disposal of pesticides and specific pesticide devices in Colorado. The Pesticide Act, however, is not the subject of this report.

PESTICIDE APPLICATOR ENTITIES

Pesticide applicators may be entities or individuals, and the Act recognizes several types of pesticide applicator entities:

- Commercial applicators,
- Limited commercial applicators, and
- Public applicators.

A commercial applicator is a business that offers pesticide application services or equipment for hire.³¹

A commercial applicator must obtain a license from the Commissioner, and a commercial applicator is limited to the class or subclass of pesticide application that the commercial applicator's qualified supervisor is licensed to use.³²

²⁵ § 35-10-104, C.R.S.

²⁶ §§ 35-10-118(1) and (2), C.R.S.

²⁷ § 35-10-103(10), C.R.S.

²⁸ § 35-10-103(9), C.R.S.

²⁹ §§ 35-10-103(7) and (14), C.R.S.

³⁰ § 35-10-103(14), C.R.S.

³¹ § 35-10-103(2), C.R.S.

³² § 35-10-105, C.R.S.

To obtain a commercial applicator license, an applicant must:³³

- Maintain liability insurance coverage of at least \$400,000,
- Hire or contract with a qualified supervisor,
- Provide training to all technicians, and
- Identify pesticide equipment used.

If a commercial applicator uses aircraft to spray pesticides, a Federal Aviation Administration (FAA) certificate is required.³⁴

A limited commercial applicator is a business that applies pesticides on property owned or leased by the business,³⁵ and a public applicator is a state or local government agency or political subdivision that applies pesticides.³⁶

Limited commercial and public applicators are not required to obtain a license from the Commissioner; however, if they use restricted use pesticides, they must register with the Commissioner, and they may voluntarily register even if they do not use restricted use pesticides.³⁷

Licensed commercial applicators and registered entities must employ or contract with a qualified supervisor. The qualified supervisor may supervise up to 15 technicians, of which no more than eight may be unlicensed technicians.³⁸

Anyone working for a public applicator must be trained to apply general use pesticides.³⁹ Similarly, the owner of a limited commercial applicator, or their designee, must complete training in the core elements of pesticide use.⁴⁰ Both public applicators and limited commercial applicators must maintain training records consistent with the requirements established by the Commissioner in rule.⁴¹

INDIVIDUAL PESTICIDE APPLICATORS

In addition to pesticide applicator entities, the Act also recognizes several types of individual pesticide applicators:

- Certified operators,
- Private applicators,
- Qualified supervisors, and
- Technicians.

³³ § 35-10-106(1), C.R.S.

³⁴ § 35-10-106(1)(e), C.R.S.

³⁵ § 35-10-103(8), C.R.S.

³⁶ § 35-10-103(12), C.R.S.

³⁷ § 35-10-109(1), C.R.S.

³⁸ 8 CCR §§ 1203-2 2.12 and 2.30, Rules and Regulations Pertaining to the Administration and Enforcement of the Pesticide Applicators' Act.

³⁹ § 35-10-109(2)(a), C.R.S.

⁴⁰ § 35-10-109(2)(b), C.R.S.

⁴¹ §§ 35-10-109(2)(a) and (b), C.R.S.

Certified operators may apply restricted use pesticides for commercial applicators, registered limited commercial applicators or registered public applicators, and they do not require on-site supervision by a qualified supervisor.⁴²

Private applicators may use and supervise the use of pesticides, both general use and restricted use, for cultivating agricultural commodities on property owned or leased by the applicator or the applicator's employer.⁴³ Private applicators are only required to obtain a license if they are applying restricted use pesticides.⁴⁴

Qualified supervisors may supervise other pesticide applicators and may perform any of the following functions without supervision:⁴⁵

- Pest control evaluation,
- Restricted use pesticide or device recommendation,
- Pesticide mixing and loading,
- Pesticide use,
- Pesticide application sales, and
- Pesticide device operation.

Certified operators and qualified supervisors must be licensed by the Commissioner.⁴⁶

Private applicators must also be licensed by the Commissioner, but only if they are using restricted use products. A licensed private applicator may supervise an unlicensed private applicator who is applying restricted use pesticides for agricultural purposes.⁴⁷

Technicians may handle general use and restricted use pesticides and devices under the supervision of a qualified supervisor. However, technicians may only apply restricted use pesticides with on-site supervision of a qualified supervisor.⁴⁸

Technicians must also be supervised by a qualified supervisor if performing any of the following functions:⁴⁹

- Pest control evaluation,
- Restricted use pesticide or device recommendation, and
- Pesticide application sales.

The Commissioner has established specific training requirements for technicians and classifies technicians depending on their level of experience and their job duties, such as sales; flagging sites; or mixing, loading and applying pesticides.⁵⁰

⁴² § 35-10-103(1), C.R.S.

⁴³ § 35-10-103(11.5), C.R.S.

⁴⁴ § 35-10-114.5, C.R.S.

⁴⁵ § 35-110-103(13), C.R.S.

⁴⁶ § 35-10-113, 35-10-114, C.R.S.

⁴⁷ § 35-10-114.5, C.R.S.

⁴⁸ §§ 35-10-103(15)(a)(I) and (II), C.R.S.

⁴⁹ § 35-10-103(15)(a)(III), C.R.S.

⁵⁰ 8 CCR § 1203-2 5.01, Rules and Regulations Pertaining to the Administration and Enforcement of the Pesticide Applicators' Act.

The amount of initial and ongoing training a technician must receive depends upon their level of experience, their job duties and the type of pesticide application being performed: agricultural, turf, ornamental, turf and ornamental, or structural. Training is generally a mix of classroom education and on-the-job training. The amount of initial training required for technicians ranges between 36 and 160 hours, and the amount of ongoing training required for technicians ranges between 4 and 12 hours a year.⁵¹

To be licensed as a qualified supervisor, certified operator or private applicator, an applicant must pass a written examination in each pesticide application class, subclass or device use sought. An applicant must also complete any experience or other requirements established by the Commissioner, and if an applicant is seeking to apply pesticides by aircraft, they must hold an FAA certificate.⁵²

The Commissioner may renew licenses without additional examination as long as the licensee has completed the continuing education requirements established by the Commissioner.⁵³

The Commissioner requires qualified supervisors and certified operators to complete the following continuing education credits prior to renewal:⁵⁴

- Two credits related to pesticide laws;
- One credit related to pesticides and their families;
- One credit related to applicator safety;
- One credit related to public safety;
- One credit related to environmental protection;
- One credit related to pesticide use;
- Two credits related to each of the categories in which an applicator is licensed, such as Residential and Commercial Pest Control, Turf Pest Control or Ornamental Pest Control; and
- One credit related to any other pest management category in which an applicator is licensed.

The Commissioner requires private applicators to complete the following continuing education credits prior to renewal:⁵⁵

- Two credits related to pesticide laws,
- One credit related to pesticides and their families,
- One credit related to applicator safety,

⁵¹ 8 CCR §§ 1203-2, Part 5, Rules and Regulations Pertaining to the Administration and Enforcement of the Pesticide Applicators' Act.

⁵² § 35-10-115(1), C.R.S.

⁵³ § 35-10-116(2), C.R.S.

⁵⁴ 8 CCR § 1203-2 4.01, Rules and Regulations Pertaining to the Administration and Enforcement of the Pesticide Applicators' Act.

⁵⁵ 8 CCR § 1203-2 4.06, Rules and Regulations Pertaining to the Administration and Enforcement of the Pesticide Applicators' Act.

-
- One credit related to public safety,
 - One credit related to environmental protection, and
 - One credit related to pesticide use.

All continuing education courses must be approved by the Commissioner.⁵⁶ For a continuing education course to be approved, it must be submitted on a form required by the Commissioner at least 30 days prior to the date of the course, and the form must detail:⁵⁷

- The agenda,
- The length of each session,
- A synopsis of the topics, and
- The identity of each speaker.

The Commissioner may require the course sponsor to submit each speaker's credentials.⁵⁸

A grace period of 30 days after the expiration of a license is allowed for renewal applications.⁵⁹ However, after this time period, an applicant must submit an application for reinstatement.⁶⁰ After 180 days, an applicant must submit an application for a new license,⁶¹ which requires retesting.

An individual who is a licensed pesticide applicator in another jurisdiction may apply for a license without passing an examination as long as their license is in good standing. When their license expires in the other jurisdiction, they must either renew their license in the other jurisdiction and reapply in Colorado, or they may apply for a license in Colorado only and satisfy all the requirements for licensure in Colorado, including passing any applicable examinations.⁶²

RECORDKEEPING

Licensed and registered pesticide applicator entities must maintain records of pesticide applications for at least three years. Private applicators are only required to maintain records of pesticide applications for two years.⁶³

⁵⁶ 8 CCR § 1203-2 4.02(a), Rules and Regulations Pertaining to the Administration and Enforcement of the Pesticide Applicators' Act.

⁵⁷ 8 CCR § 1203-2 4.02, Rules and Regulations Pertaining to the Administration and Enforcement of the Pesticide Applicators' Act.

⁵⁸ 8 CCR 1203-2 § 4.02(d)(2), Rules and Regulations Pertaining to the Administration and Enforcement of the Pesticide Applicators' Act.

⁵⁹ § 35-10-116(5), C.R.S.

⁶⁰ § 35-10-116(6), C.R.S.

⁶¹ § 35-10-116(7), C.R.S.

⁶² 8 CCR §§ 1203-2 2.48 and 2.59, Rules and Regulations Pertaining to the Administration and Enforcement of the Pesticide Applicators' Act.

⁶³ § 35-10-111(1), C.R.S.

Pesticide applicators are required to maintain technician training records and provide them to the Commissioner when requested.⁶⁴

REGISTRY OF PESTICIDE-SENSITIVE PERSONS & PUBLIC NOTICE

People who are sensitive to pesticides may register for notification of pesticide application. In order to be placed on the Registry, an individual must provide evidence of sensitivity to pesticides from a licensed physician. The Commissioner must make the Registry available to commercial applicators, registered limited commercial applicators and registered public applicators.⁶⁵

Before applying pesticides in any turf or ornamental category, pesticide applicators must provide notice of the date and time of application to anyone on the Registry who:⁶⁶

- Lives on the property,
- Lives on an abutting property, and
- Lives in a multi-unit dwelling that abuts a common area being treated.

An abutting property includes property that is divided by an alley but does not include property divided by a road.⁶⁷

Similarly, any licensed commercial, registered limited commercial or registered public applicator who is applying pesticides to a multi-unit dwelling must provide notification to anyone on the Registry who lives at that address prior to a structural application.⁶⁸

Licensed commercial, registered limited commercial or registered public applicators must also provide notification of pesticide application in any turf or ornamental category, by posting a sign or signs for the public at any clearly visible entrance or entrances to the property at the time of application.⁶⁹

Public notification consistent with Commissioner rules is also required for the application of aquatic pesticides.⁷⁰

No additional notification requirements on commercial applicators may be established by local jurisdictions beyond those required by the Act and Commissioner rules; however, local jurisdictions may establish notification requirements on private individuals, property owners and the general public.⁷¹

⁶⁴ 8 CCR § 1203-2 5.02(m), Rules and Regulations Pertaining to the Administration and Enforcement of the Pesticide Applicators' Act.

⁶⁵ § 35-10-112(1)(a), C.R.S.

⁶⁶ § 35-10-112(1)(c)(I), C.R.S.

⁶⁷ § 35-10-112(1)(c)(II), C.R.S.

⁶⁸ § 35-10-112(1)(d), C.R.S.

⁶⁹ § 35-10-112(2)(a), C.R.S.

⁷⁰ § 35-10-112(2)(b), C.R.S.

⁷¹ § 35-10-112(3), C.R.S.

UNIFORM REGULATION OF PESTICIDES

With some exceptions, the Act prohibits local jurisdictions from adopting regulations for the use of pesticides by anyone regulated under the Act concerning:⁷²

- The use and application of pesticides;
- Labeling or registration requirements;
- Any warnings and precautionary statements, notification or statement of practical treatment; or
- Licensure, training or certification requirements for anyone regulated under the Act.

A local government does, however, have the authority to regulate the use of pesticides on its own property⁷³ and establish:⁷⁴

- Zoning ordinances for pesticide sales and storage,
- Pesticide or pesticide container disposal sites,
- Building and fire codes,
- Pesticide transportation regulations that align with federal and state law, and
- Drinking water regulations that align with federal and state law.

Section 31-15-707(1)(b), C.R.S., grants to the governing body of each municipality the power to:

construct or authorize the construction of such waterworks without their limits and, for the purpose of maintaining and protecting the same from injury and the water from pollution, their jurisdiction shall extend over the territory occupied by such works and all reservoirs, streams, trenches, pipes, and drains used in and necessary for the construction, maintenance, and operation of the same and over the stream or source from which the water is taken for five miles above the point from which it is taken and to enact all ordinances and regulations necessary to carry the power conferred in this paragraph (b) into effect[.]

If a local government adopts any ordinance concerning pesticides pursuant to section 31-15-707(1)(b), C.R.S., or pursuant to any exceptions authorized by the Act, it must file a certified copy of the ordinance and a map or legal description of the area covered by the ordinance with the Commissioner.⁷⁵

⁷² § 35-10-112.5(2), C.R.S.

⁷³ § 35-10-112.5(3)(a)(III), C.R.S.

⁷⁴ § 35-10-112.5(3)(a)(I), C.R.S.

⁷⁵ § 35-10-112.5(4), C.R.S.

POWERS AND DUTIES OF THE COMMISSIONER

The Act grants the Commissioner the authority to adopt rules that are necessary to administer and enforce the Act. Specifically, the Commissioner is granted the authority to adopt rules related to:⁷⁶

- Pesticide application,
- Qualifications and standards of practice,
- Examination content,
- Licensing, and
- Grounds for discipline.

The Commissioner is charged with adopting rules to establish which pesticide devices pose a significant risk to public health or safety and to require a license to operate them.⁷⁷

As long as the Commissioner's rules do not contradict the Act, the Pesticide Act, or any other state law, the Commissioner may also adopt rules necessary to comply with FIFRA.⁷⁸

UNLAWFUL ACTS

The Act delineates several actions that are unlawful. Generally, unlawful actions include:⁷⁹

- Acting without a license;
- Failure to comply with the Act, the Commissioner's rules or federal law; or
- Engaging in fraudulent activities.

Acting without a license and violations related to fraud are also considered deceptive trade practices and may be enforced under the Colorado Consumer Protection Act.⁸⁰

Unless otherwise provided for by law, no regulated entity or individual may use any regulated device or use, store or dispose of pesticides, pesticide containers, rinsates or other related materials, inconsistent with label directions or requirements or in an unsafe, negligent or fraudulent manner.⁸¹ Nor may they use, or recommend the use of, any regulated device or pesticide that is not registered with the Commissioner pursuant to the Pesticide Act or in any manner that is inconsistent with the Commissioner's rules.⁸²

⁷⁶ § 35-10-118(2), C.R.S.

⁷⁷ § 35-10-118(9.5), C.R.S.

⁷⁸ § 35-10-118(9), C.R.S.

⁷⁹ § 35-10-117(1), C.R.S.

⁸⁰ § 35-10-117(6), C.R.S.

⁸¹ § 35-10-117(2)(a), C.R.S.

⁸² §§ 35-10-117(2)(b) and (2)(b.5), C.R.S.

The Act also specifically prohibits a commercial applicator, qualified supervisor or certified operator from supervising or recommending the use of a device or pesticide that, according to generally accepted standards of practice, would be ineffective or inappropriate.⁸³

It is prohibited to apply a pesticide or use a device without maintaining insurance required under the Act and filing verification of insurance with the Commissioner. It is also a violation of the Act to fail to provide a customer with information required under the Act or the Commissioner's rules.⁸⁴

DISCIPLINARY AUTHORITY

The Commissioner has the authority to deny, suspend, refuse to renew, revoke a license or registration if an applicant, registrant or licensee has committed any acts that are grounds for discipline. The Commissioner may also issue a letter of admonition, impose discipline through a stipulation, impose probation or restrict a registration or license.⁸⁵

The grounds for discipline include:⁸⁶

- Refusing or failing to comply with the Act, the Commissioner's rules or an order of the Commissioner;
- Being convicted of a felony connected to the regulation of pesticide application;
- Having a pesticide applicator license or registration revoked by any jurisdiction;
- Violating FIFRA;
- Refusing to provide information to the Commissioner related to methods, materials and work performed; and
- Falsifying information requested by the Commissioner.

Any disciplinary action taken in another jurisdiction for conduct that would be considered grounds for discipline in Colorado may be considered *prima facie* evidence by the Commissioner.⁸⁷

If a license or registration is revoked by the Commissioner, the licensee or registrant must wait two years before applying for a new license or registration.⁸⁸

Disciplinary actions may be appealed to the Court of Appeals.⁸⁹

⁸³ § 35-10-117(3)(b), C.R.S.

⁸⁴ § 35-10-117(4), C.R.S.

⁸⁵ § 35-10-121(1), C.R.S.

⁸⁶ § 35-10-121(1), C.R.S.

⁸⁷ § 35-10-121(2), C.R.S.

⁸⁸ § 35-10-121(3), C.R.S.

⁸⁹ § 35-10-121(4), C.R.S.

ENFORCEMENT AUTHORITY

The Commissioner is charged with:⁹⁰

- Inspecting and analyzing pesticides,
- Inspecting pesticide equipment or devices that require a license, and
- Inspecting apparatus used to apply pesticides.

The Commissioner has the authority to conduct investigations,⁹¹ administer oaths, take statements and issue subpoenas.⁹² With consent or by securing an administrative warrant, the Commissioner also has the authority to access places where pesticides and pesticide devices that require a license are being used, stored, handled, processed or transported and to any records that are required to be maintained according to the Act or Commissioner rules.⁹³

With some exceptions, any complaints filed with the Commissioner and the results of an investigation may be closed to the public.⁹⁴

The Commissioner has the authority to issue cease and desist orders in case immediate enforcement is necessary and a violation may have taken place,⁹⁵ and the Commissioner may also seek a restraining order or an injunction.⁹⁶

The Commissioner or a court may assess a civil penalty of up to \$1,000 per violation. If a violation is repeated, the civil penalty may be doubled.⁹⁷

It is considered a class 2 misdemeanor, punishable by up to 364 days imprisonment and a fine of up to \$1,000,⁹⁸ if certain violations of the Act are repeated more than once.⁹⁹

Fees and civil fines are directed to the Plant Health, Pest Control and Environmental Protection Cash Fund established in section 35-1-106.3, C.R.S.¹⁰⁰

ADVISORY COMMITTEE

The Act establishes a 15-member advisory committee, which is tasked with advising the Commissioner on pesticide use and rulemaking matters related to both the Act and the Pesticide Act.¹⁰¹

⁹⁰ § 35-10-119(1), C.R.S.

⁹¹ § 35-10-119(2), C.R.S.

⁹² § 35-10-119(5), C.R.S.

⁹³ § 35-10-119(4), C.R.S.

⁹⁴ § 35-10-119(3), C.R.S.

⁹⁵ § 35-10-120(2), C.R.S.

⁹⁶ § 35-10-120(3), C.R.S.

⁹⁷ § 35-10-122(1), C.R.S.

⁹⁸ § 18-1.3-501(1)(a.5), C.R.S.

⁹⁹ §§ 35-10-123(1), (2) and (3), C.R.S.

¹⁰⁰ § 35-10-126, C.R.S.

¹⁰¹ §§ 35-9-127 and 35-10-125(1), C.R.S.

The members of the Pesticide Advisory Committee (Advisory Committee) include:¹⁰²

- A formulator, or a representative, who is actively engaged in pesticide sales in Colorado;
- A licensed agricultural commercial applicator;
- A licensed turf or ornamental commercial applicator;
- A licensed structural commercial applicator;
- A qualified supervisor who is employed by a limited commercial applicator;
- Two representatives of registered public applicators, who must be elected officials or their designees;
- A representative from the agricultural experiment station or extension at Colorado State University;
- Two representatives from the CDPHE;
- Two public members, one who is actively engaged in urban farming;
- A member of a state or national apiary or beekeeper association;
- An agricultural worker; and
- An organic farmer.

Members of the Advisory Committee are appointed by the Colorado Agricultural Commission (Agricultural Commission).¹⁰³ All members of the Advisory Committee, with one exception, must be Colorado residents. The one seat that does not require a Colorado resident is set aside for a pesticide formulator, or their representative, who is actively engaged in the sale of pesticides in Colorado.¹⁰⁴

The members of the Advisory Committee serve three-year terms but are not otherwise subject to term limits.¹⁰⁵ That said, the Agricultural Commission has established a policy that limits all boards and committees appointed by the Agricultural Commission in the Department of Agriculture to nine years. Based on this policy, Advisory Committee members may serve three consecutive terms.

Members are not paid per diem, but they may be reimbursed for travel expenses.¹⁰⁶

¹⁰² § 35-10-125(2), C.R.S.

¹⁰³ § 35-10-125(1), C.R.S.

¹⁰⁴ § 35-10-125(3), C.R.S.

¹⁰⁵ § 35-10-125(4), C.R.S.

¹⁰⁶ § 35-10-125(5), C.R.S.

Program Description and Administration

In a sunset review, the Colorado Office of Policy, Research and Regulatory Reform (COPRRR) is guided by sunset criteria located in section 24-34-104(6)(b), Colorado Revised Statutes (C.R.S.). The third, fourth and fifth sunset criteria question:

Whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes, rules, procedures practices and any other circumstances, including budgetary, resource and personnel matters;

Whether an analysis of agency operations indicates that the agency performs its statutory duties efficiently and effectively; and

Whether the composition of the agency's board or commission adequately represents the public interest and whether the agency encourages public participation in its decisions rather than participation only by the people it regulates.

In part, COPRRR utilizes this section of the report to evaluate the agency according to these criteria.

The Commissioner of Agriculture (Commissioner) in the Department of Agriculture (Department) is entrusted with regulating all aspects of pesticide application. The program was created to protect the public from the adverse effects of pesticides resulting from unsafe and incorrect pesticide use. The regulation of pesticide use is federally required and overseen by the U.S. Environmental Protection Agency (EPA).

A 15-member advisory committee is tasked with advising the Commissioner on agricultural, human health, environmental, wildlife, worker safety and other matters related to the use of pesticides and to assist the Commissioner with rulemaking. Members are appointed by the Colorado Agricultural Commission.

The membership of the Pesticide Advisory Committee (Advisory Committee) includes several representatives from the pesticide and agricultural industries, including pesticide applicators, and two representatives from the Department of Public Health and Environment, a representative from Colorado State University and a representative from an apiary or beekeeper association. The membership also includes two public member seats, one of which is set aside for someone engaged in urban farming.

The Advisory Committee meets quarterly at the Department of Agriculture in Broomfield. During the COVID-19 pandemic, the Advisory Committee held virtual meetings, and later, meetings were a hybrid of virtual and in-person meetings.

The pesticide applicator program is partially cash funded by examination fees, license fees and civil penalties. The EPA also provides annual federal grant money to support

certification and enforcement related to pesticide use. EPA funding is based on annual certification and enforcement work plan requirements and reporting, and the EPA conducts annual reviews to verify that the Department is meeting its annual obligations.

In addition to the Plant Health, Pest Control and Environmental Protection Cash Fund (Cash Fund) and the EPA grant funding, the Marijuana Tax Fund covers the cost of six inspectors and three enforcement specialist positions.

Table 2 illustrates the program expenditures by funding source and full-time equivalent (FTE) employees allocated to the program over a five-year period.

Table 2
Program Expenditures and Staffing

Fiscal Year	Cash Fund	Marijuana Tax Fund	Federal Funds	FTE
16-17	\$1,486,015	\$2,290,051	\$420,000	25.2
17-18	\$1,547,430	\$1,424,508	\$420,000	25.2
18-19	\$888,949	\$1,434,129	\$505,857	25.2
19-20	\$1,217,532	\$1,445,869	\$505,857	25.2
20-21	\$1,243,151	\$1,246,035	\$565,061	25.2

The higher Cash Fund expenditures in fiscal year 16-17 and 17-18 are attributed to enforcement of the marijuana industry. Prior to this, the Commissioner was not regulating pesticide use in marijuana production. Also, in fiscal year 18-19, several FTE resigned and the positions were not immediately filled, which temporarily reduced the Cash Fund expenditures. The increase in federal funding in fiscal year 18-19 also helped to reduce the Cash Fund expenditures.

While the Marijuana Tax Fund covers the cost of additional staff dedicated to regulating pesticide use in marijuana production, in fiscal year 16-17, the first year this funding was provided, the Marijuana Tax Fund also provided \$845,000 to pay for new laboratory equipment that was needed to analyze cannabis pesticide residue.

The federal funding has been consistently set at \$420,000. However, the EPA makes additional grant funds available to states for other enforcement activities, staff training, lab equipment and other program improvements, and the pesticide applicator program applied for and received additional grant funds from the EPA in fiscal years 18-19, 19-20 and 20-21.

The FTE reported in Table 2 represent the staffing allocated to the program. For a number of reasons, the program was unable to fill all of the positions allocated to it until fiscal year 21-22. Currently, however, the program is fully staffed.

In fiscal year 21-22, 25.2 FTE were dedicated to the program, including the following staff members who were funded by the Plant Health, Pest Control and Environmental Protection Cash Fund and the federal grant:

- **Pesticides Section Chief** (Program Management II, 0.6 FTE), who oversees and supervises program staff, and is responsible for policy, rules, legislation, grants and federal and state reporting;
- **Program Managers** (Administrator V, 2.0 FTE), who oversee and supervise the administration of certification and enforcement program processes;
- **Administrative Assistants III** (3.0 FTE), who administer examinations and license individuals and entities;
- **Enforcement Staff** (Compliance Specialists III & IV, 2.0 FTE), who compile non-cannabis pesticide complaint cases and issue final enforcement actions;
- **Inspectors** (Compliance Specialists III, 6.0 FTE), who conduct compliance assistance inspections on commercial applicator businesses and licensed private applicators, conduct investigations, enforce the Worker Protection Standard and conduct records inspections; and
- **Lab Technician II** (1.6 FTE), who process and report pesticide sample residue analysis.

The following staff were funded by the Marijuana Tax Fund:

- **Lab Technician II** (1.0 FTE), who processes and reports cannabis pesticide sample residue analysis;
- **Enforcement Staff** (Marijuana Tax Fund Compliance Specialists III, 3.0 FTE), who compile cannabis complaint investigation cases and issue final enforcement actions; and
- **Inspectors** (Marijuana Tax Fund Compliance Specialists III, 6.0 FTE), who conduct compliance assistance inspections on the regulated cannabis community, conduct inspections, enforce the Worker Protection Standard and investigate complaints.

Licensing & Registration

The eighth sunset criterion questions whether the scope of practice of the regulated occupation contributes to the optimum utilization of personnel and whether entry requirements encourage affirmative action.

In part, COPRRR utilizes this section of the report to evaluate the program according to this criterion.

The Commissioner licenses and registers pesticide applicators, which may be entities or individuals.

The Pesticide Applicators' Act (Act), located in Article 10 of Title 35, Colorado Revised Statutes (C.R.S.), recognizes several types of pesticide applicator entities:

- Commercial applicators,
- Limited commercial applicators, and
- Public applicators.

While commercial applicators must be licensed by the Commissioner, registration of limited commercial applicators and public applicators is only required if they are using restricted use pesticides.

To obtain a commercial applicator license, an applicant must submit:

- A signed, complete and accurate application on a form required by the Commissioner;
- Designate a qualified supervisor whose license is in good standing;
- A Certificate of Good Standing from the Secretary of State if a corporation or other entity required to register with the Secretary of State; and
- Evidence of liability insurance.

A commercial applicator license is required for each business location.

To register with the Commissioner, a limited commercial or public applicator must:

- Submit an application,
- Designate a qualified supervisor whose license is in good standing, and
- Submit a Certificate of Good Standing from the Secretary of State if a corporation or another business entity required to register with the Secretary of State.

Commercial applicators and registered limited commercial applicators are both required to employ or contract with a qualified supervisor who is licensed in the class of pesticide application performed by the business.

The license fees for entities are:

- Commercial applicators \$350,
- Limited commercial applicators \$50, and
- Public applicators \$50.

In addition to pesticide applicator entities, the Act also recognizes several types of individual pesticide applicators:

- Certified operators, who may be employed by a commercial business or a public applicator to use restricted use pesticides under the supervision of a qualified supervisor;
- Qualified supervisors, who are employed by a commercial business or public applicator to, without supervision, evaluate pest problems, recommend pest controls using pesticides or devices, mix, load or apply any pesticide, sell any application services, operate devices or supervise others performing these activities;
- Private applicators, who use or supervise the use of restricted use pesticides for the purpose of producing an agricultural commodity, such as fruits, vegetables or marijuana; and
- Technicians, who may handle general use and restricted use pesticides and devices under the supervision of a qualified supervisor and may only apply restricted use pesticides with on-site supervision.

Certified operators, qualified supervisors and private applicators must be licensed by the Commissioner. Technicians are not licensed or registered, but their employer must provide them with any initial and ongoing training established by the Commissioner.

To be licensed as a certified operator or a qualified supervisor, an applicant must submit an application on a form approved by the Commissioner and pass a General Core examination and an examination in any category of pest management in which the applicant will be working.

The pest management categories are:

- Agricultural Insect Control,
- Agricultural Plant Disease Control,
- Agricultural Weed Control,
- Aquatic Pest Control,
- Forest Pest Control,
- Fumigation,
- Industrial and Right-of-Way Seed Control,
- Interior Plant Pest Control,
- Livestock Pest Control,
- Metam Sodium for Root Control in Sewers,
- Ornamental Pest Control,
- Outdoor Vertebrate Pest Control,
- Post-Harvest Potato Pest Control,
- Public Health Pest Control,
- Rangeland Pest Control,
- Research and Demonstration,

-
- Residential and Commercial Pesticide Application,
 - Seed Treatment,
 - Stored Commodities Treatment,
 - Turf Pest Control,
 - Wood Destroying Organism Pest Control, and
 - Wood Preservation and Wood Products Treatment.

In addition to passing the General Core examination and any relevant pest management category examination, a qualified supervisor must also complete specific experience requirements and be licensed in each pest management category they will be supervising.

Experience may be attained on the job or through a combination of education and field experience. For example, an applicant seeking to be licensed as a qualified supervisor in Ornamental Pest Control must have:

- Eight months of field experience in Ornamental Pest Control, or
- Two years of college credit in Ornamental Pest Control and four months of field experience, or
- One year of college credit in Ornamental Pest Control and six months of field experience.

The Commissioner may verify any experience or education reported in an application.

To be licensed as a private applicator, an applicant must submit an application on a form approved by the Commissioner and pass an examination.

The license fees for individuals are:

- Qualified supervisor \$100,
- Certified operator \$100, and
- Private applicator \$75.

Table 3 provides, over a five-year period, the total number of new individual applicators licensed by examination and the total number of individual applicators licensed by renewal.

Table 3
Individual Applicator Licenses Issued

Fiscal Year	Initial Licenses	Renewals
16-17	1,340	2,238
17-18	1,268	2,184
18-19	1,171	1,911
19-20	1,092	2,135
20-21	1,167	2,059

The total number of new individual applicator licenses issued by the Commissioner was trending down until fiscal year 20-21, when the total number of new individual applicator licenses issued increased slightly. Similarly, the total number of renewing individual licenses was trending down until fiscal year 19-20, when the total number of renewing individual licenses increased slightly.

Individual licenses renew every three years, so the number of licenses issued as reported in Table 3 is only a portion of the total number of individual applicators that are licensed in Colorado (see Table 4).

Table 4 demonstrates the total number of individual applicators licensed by the program over a five-year period.

Table 4
Individual Applicator Licenses
By Type

Fiscal Year	Qualified Supervisor	Certified Operators	Private Applicators	Total
16-17	3,114	1,657	5,257	10,028
17-18	3,151	1,717	5,408	10,276
18-19	3,189	1,782	5,431	10,402
19-20	3,142	1,793	5,216	10,151
20-21	3,083	1,790	4,983	9,856

The total number of individual applicators licensed in Colorado was trending upward until fiscal year 19-20 when the number of individual applicator licenses began to decline. The downward trend may be due to the impact of the COVID-19 pandemic on small businesses and the pesticide industry.

A qualified supervisor or certified operator license costs \$100, and the program does not charge to upgrade a license to include a new pest management category or categories.¹⁰⁷ A private applicator license costs \$75.¹⁰⁸

Individual licenses expire every three years on the individual's date of birth. Individual licenses may be renewed by completing continuing education required by the Commissioner or by retaking any applicable examinations.

Table 5 shows the total number of pesticide applicator entities approved to operate over a five-year period.

Table 5
Licensed and Registered Pesticide Applicator Entities
By Type

Fiscal Year	Commercial	Limited Commercial	Public	Total
16-17	1,114	32	90	1,236
17-18	1,110	28	84	1,222
18-19	1,117	27	83	1,227
19-20	1,108	22	73	1,203
20-21	1,077	20	69	1,166

Similar to the number of licensed individual pesticide applicators, the total number of licensed and registered pesticide applicator entities also decreased over the five-year period. While the total number of commercial applicators increased in fiscal year 18-19, the total number of limited commercial and public applicators experienced a steady decline over the five-year period.

Limited commercial and public applicators are only required to register if they are using restricted use pesticides, so the numbers in these categories tend to fluctuate depending on whether the entity is using general use pesticides or restricted use pesticides. Some limited commercial applicators and public applicators voluntarily register regardless of the type of pesticide they are using. Others opt out of registration from year to year in order to alleviate the regulatory burden.

The decline in licensed and registered entities in fiscal year 20-21 is likely due to the COVID-19 pandemic.

Entity licenses and registrations expire every year on December 31.

¹⁰⁷ Colorado Department of Agriculture. *QS CO Testing Information*. Retrieved March 22, 2022, from ag.colorado.gov/plants/pesticides/qs-co-testing-information

¹⁰⁸ Colorado Department of Agriculture. *Private Applicator Testing Information*. Retrieved March 22, 2022, from ag.colorado.gov/private-applicator-testing-information

Examinations

The eighth sunset criterion questions whether the scope of practice of the regulated occupation contributes to the optimum utilization of personnel and whether entry requirements encourage affirmative action.

In part, COPRRR utilizes this section of the report to evaluate the program according to this criterion.

In order to be licensed by the Commissioner, individual pesticide applicators must pass an examination.

Qualified supervisors and certified operators must pass the General Core Examination, which tests knowledge of pesticide laws and regulations, pesticide safety and use of pesticides. They must also pass an examination in each pest management category in which they will be working, such as Agricultural Insect Pest Control or Turf Pest Control.¹⁰⁹ A qualified supervisor or certified operator may be certified in any or all of the 22 pest management categories.

The examinations and related study guides are developed by the Colorado State University, Pesticide Regulatory Education Program. The examinations are administered by the Colorado State University Extension and Metro Institute, a computer-based testing company, and by the Department.

During the COVID-19 pandemic when the testing locations were closed, the Department contracted with Metro Institutes and Sylvan and Huntington Learning Centers to provide examination proctoring sites so that applicators could continue to take the examinations and obtain their pesticide applicator licenses.

Examinations for qualified supervisors and certified operators are offered at proctored locations in:

- Broomfield,
- Center,
- Cortez,
- Fort Collins,
- Grand Junction,
- Lamar,
- Lone Tree, and
- Sterling.

Examinations at these locations are offered several times a week. The hours and frequency of testing varies depending on the testing location.

¹⁰⁹ Colorado Department of Agriculture. *QS CO Testing Information*. Retrieved March 22, 2022, from ag.colorado.gov/plants/pesticides/qs-co-testing-information

The examination fee for the General Core Examination is \$30, and the examination fee in each pest management category is also \$30.¹¹⁰ For example, if a candidate is taking the General Core Examination and is testing in two pest management categories, the total examination costs would be \$90.

Unlike qualified supervisors and certified applicators, a private applicator is only required to pass an examination specific to the use of pesticides in the production of agricultural commodities.

Currently, private applicators are able to take their examinations at home. Private applicators have a choice between an online or paper version of the examination, and the examination is self-paced and open book.¹¹¹ However, private applicator examinations may be moved to proctored locations in the future due to federal certification requirements.

The examination to become a private applicator costs \$20.¹¹²

Table 6 illustrates the number of examinations given and the results during the period under review.

Table 6
Examinations

Fiscal Year	Examinations	Pass Rate
16-17	4,025	79%
17-18	3,895	79%
18-19	4,268	70%
19-20	3,698	76%
20-21	4,082	75%

The pass rates demonstrate that examinees are fairly well prepared to take the examinations.

Complaint and Disciplinary Activity

The seventh sunset criterion requires COPRRR to examine whether complaint, investigation and disciplinary procedures adequately protect the public and whether final dispositions of complaints are in the public interest or self-serving to the profession.

¹¹⁰ Colorado Department of Agriculture. *QS CO Testing Information*. Retrieved March 22, 2022, from ag.colorado.gov/plants/pesticides/qs-co-testing-information

¹¹¹ Colorado Department of Agriculture. *Private Applicator Testing Information*. Retrieved March 22, 2022, from ag.colorado.gov/private-applicator-testing-information

¹¹² Colorado Department of Agriculture. *Private Applicator Testing Information*. Retrieved March 22, 2022, from ag.colorado.gov/private-applicator-testing-information

In part, COPRRR utilizes this section of the report to evaluate the program according to this criterion.

Anyone may file a complaint with the Commissioner, and program staff may open complaints on behalf of the Commissioner. According to program staff, complaints are often filed by municipalities, employees of businesses and farmers, but the vast majority of complaints come from homeowners or tenants.

When a complaint is received, program staff attempts to understand the complaint and determine whether the program has the authority to investigate. Staff may open a preliminary investigation to determine whether sufficient evidence is available to begin a formal investigation.

If staff finds a violation may have occurred and evidence is likely available, they will send out a complaint form to the complainant and ask them to fill it out. This is done to ensure the complaint is valid and the complainant is willing to participate in giving a statement of facts, access to their property to obtain evidence and testify if necessary. Once staff receives the complaint form signed by the complainant, the case is opened as a formal investigation and assigned to investigative staff.

The program categorizes complaints related to pesticide misuse by whether they concern humans, animals, property or environment, and it prioritizes cases based on these categories. Complaints related to human exposure are categorized as high priority; complaints related to property are treated as secondary to human exposure or animal endangerment cases.

Pesticide misuse related to humans refers to complaints in which humans received direct exposure or residual exposure to pesticides. Marijuana cases, for example, are all human endangerment cases since humans ingest marijuana. Failing to notify someone on the Pesticide Sensitive Registry (Registry) would also fall under misuse related to humans, regardless of whether the registered person was actually exposed to pesticides.

Similarly, pesticide misuse related to animals refers to cases in which an animal may have been endangered by pesticide misuse. This category also includes cases in which an animal that is not the target of the pesticide may have been exposed. For example, pesticide drifting onto a horse barn while crops are being treated would fall under this category. Another example would be a case in which a rodenticide was used to control mice and a neighbor's dog was exposed to the rodenticide.

Pesticide misuse related to property includes cases such as a pesticide application on a tree that drifts on to a neighbor's lawn.

If the complaint relates to pesticide misuse affecting wilderness areas, then the complaint would fall under the environment category. Complaints related to the environment are generally considered the same priority level as property cases.

However, if the investigation uncovers human or animal exposure, then it would be elevated to a higher priority level.

Table 7 demonstrates the number of complaints, by type, received by the program during the period under review.

Table 7
Complaints

Type	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Pesticide Misuse: Humans	106	77	46	21	5
Pesticide Misuse: Animals	15	8	3	2	5
Pesticide Misuse: Property	20	21	26	14	12
Pesticide Misuse: Environment	3	2	0	0	0
Other	44	76	47	17	14
Total	188	184	122	54	36

About 44 percent of complaints filed with the Commissioner concerned humans and 16 percent concerned property. Only one percent of complaints concerned the environment, which refers to pesticide misuse in wilderness areas.

About 34 percent of complaints were reported as “Other.” Unfortunately, the program cannot provide a breakdown of these complaints by type. According to program staff, these complaints do not rise to the level of human, animal or environmental endangerment and, for the most part, they relate to complaints concerning improper signage on vehicles or equipment, failure to post public notification flags and failure to provide required training. The “Other” category also includes complaints related to pesticide applications in which the individuals or entities involved were not licensed or registered but should have been.

The drop in the number of complaints in fiscal years 19-20 and 20-21 is attributed to the COVID-19 pandemic since fewer applications were being made.

Table 8 shows the average time it took for the program to close complaints, either through enforcement actions or by dismissal.

Table 8
Average Time to
Close Complaints

Fiscal Year	Days
16-17	439
17-18	868
18-19	709
19-20	935
20-21	1,062

On average, the time it takes for the program to close complaints is about 800 days, which is equivalent to 26 months. As Table 8 demonstrates, the time it takes for the program to close complaints has increased nearly every fiscal year. In fiscal year 16-17, the average time it took to close complaints was over 14 months, and in fiscal year 20-21, it took an average of nearly 35 months to close complaints.

The program's expectation is that it should take between 9 and 18 months to close complaints. However, higher caseloads and staffing issues have made this challenging over the past few years.

Before fiscal year 15-16, the program's enforcement case backlog was reportedly low and trending toward a 100 percent completion rate. In March 2015, pesticide misuse in the marijuana industry was added to the program's oversight. As a result, in fiscal year 16-17, the program received three times the average annual pesticide misuse complaints.

Initially, an increase in staffing to address the new workload was not approved. Once it was approved, it took the program most of fiscal year 17-18 to hire and train new staff. Additionally, since all marijuana cases are considered potential human endangerment cases and are, therefore, considered high priority, conventional pesticide misuse cases not involving human endangerment were delayed. Since then, the program has experienced additional staffing issues and budgetary problems, which have prevented the program from filling vacant positions.

As of fiscal year 20-21, the program was fully staffed. Also, during the COVID-19 pandemic, the program received fewer complaints related to pesticide misuse, so it has been able to reduce its backlog of enforcement cases somewhat.

Even so, according to program staff, the staffing still falls short of what is needed to immediately resolve the backlog of cases within the program's goal of 9 to 18 months while also investigating and processing new enforcement cases. Due to the time it took to obtain staffing and the accumulated backlog of cases, it will take several years to meet this goal. However, as long as staffing can be maintained, the program feels it is now on track to do so.

The Commissioner has the authority to deny, suspend, refuse to renew or revoke a license or registration if an applicant, registrant or licensee has committed any acts considered grounds for discipline. The Commissioner may also issue a letter of admonition, impose discipline through a stipulation, impose probation, issue a civil penalty or restrict a registration or license.

Additionally, the Commissioner may issue cease and desist orders when immediate enforcement is necessary and a violation has likely taken place. The Commissioner also has the authority to seek a restraining order or an injunction through a court of competent jurisdiction.

Table 9 illustrates, for the fiscal years indicated, the number and types of actions taken.

Table 9
Final Actions

Type	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Revocations/Surrenders/ Voluntary Relinquishments	0	0	0	0	0
Suspensions	0	0	0	0	0
Probation/Practice Limitation	0	0	0	0	0
Letters of Admonition	0	0	1	1	1
License Denials	0	0	0	0	0
Cease and Desist Orders	103	136	76	60	18
Permanent Injunctions	0	1	0	0	0
Total Disciplinary Actions	109	155	104	75	33
Dismissals	26	31	30	20	20
Letters of Concern	0	0	4	1	0
Dropped	6	2	1	1	2
Total Dismissals	32	33	35	22	22

The decrease in disciplinary activity in fiscal years 19-20 and 20-21 is attributed to the COVID-19 pandemic.

During the five-year period reported in Table 9, the Commissioner did not revoke, suspend, impose probation on or deny any licenses or registrants.

The Commissioner relies heavily on cease and desist orders and fines. Over the five-year period, the Commissioner also issued three letters of admonition and sought one permanent injunction. The Commissioner's fining activity is reported in Table 11.

In the past, the program has employed other disciplinary actions, such as requiring additional training, probation or other remedial actions. However, several years ago, when the program was experiencing a significant backlog of cases, the Division Director at that time determined that the program did not have the staff necessary to oversee any enforcement actions, except the issuance of civil penalties and cease and desist orders, since other enforcement actions required additional staff time to track and verify completion, and this directive is still in place.

The program primarily relies on cease and desist orders and civil penalties when a pesticide applicator is found to have violated the Act. A private applicator who has violated the Act for the first time would typically be issued a cease and desist order; however, a commercial applicator would be held to a higher standard and may face a civil penalty through a stipulated agreement. When a private applicator is found to have committed a violation a second time, the program will issue a civil penalty. If the entity or individual continues the same conduct, the program may seek an injunction through a court. The program also has the authority to refer specific violations as criminal charges. According to program staff, the vast majority of entities and individuals come into compliance after the initial enforcement action is issued.

The “dropped” category in Table 9 refers to complaints that have been filed, but the complainants failed to cooperate with the investigations. When a complainant becomes uncooperative, the inspectors may move forward without the complainant’s cooperation and continue an investigation. However, sometimes the investigation depends on the cooperation of the complainant. For example, if a complainant will not allow inspectors onto their property and the inspectors have not already obtained a sample, the program may be forced to drop the complaint.

Audits/Inspections

The seventh sunset criterion requires COPRRR to examine whether complaint, investigation and disciplinary procedures adequately protect the public and whether final dispositions of complaints are in the public interest or self-serving to the profession.

In part, COPRRR utilizes this section of the report to evaluate the Program according to this criterion.

Program staff conducts inspections of pesticide applicator businesses in order to verify that pesticides are being used, stored and disposed of in a manner consistent with federal and state law and that pesticide devices are also being used properly.¹¹³ The

¹¹³ Colorado Department of Agriculture. *Pesticide Applicator Certification and Licensing Program*. Retrieved September 30, 2022, from ag.colorado.gov/plants/pesticides/pesticide-applicator-certification-and-licensing-program

program also enforces the federal Worker Protection Standard,¹¹⁴ a federal regulation created to protect agricultural workers from pesticide poisoning and injury,¹¹⁵ and conducts inspections to ensure compliance.

In addition to inspections, program staff holds educational meetings, referred to as Compliance Assistance Contacts, to fulfill the requirements of the Worker Protection Standard and the Commissioner's rules.

Under federal law, pesticide applicators are required to comply with the directions on a pesticide label, which include a requirement to comply with the Worker Protection Standard, an extensive and complicated law, which encompasses requirements related to employee training, notification, decontamination sites and ventilation, among other things. For example, employers are required to make soap, water and paper towels available to farm workers so that they may decontaminate themselves after working with crops that have been treated with pesticides in case an exposure event occurs.

Under the Worker Protection Standard, farm workers must receive training in a manner they can understand, and anyone who is providing training related to pesticide application and safety must be qualified.

The program's inspectors schedule Compliance Assistance Contacts when licenses are issued to new businesses or businesses are under new management. Additionally, inspectors may see pesticide applicators when they are out on other business and conduct unscheduled Compliance Assistance Contacts.

Marijuana growers previously did not have much experience with the Worker Protection Standard, so program staff have spent a significant amount of time working with these businesses to help bring them into compliance.

Table 10 provides the total number of Compliance Assistance Contacts conducted by program staff during the years under review and inspections, including routine office inspections, records inspections, Worker Protection Standard inspections and for cause inspections.

Table 10
Inspections and
Compliance Assistance Contacts

Type	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Compliance Assistance Contacts	531	403	102	104	231
Inspections	1,386	1,722	1,460	1,057	938

¹¹⁴ Colorado Department of Agriculture. *Pesticide Applicator Certification and Licensing Program*. Retrieved September 30, 2022, from ag.colorado.gov/plants/pesticides/pesticide-applicator-certification-and-licensing-program

¹¹⁵ U.S. Environmental Protection Agency. *Agricultural Worker Protection Standard (WPS)*. Retrieved March 22, 2022, from www.epa.gov/pesticide-worker-safety/agricultural-worker-protection-standard-wps

The drop in the number of inspections conducted in fiscal years 19-20 and 20-21 was due to the COVID-19 pandemic. The Commissioner’s staff created a virtual inspection process to allow inspectors to continue to conduct inspections during the COVID-19 pandemic. These processes have since been incorporated into a hybrid inspection approach, which allows staff to conduct a portion of an inspection virtually and then complete an on-site inspection to verify compliance with specific elements.

Compliance Assistance Contacts vary from year to year. In fiscal years 16-17 and 17-18, inspectors were working with the marijuana industry to bring these businesses into compliance with federal and state laws, which is why the number of Compliance Assistance Contacts was higher in those years.

Fining Activity

The seventh sunset criterion requires COPRRR to examine whether complaint, investigation and disciplinary procedures adequately protect the public and whether final dispositions of complaints are in the public interest or self-serving to the profession.

In part, COPRRR utilizes this section of the report to evaluate the program according to this criterion.

The Commissioner may assess a civil penalty of up to \$1,000 per violation. If a violation is repeated, the civil penalty may be doubled. Fees and civil penalties are directed to the Cash Fund.

Table 11 demonstrates the total civil penalties issued and the value of the civil penalties over the five-year period.

Table 11
Civil Penalties

Fiscal Year	Number of Penalties Imposed	Value of Penalties Imposed	Value of Penalties Collected
16-17	11	\$11,000	\$3,800
17-18	31	\$31,000	\$15,250
18-19	64	\$64,000	\$45,200
19-20	22	\$22,000	\$12,675
20-21	26	\$26,000	\$13,800

The value of the penalties collected is lower than the value of the penalties imposed because when a civil penalty is issued, a portion of it is held in abeyance. As long as the individual or entity does not violate the Act again, that portion of the civil penalty is not required to be paid.

The fining activity varies from year to year. On average, the Commissioner issued about 31 civil penalties a year, but this ranges from 11 imposed in fiscal year 16-17 to 64 imposed in fiscal year 18-19. The civil penalties imposed average \$1,000 per fine, which is the maximum fine allowed. The civil penalties collected averages about \$600 per fine.

Collateral Consequences - Criminal Convictions

The ninth sunset criterion requires COPRRR to examine whether the agency under review, through its licensing processes, imposes any sanctions or disqualifications based on past criminal history, and if so, whether the disqualifications serve public safety or commercial or consumer protection interests.

The Commissioner has the authority to restrict, deny, suspend, refuse to renew or revoke any license or registration if the applicant, registrant or licensee has been convicted of a felony for an offense related to the conduct regulated by the Act.¹¹⁶

The Commissioner has not disqualified any pesticide applicators or imposed any sanctions based on past criminal history since no applicant, registrant or licensee has been identified that meets these conditions.

Pesticide Notification

An individual may request to be on the Registry if they submit an application to the Department and provide evidence of sensitivity to pesticides signed by a licensed physician.

Individuals on the Registry will be notified when a pesticide application in the turf or ornamental category is planned at their residence or on a property abutting their residence. Additionally, individuals who live in multi-unit dwellings will be notified when a pesticide application in the turf or ornamental category is planned in a common area.

Similarly, prior to a structural application, any licensed commercial, registered limited commercial or registered public applicators who are applying pesticides to a multi-unit dwelling must provide notification to an individual on the Registry who lives at that address.

Notification of pesticide application must be made at least 24 hours before an application. Pesticide applicators must make at least two attempts to notify an individual on the Registry, which may be by telephone, email, in person or mail. If attempts at notification fail, then the pesticide applicator must attempt to notify the

¹¹⁶ § 35-10-121(1)(b), C.R.S.

registrant in person, and if this also fails, then notice of the application must be placed on the registrant's door.

Only licensed commercial, registered limited commercial or registered public applicators are required to provide notification to individuals who are on the Registry. The Registry does not apply to private applicators or unlicensed or unregistered pesticide applicators, such as farmers, homeowners or business owners, who are applying general use pesticides.

The Commissioner must provide the Registry to licensed commercial applicators, registered limited commercial applicators and registered public applicators. Currently, 84 people are listed on the Registry.

In addition to notification to people who are listed on the Registry, pesticide applicators must post signs notifying the public when they are making an application in a turf or ornamental category. Signs must be placed at any conspicuous point or points of entry to the property. They must also post signs when making a pesticide application in the aquatic category.

These public notice-of-application signs must be water resistant, yellow flags, and include the words, "WARNING, PESTICIDES APPLIED," and a circle with a slash over a picture of an adult, a child and a dog. The name of the pesticide applicator must also be included on the flag. The Act specifies the size of the flag, the font and the picture.

Only licensed commercial, registered limited commercial or registered public applicators are required to post signs notifying the public of pesticide applications in turf, ornamental or aquatic categories. The public notice-of-application signs are not required of unlicensed or unregistered pesticide applicators, such as homeowners or business owners, who are applying general use pesticides.

Local Regulation

Generally, local government is prohibited from regulating the use of pesticides. However, it may regulate the use of pesticides on its own property, and it may also establish:

- Zoning ordinances for pesticide sales and storage,
- Pesticide or pesticide container disposal sites,
- Building and fire codes,
- Pesticide transportation regulations that align with federal and state law, and
- Drinking water regulations that align with federal and state law.

Additionally, section 31-15-707(1)(b), C.R.S., grants to the governing body of each municipality the power to:

construct or authorize the construction of such waterworks without their limits and, for the purpose of maintaining and protecting the same from injury and the water from pollution, their jurisdiction shall extend over the territory occupied by such works and all reservoirs, streams, trenches, pipes, and drains used in and necessary for the construction, maintenance, and operation of the same and over the stream or source from which the water is taken for five miles above the point from which it is taken and to enact all ordinances and regulations necessary to carry the power conferred in this paragraph (b) into effect[.]

If a local government adopts any ordinance concerning pesticides pursuant to section 31-15-707(1)(b), C.R.S., or pursuant to any exceptions authorized by the Act, it must file a certified copy of the ordinance and a map or legal description of the area covered by the ordinance with the Commissioner.¹¹⁷

Despite the requirement established under section 31-15-707(1)(b), C.R.S., historically, local governments have not filed ordinances with the Commissioner.

Program staff typically learns about a local ordinance when a pesticide applicator files a complaint with the Commissioner. Then program staff reaches out to the jurisdiction to determine whether the local ordinance exceeds the authority provided for under the Act, and if it does, program staff discusses this with local officials. While program staff maintain a file related to these complaints, it does not track the specific local ordinances or maintain a database related to them.

COPRRR surveyed municipalities and counties to understand the extent of local regulation of pesticides in Colorado. The response rate was 31 percent. Only eight percent of respondents reported that their city, town, county or city and county had enacted a watershed protection ordinance pursuant to section 31-15-707(1)(b), C.R.S., and eight percent of respondents also reported that their city, town, county or city and county had established other ordinances or regulations concerning pesticides. The survey responses may be found in Appendix A.

¹¹⁷ § 35-10-112.5(4), C.R.S.

Analysis and Recommendations

The final sunset criterion questions whether administrative and statutory changes are necessary to improve agency operations to enhance the public interest. The recommendations that follow are offered in consideration of this criterion, in general, and any criteria specifically referenced in those recommendations.

Recommendation 1 - Continue the Pesticide Applicators' Act for 11 years, until 2034.

The Pesticide Applicators' Act (Act) is located in Article 10 of Title 35, Colorado Revised Statutes (C.R.S.). The Commissioner of Agriculture in the Department of Agriculture (Commissioner and Department, respectively) is entrusted with the enforcement of the Act.

In the Act's legislative declaration, the General Assembly recognizes that:

pesticides perform a valuable function in controlling insects, rodents, weeds, and other forms of life which may be injurious to crops, livestock, and other desirable forms of plant and animal life, to structures, and to individuals.¹¹⁸

The General Assembly further recognizes that:

pesticides contain toxic substances which may pose a serious risk to the public health and safety and that regulation of pesticide use is necessary to prevent adverse effects on individuals and the environment.¹¹⁹

The Act concerns anyone who uses or supervises the use of pesticides or pesticide devices, which includes entities and individuals that apply pesticides and are licensed or registered by the Commissioner and the general public.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the first criterion questions whether regulation is necessary to protect the public health, safety and welfare.

The regulation of pesticides begins with federal law. Under the Federal Insecticide, Fungicide and Rodenticide Act, the U.S. Environmental Protection Agency (EPA) is charged with reviewing and registering pesticides and designating them for specified uses. The EPA classifies pesticides as either restricted use or general use pesticides. The general public cannot purchase or use restricted use pesticides since they are

¹¹⁸ § 35-10-102, C.R.S.

¹¹⁹ § 35-10-102, C.R.S.

especially hazardous to the environment and anyone exposed to them, so they require additional restrictions.¹²⁰

Anyone who works with restricted use pesticides, as designated by the EPA or under state law, or who supervises the use of restricted use pesticides must obtain certification according to EPA regulations and any other applicable state or tribal laws. The EPA sets the minimum standards for pesticide applicators, and pesticide applicators must be certified in each state where they apply pesticides.¹²¹

Pesticides contain toxic chemicals, some of which may cause short-term and long-term health problems. In the short-term, exposure to certain pesticides can result in symptoms such as dizziness, muscle ache, nausea and seizures.¹²² Over the long-term, exposure to certain pesticides has been linked to various chronic health problems, such as cancer and neurological disorders.¹²³ If used incorrectly, some pesticides can be deadly.

Pesticide products are labeled according to their acute toxicity: highly toxic, moderately toxic, slightly toxic or relatively nontoxic. Even though some pesticides are labeled slightly toxic or relatively nontoxic, all pesticides are poisonous and may be dangerous to humans, animals, other organisms and the environment and should be handled according to the directions on the product label.¹²⁴

Pesticide applicators use pesticides in a variety of settings: apartment buildings, single-family homes, businesses, greenhouses, farms, golf courses, parks and schools. When applying pesticides, workers must be careful to protect themselves from pesticide exposure while also protecting other people and non-target plants and animals.

Many individuals who use pesticides, such as homeowners, have no training in the application of pesticides and are limited to using pesticides that are classified as general use. Commercial pesticide applicators and other applicators who are using restricted use pesticides, on the other hand, are required to complete a certain amount of training, or a mix of training and education, and pass an examination, or examinations.

The Commissioner regulates pesticide applicators to protect the public from the adverse effects of pesticides resulting from unsafe and incorrect pesticide use.

¹²⁰ U.S. Environmental Protection Agency. *Restricted Use Products (RUP) Report*. Retrieved September 22, 2022, from www.epa.gov/pesticide-worker-safety/restricted-use-products-rup-report

¹²¹ U.S. Environmental Protection Agency. *How to Get Certified as a Pesticide Applicator*. Retrieved November 15, 2021, from www.epa.gov/pesticide-worker-safety/how-get-certified-pesticide-applicator

¹²² Kim Sunwook, et al. (2016), "Effects of Lifetime Occupational Pesticide Exposure on Postural Control Among Farmworkers and Non-Farmworkers," *Journal of Occupational and Environmental Medicine*, 58 (2), p. 134.

¹²³ Cynthia L. Curl, et al. (March 2020), "Synthetic Pesticides and Health in Vulnerable Populations: Agricultural Workers," *Current Environmental Health Reports*, 7 (1), p. 13.

¹²⁴ Penn State Extension. *Toxicity of Pesticides*. Retrieved September 26, 2021, from extension.psu.edu/toxicity-of-pesticides

The Commissioner accomplishes this, in part, by licensing and registering pesticide applicators who use restricted use pesticides. In fiscal year 20-21, there were a total of 9,856 individuals and 1,166 entities who were licensed or registered as pesticide applicators.

The Commissioner also protects the public through rulemaking. The Commissioner's rules establish training requirements for pesticide applicators, experience requirements for qualified supervisors and continuing education requirements, among other things. In addition, the Commissioner protects the public by approving continuing education courses and working with Colorado State University (CSU) to develop study guides and examinations for 22 pesticide applicator categories.

The Act further protects the public by establishing a Pesticide Advisory Committee (Advisory Committee) to advise the Commissioner on agricultural, human health, environmental, wildlife, worker safety and other matters related to the safe use of pesticides and to assist the Commissioner with rulemaking. The 15 members of the Advisory Committee are appointed by the Colorado Agricultural Commission (Agricultural Commission).

On behalf of the Commissioner, the Department protects the public by conducting inspections and investigations to uncover problems with pesticide use, and to prevent adverse effects on individuals and the environment, and it takes enforcement actions against pesticide applicators who have violated the Act or the Commissioner's rules.

Over the five-year period, the Commissioner took the following enforcement actions against pesticide applicators: 3 letters of admonition, 393 cease and desist orders, 79 fines and 1 permanent injunction.

All registered pesticides contain toxic chemicals, which if used incorrectly can be hazardous to the public. Clearly, the regulation of pesticide use is necessary to protect the public health and safety, and it should be continued. Moreover, if the state does not regulate pesticide applicators, the federal government will intervene, and regulation at the state level is generally preferable to regulation at the federal level.

In the past, when the EPA regulated private applicators in Colorado, it assessed high penalties against private applicators who were found to have violated federal law. In comparison, the Department seeks to bring pesticide applicators into compliance through a three-strikes approach. Compliance assistance and education are the first line of defense, and then, if compliance is not achieved, enforcement may be sought through cease and desist orders or civil penalties. However, depending on the conduct and the severity of the violation, the program may immediately initiate enforcement actions if necessary.

During the sunset review, stakeholders engaged in considerable discussion related to the state uniform regulation of pesticides law and whether local governments should be permitted more control over pesticide use than they are currently afforded under

the Act. The Colorado Office of Policy, Research and Regulatory Reform (COPRRR) reviewed a sizable amount of literature related to this issue, and while there are compelling arguments in support of local control, repealing the state uniform regulation of pesticides law would likely be contrary to the second sunset criterion, which asks for the least restrictive form of regulation consistent with the public interest.

While COPRRR is not recommending eliminating the state uniform regulation of pesticides law, COPRRR has proposed several recommendations intended to modernize the Act. Since none of the recommendations in this report will likely result in any sweeping changes to the regulation of pesticide application, an 11-year continuation is reasonable. Anything less would likely be an inefficient use of state resources.

Therefore, the General Assembly should continue the Act for 11 years, until 2034.

Recommendation 2 - Update the definition of “use” of pesticides to align with changes in federal law.

In 2015, the EPA updated the federal Worker Protection Standard, a regulation that was established to protect farm workers from exposure to pesticides. When the Worker Protection Standard was updated, the EPA also expanded the definition of the term “use” of pesticides. As state law cannot be less restrictive than federal law, the definition of “use” in the Act should be modernized to align with the federal definition, and the EPA is requiring all states to update their definition of “use.”

Section 35-10-103(18), C.R.S., currently defines “use” as:

all aspects of the handling of pesticides, including but not limited to the mixing, loading, application or administration, spill control, and disposal of a pesticide or its container.

The EPA now defines “use,” as in “to use a pesticide,” as:¹²⁵

(1) Pre-application activities, including, but not limited to:

- (i) Arranging for the application of the pesticide.
- (ii) Mixing and loading the pesticide.
- (iii) Making necessary preparations for the application of the pesticide, including responsibilities related to worker notification, training of workers or handlers, providing decontamination supplies, providing pesticide safety information and pesticide application and hazard information, use and care of personal protective equipment, providing emergency assistance, and heat stress management.

¹²⁵ 40 C.F.R., Part 170.305.

-
- (2) Application of the pesticide.
 - (3) Post-application activities intended to reduce the risks of illness and injury resulting from handlers' and workers' occupational exposures to pesticide residues during and after the restricted-entry interval, including responsibilities related to worker notification, training of workers or early-entry workers, providing decontamination supplies, providing pesticide safety information and pesticide application and hazard information, use and care of personal protective equipment, providing emergency assistance, and heat stress management.
 - (4) Other pesticide-related activities, including, but not limited to, transporting or storing pesticides that have been opened, cleaning equipment, and disposing of excess pesticides, spray mix, equipment wash waters, pesticide containers, and other pesticide-containing materials.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the first criterion questions whether conditions that led to the initial regulation have changed. The minimum standards for the regulation of pesticide applicators are established by the EPA. As the EPA has revised the definition of the term “use,” it is reasonable for Colorado to align its definition with federal law.

Therefore, the General Assembly should revise the definition of “use” in the Act to align with the federal definition.

Recommendation 3 - Authorize individuals on the Pesticide Sensitive Registry to receive notification prior to a pesticide application in any turf, ornamental or structural category that is planned at their workplaces or, if they are students, at their school addresses.

While nearly all pesticides are toxic and could potentially present a health risk to all people, some individuals are especially sensitive to pesticides and other chemicals.

When exposed to pesticides, people who are pesticide sensitive may experience symptoms such as fatigue, headache, weakness, rash, mood changes, difficulty with memory and concentration and respiratory problems.¹²⁶

Currently, a person who is pesticide sensitive may sign up to be notified when a pesticide application in the turf or ornamental category is planned at their residence or on a property abutting their residence.

¹²⁶ Shahir Masri, et al. (2021), “Toxicant-induced loss of tolerance for chemicals, foods, and drugs: assessing patterns of exposure behind a global phenomenon,” *Environmental Sciences Europe*, 33 (65), p. 2.

Providing people who are pesticide sensitive prior notification of a pesticide application allows them to take any necessary precautions to avoid being exposed to pesticides. This may mean closing their windows and staying indoors, or they may need to vacate their residence for a period of time.

While a person who is pesticide sensitive can list more than one residence on the Pesticide Sensitive Registry (Registry), the Act does not allow them to list their work or school addresses.

In Pennsylvania, which has a similar registry, such individuals may list their home, work, vacation home and, if they are students, their school addresses.

Pesticide exposure may cause someone who is pesticide sensitive to miss work or school, and illness related to pesticide sensitivity may prevent them from working or going to school at all.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the third criterion questions whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes. Currently, the Act only allows people who are pesticide sensitive to be notified of applications based on their home address. However, people spend a significant amount of time at work and at school where pesticide applications may also be made, and people who are pesticide sensitive should also be allowed to take necessary precautions to protect themselves from pesticide exposure in these settings too.

Pesticide sensitivity is a serious condition that warrants notification in case a pesticide application is being planned near a pesticide sensitive person's home, place of business or their school.

In order to protect people who are pesticide sensitive, the Act should be amended to allow individuals on the Registry to include their work and school addresses in the Registry, in addition to their places of residence.

At this time, only 84 people are listed on the Registry. Requiring notification at their places of business and schools should not result in an undue burden on professional pesticide applicators.

Therefore, the General Assembly should amend the Act to authorize individuals on the Registry to receive notification prior to a pesticide application in a turf, ornamental or structural category that is planned at their workplaces or, if they are students, at their school addresses.

Recommendation 4 - Amend the requirement for notification of anyone on the Registry prior to a pesticide application in any turf or ornamental category on any property within 250 feet of the registrant's property line, rather than on an abutting property.

As discussed in Recommendation 3, currently, an individual who is pesticide sensitive may sign up to be notified when a pesticide application in a turf or ornamental category is planned at their residence or on a property abutting their residence.

Providing notification to people who are pesticide sensitive prior to a pesticide application simply allows them to take the necessary steps to protect themselves from exposure to pesticides. For example, people who are pesticide sensitive may close their windows, cover up their vegetable garden and decide to forgo taking an evening walk or they may choose to vacate the property for a period of time.

However, for individuals who live in urban areas, notification of a pesticide application on an abutting property may not be an adequate standard. If a person who is pesticide sensitive is located in a rural area or an area where the lots are fairly large, then notification of turf or ornamental pesticide applications being made next door is likely sufficient, but for those who live in densely populated areas, it may not provide adequate notification.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the third criterion questions whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes.

Establishing a distance requirement would be more equitable than only requiring notification if someone lives next door or across an alleyway. If a tree that is 100 feet tall is being sprayed in an urban neighborhood, for example, then it is possible that pesticide residue could drift beyond the next-door neighbor's yard. While the abutting standard treats everyone equally, not all properties are the same size. Therefore, a more equitable standard would be to establish a distance requirement.

Pesticide drift can and does occur when an applicator is not abiding by the pesticide label directions or does not take all environmental conditions into account to ensure the pesticide stays on the intended site.

When exposed to pesticides, people who are pesticide sensitive may experience symptoms such as fatigue, headache, weakness, rash, mood changes, difficulty with memory and concentration and respiratory problems.¹²⁷ Pesticide exposure may cause them to miss work or school, and illness related to pesticide sensitivities may prevent them from working or going to school at all.

¹²⁷ Shahir Masri, et al. (2021), "Toxicant-induced loss of tolerance for chemicals, foods, and drugs: assessing patterns of exposure behind a global phenomenon," *Environmental Sciences Europe*, 33 (65), p. 2.

Other states have implemented distance requirements or have more robust requirements relating to abutting properties. For instance, Maine requires notification to a registrant in case an application is being made on a property that is 250 feet from the application. Anyone who is listed on the Pennsylvania registry receives notice of a commercial application that is made within 500 feet of their property. In Wisconsin, notification is required to a registrant if an application is being made on the registrant's block or on an abutting block.

Only 84 people are currently listed on the Registry, so creating a distance requirement of 250 feet is unlikely to increase the number of notifications required significantly, but it will provide somewhat more protection to those who legitimately suffer severe illness when they are exposed to pesticide residue, especially for those who live in congested areas.

If the person who is pesticide sensitive is responsible for listing all the properties that apply, implementation and enforcement of this change should not be much more difficult than it is now.

When registrants annually reapply to the Registry, the Department may only need to verify that no changes need to be made to the listed properties, and updates would only need to be made when changes are reported, people fail to renew, or new people sign up for the Registry.

At first, it will increase the workload for the Department somewhat since some additional properties will be captured. However, the Department would only need to investigate compliance if a complaint is filed. Considering the health of those on the Registry are at risk, the potential increase in workload is reasonable.

Creating a distance requirement would establish a more equitable Registry and allow those who are listed to take any necessary precautions to protect their health.

Therefore, the General Assembly should amend section 35-10-112(1)(c)(I)(B), C.R.S., to require notification of anyone on the Registry prior to a pesticide application in any turf or ornamental category on any property within 250 feet of the registrant's property line as reported to the Commissioner by the Pesticide Sensitive person in their application.

Recommendation 5 - Modernize the Commissioner's fining authority to adjust for inflation by increasing the maximum fine to \$2,500 per violation.

Currently, the Commissioner may require anyone who violates the Act or the Commissioner's rules to pay a fine up to \$1,000 per violation. If the person violates the Act a second time, the maximum fine may be doubled.

The Commissioner's fining authority was established in 1990, and it has not increased since that time.

The purpose of issuing a fine is to deter professional misconduct which may result in pesticide poisoning or damage to the environment or property. Three decades ago, a fine of \$1,000 was a much stronger deterrent than it is today. In order to ensure that the fines issued by the Commissioner continue to act as a deterrent, the maximum fine amount should be adjusted for inflation, which would be equal to about \$2,500 today.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the third criterion questions whether the agency operates in the public interest and whether its operation is impeded by existing statutes.

The Commissioner's fining authority should be modernized to ensure that the Act continues to effectively protect the public from the mishandling of pesticides, which are dangerous substances that may cause acute and long-term illness and may even result in death.

For these reasons, the General Assembly should modernize the Commissioner's fining authority to adjust for inflation by increasing the maximum fine to \$2,500 per violation.

Recommendation 6 - Direct that civil penalties be credited to the General Fund.

Section 35-10-126, C.R.S., directs all civil penalties collected pursuant to the Act to be credited to the Plant Health, Pest Control and Environmental Cash Fund.

Ordinarily, when an agency is granted fining authority, any funds generated by such fines are credited to the state's General Fund. This is done so that the agency has no incentive, other than taking legitimate disciplinary action, to impose fines.

When fines are instead credited to an agency's cash fund, as they are in the Act, it creates the perception of a conflict of interest since the agency can increase its revenue by imposing more fines.

In fiscal year 20-21, the Commissioner collected approximately \$13,800 in fines and issued or renewed 3,226 licenses. To make up for this loss of funding, license fees would be expected to increase by approximately \$4 per license. This is a nominal amount and a small price to pay for the assurance that the Commissioner will not fine licensees or registrants for reasons other than legitimate disciplinary matters.

While no allegations of impropriety related to fining have been levied against the Commissioner or the Department during the course of this sunset review, this recommendation is intended to eliminate the potential of such conduct.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the second criterion questions whether statutes and regulations establish the least restrictive form of regulation consistent with the public interest. Directing fines to the General Fund will act to protect the regulated community from fines being imposed for reasons other than legitimate disciplinary action.

For these reasons, the General Assembly should direct fines to the General Fund.

Recommendation 7 - Require basic licensing information for licensed and registered pesticide applicators to be made available online.

Regulation of pesticide applicators is premised on public protection. Inherent in this premise is the ability of the public to access information about which individuals and entities are licensed and, therefore, legally authorized to perform activities that require a license.

The most consumer-friendly and cost-effective way to provide this information to the public is to publish it online. However, the Department's website currently does not provide this information to consumers. If consumers want to know if the pesticide applicators that they are hiring are licensed, they must place a telephone call to the Department. As this task could easily be automated, this is an inefficient use of staff time, and it is also inconvenient for consumers who may not be able to reach someone in the office for several days, depending on when they call and when staff are available.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the third and fourth criteria question whether the agency operates in the public interest and whether the agency performs its statutory duties efficiently and effectively.

Allowing the public to easily access basic licensing information online would increase the likelihood that consumers will hire licensed practitioners. Today, consumers are accustomed to searching for information online, and they are much more likely to conduct an online search than to telephone a government agency to find this information.

Licensing information is already public information. Providing it online simply makes the government's activities more transparent, and it is more efficient than having staff respond to licensing queries by telephone or email.

Most regulatory programs in the state provide basic licensing information to the public online, and many other states provide the public with the ability to verify pesticide applicator licenses online. This is accomplished in several different ways, with simple search forms, documents or spreadsheets. Considering this, it should not be an expensive undertaking.

Therefore, the General Assembly should require basic licensing information for licensed and registered pesticide applicators to be made available online.

Recommendation 8 - Require the Commissioner to develop an online complaint process, in which complainants may easily fill out an online complaint form and submit it electronically.

During the last sunset review of the Act, COPRRR recommended that the Commissioner develop an online complaint process. At present, this has not been accomplished.

Unlike other state agencies that allow complaints to be filed electronically, the Commissioner does not provide an upfront, easy way for consumers to file complaints. While the Commissioner provides a form on the Department's website that consumers may print out and mail in,¹²⁸ the Commissioner has not established a process for consumers to fill out and submit complaint forms electronically.

Submitting forms through the mail is an inefficient method for consumers to file complaints. If a consumer submits a complaint online, it may be received almost instantaneously. If a consumer submits a complaint through the mail, it unnecessarily delays the receipt of the complaint. As pesticide complaints must be investigated quickly or evidence may be lost, the Department should prioritize providing the public with the means to file complaints electronically.

At this time, if a consumer does not have access to a printer, the only other option is for the consumer to call the Department to file a complaint. The Department's website is not easy to navigate, and it takes some digging to determine where to call to file a complaint. Members of the public must hunt around the website and wade through the contacts for several different programs, such as the Apiary Program, the Nursery Program and the Organic Certification Program, among many others, and then consumers must read through each staff person's duties in the Pesticide Applicator Program to determine which of two staff members to call with complaints.

Moreover, it is not easy to locate the complaint form on the Department's website.

Finally, the information about how to file a complaint form and who to call with a complaint are provided in two different locations on the website, so a member of the public would not necessarily know that there are two options.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the third and fourth criteria question whether the agency operates in the public interest and whether the agency performs its statutory duties efficiently and effectively.

¹²⁸ Colorado Department of Agriculture. *Pesticides*. Retrieved September 27, 2022, from ag.colorado.gov/plants/pesticides

Additionally, the seventh sunset criteria questions whether complaint procedures adequately protect the public.

The purpose of regulation is to protect the public, and one of the primary ways that the public is protected is through the ability to report possible misconduct to the regulatory agency.

Many professional licensing programs in Colorado allow the public to submit complaints online. The technology to implement online complaint filing is widely available and easy to create, and different state agencies have accomplished this in a variety of ways.

Typically, this information is provided on the agency's website in an easy to locate place, such as the first level of a program's webpage.

Automating this function will likely increase the number of complaints to the Department, but it will also create a more streamlined, efficient complaint process and free up more time for enforcement activities.

For these reasons, the General Assembly should require the Department to develop an online complaint process, in which complainants may fill out an online complaint form and submit it electronically or by mail, and all information necessary for consumers to file complaints should be provided in one easy to find location.

Recommendation 9 - Authorize a former agricultural worker or an advocate for agricultural workers or representative of a community-based organization that serves agricultural workers to be appointed to the Advisory Committee, in case the Agricultural Commission is unable to appoint a representative who is currently engaged as an agricultural worker.

The Advisory Committee includes among its membership a representative from the agricultural sector who is a worker as it is defined in the Worker Protection Standard.

Currently, the EPA defines a worker as:¹²⁹

any person, including a self-employed person, who is employed for any type of compensation and who is performing activities relating to the production of agricultural plants on an agricultural establishment to which [the Worker Protection Standard] applies.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the fifth criterion questions whether the composition of the agency's board or commission represents the public interest and whether the agency encourages public participation in its decisions rather than participation only by the people it regulates.

¹²⁹ 40 C.F.R. § 170.3.

As the Department enforces the Worker Protection Standard, which is intended to protect agricultural workers from harm related to pesticides, it is worthwhile to include a representative on its Advisory Committee. The workers' perspective related to the use of pesticides is unique and valuable, and the Department should endeavor to find agricultural workers who are available to sit on the Advisory Committee.

Unfortunately, finding an agricultural worker to sit on the Advisory Committee is not an easy task. Agricultural workers are generally not available during the day. If they take time off, they must obtain leave from their employer and their employer's permission to participate in the Advisory Committee meetings, or they might not get paid, which could be particularly devastating for lower wage earners. Additionally, agricultural workers may fear retaliation or reprisals in case they mention something their employers or fellow workers disagree with.

While an agricultural worker has first-hand knowledge of current practices in agricultural settings to bring to the Advisory Committee meetings, if one cannot be found, the interests of these types of workers should still be represented.

There are two ways that this may be accomplished.

First, a former agricultural worker could be appointed instead of someone who is currently working as an agricultural worker. While a former worker would not have first-hand knowledge of current conditions, they would have in-depth knowledge of the conditions these workers generally face, and they would not be required to risk their livelihood by attending committee meetings or speaking up. Additionally, a former agricultural worker may have friends or know others who are currently working in agricultural settings, and they could attain knowledge of current conditions through these means.

Second, an organization that works on behalf of agricultural workers could act as a representative for workers. As this person would understand the issues that workers face in agricultural settings and would likely have a broader understanding than any individual worker could bring to the table, a representative from this type of organization could provide valuable information that might not otherwise be considered by the committee members.

It may be preferable to have a worker who is actively engaged in agriculture. However, if one cannot be found, other options should be considered.

Therefore, the General Assembly should allow a former agricultural worker or an advocate for agricultural workers or representative of a community-based organization that serves agricultural workers to sit on the Advisory Committee in case the Agricultural Commission is unable to appoint a representative who is currently engaged as an agricultural worker.

Recommendation 10 - Limit the number of terms that members of the Pesticide Advisory Committee may serve to no more than two consecutive three-year terms, with some exceptions.

The Act specifies that Advisory Committee member terms are limited to three years, but it does not specify the number of terms that a member may serve.

Term limits are standard for boards, committees and other public bodies in Colorado state government. The Governor is limited to two terms and members of the General Assembly also have term limits. Additionally, virtually all of the members of the professional licensing boards in the Department of Regulatory Agencies are subject to term limits.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the fifth criterion questions whether the composition of the agency's board or commission represents the public interest.

Proponents of term limits argue that they ensure new people are provided an opportunity to serve. New people bring new ideas and fresh perspectives. Proponents also argue that term limits help to reduce the likelihood of boards or committees from becoming dominated by a single, long-serving member.

Opponents of term limits, on the other hand, contend that they degrade institutional memory because turnover removes long-serving members that possess knowledge about an institution's history.

The argument against term limits is far less convincing when it comes to service on the Advisory Committee. The Department staff already provides the institutional memory. Further, the Advisory Committee is an advisory body, which supports the argument that new people should be provided the opportunity to serve and present new ideas.

Currently, the Commissioner has a policy that limits terms of commission, board and committee members within the Department. As this policy is subject to change at any time, it is preferable to codify term limits into statute.

That said, three positions on the Advisory Committee should be exempted from any term limits since they have, historically, been held by individuals in specific positions:

- The representative from Colorado State University, and
- The two representatives from the Colorado Department of Public Health and Environment.

Therefore, other than the seats detailed in sections 35-10-125(2)(g) and (h), C.R.S., the General Assembly should establish term limits for members of the Advisory Committee so that no member may serve more than two consecutive three-year terms.

Recommendation 11 - Duplicate the requirement to report local ordinances to the Commissioner in the sections of law that directly relate to local government.

If a local government adopts an ordinance related to pesticides, the Act currently requires it to report the enacted ordinance to the Commissioner.

According to the Department, over the last two decades, no local governments have filed any ordinances with the Commissioner without first being asked to do so.

Instead, pesticide applicators typically contact the Department to complain about an ordinance that conflicts with state law. Then, the Department follows up with the local authority to obtain the ordinance, review it and discuss any issues if the ordinance is found to conflict with the Act.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the third criterion questions whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes, and the fourth criterion questions whether the agency performs its statutory duties efficiently and effectively.

As the Act governs pesticide applicators, local jurisdictions may not be familiar with this requirement. In order to bring it to the attention of local governments, it may be beneficial to mirror this requirement in the sections of law that directly relate to local government. If cities, towns and counties were aware of this requirement, they would be more likely to comply with it, and any issues with local ordinances could be addressed without delay.

Therefore, the General Assembly should mirror the requirement located in section 35-10-112.5(4), C.R.S., in the sections of law that directly relate to local government.

Administrative Recommendation 1 - The Department should eliminate the ongoing practice in which enforcement activities are primarily limited to issuing cease and desist orders and civil penalties, and it should instead apply the enforcement tool that is appropriate to each case and that best serves to protect the public.

Prior to the current backlog of cases, the Department previously experienced another backlog, which led to certain practices that continue today. In order to streamline case resolution, the Department began focusing its enforcement efforts on issuing cease and desist orders, civil penalties and, when the conduct persists, seeking injunctions.

When a violation is found to have occurred, in addition to the above enforcement actions, the Commissioner also has the authority to issue a letter of admonition, impose

discipline through a stipulation, impose probation, or restrict a registration or license, suspend, refuse to renew, and revoke a license or registration.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the seventh criterion questions whether the complaint, investigations and disciplinary procedures adequately protect the public and whether final dispositions are in the public interest or self-serving to the profession.

While a civil penalty is likely appropriate in many instances, in some cases, other enforcement actions may result in better public protection. For example, it may be appropriate for additional training or education to be required. If this is the case, issuing a fine is unlikely to protect the public.

In order to create a more effective regulatory program, the Department should eliminate the ongoing practice in which enforcement activities are primarily limited to issuing cease and desist orders and civil penalties, and it should instead apply the enforcement tool that is appropriate to each case and that best serves to protect the public.

Administrative Recommendation 2 - The Department should prioritize hiring inspectors who are bilingual.

The Department is charged with enforcing the federal Worker Protection Standard, a federal law created to protect agricultural workers from pesticide poisoning and injury, and it conducts inspections to ensure compliance with it.

However, at this time, the program only has one bilingual inspector.

Workers in agricultural settings often only speak Spanish. In fact, two-thirds of surveyed agricultural workers reported that Spanish is their primary language. Approximately 68 percent of agricultural workers do not speak English well, and about 29 percent of agricultural workers speak no English at all.¹³⁰

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the third criterion questions whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes, rules, procedures, and practices and any other circumstances, including budgetary, resource and personnel matters.

Without bilingual inspectors, it is difficult for Colorado to protect agricultural workers from pesticide poisoning and injury.

¹³⁰ Findings from the National Agricultural Workers Survey 2019-2020: A Demographic and Employment Profile of United States Farmworkers (Research Report No. 16), U.S. Department of Labor, Employment and Training Administration (January 2022), p. 13.

Inspectors are required to share and gather information related to pesticide use and misuse. Having inspectors who are bilingual would likely increase compliance with the Worker Protection Standard, and it would also help the program to build a stronger rapport with agricultural workers.

The Department understands that this is an issue and has taken steps to address it. For instance, the Department has worked with Colorado State University to develop materials so that inspectors can communicate with non-English speaking workers in a rudimentary way. In the past, the program has also sent its English-speaking inspectors to foreign language courses. The Department also uses Language Line, which provides language interpreters through a phone call or conference line.

Even so, in a current job posting for a position as a pesticide inspector, language skills are not mentioned in the posting. While the measures that the Department has taken to address this issue are commendable, the Department should focus on actively recruiting bilingual inspectors, and fluency in Spanish, and other languages commonly spoken by agricultural and pesticide workers who are not fluent in English, should, at a minimum, be listed as a preferred competency.

To increase its effectiveness, the Department should prioritize hiring bilingual inspectors.

Administrative Recommendation 3 - The Department should immediately develop and implement a recordkeeping system to track and categorize complaints.

During the sunset review, COPRRR requested complaint data from the Department. While the Department maintains a file of complaints and has a database that tracks complaints, it was unable to provide detailed information about the type of complaints it receives. Broadly, the Department reported the total number of pesticide misuse complaints related to human, animal, property and wilderness areas. However, it was unable to break down this information into more detailed complaint categories without reading each complaint file.

Complaints related to pesticide misuse can cover a variety of different types of complaints, including drift, overspray and treating the wrong target. Complaints related to misuse may also concern using too much product or using the wrong product according to label directions.

Additionally, the Department reported a significant number of complaints categorized as “Other.” These complaints were not related to pesticide misuse, but the Department could not provide detailed data related to these complaints by type. Complaints categorized as “Other” may concern technician training cases, administrative records, public notification, improper signage, inadequate or incomplete records, and improper

signage on vehicles or equipment. They may also concern cases in which individuals or entities were operating without a license when one was required.

Sunset reviews are guided by statutory criteria found in section 24-34-104, C.R.S., and the third, fourth and seventh criteria question:

- Whether the agency operates in the public interest and whether its operation is impeded or enhanced by existing statutes, rules, procedures, and practices and any other circumstances, including budgetary, resource and personnel matters;
- Whether the agency performs its statutory duties efficiently and effectively; and
- Whether complaint, investigation and disciplinary procedures adequately protect the public.

Tracking complaints by type is important for several reasons. For one, it is important for management to know how many and what types of complaints the Department is receiving to help gauge the effectiveness of the program.

Complaint data can also provide important information necessary for public protection. Trends in complaint data may demonstrate a need to provide additional information to licensees or to the public, or they may demonstrate a need to change its study guides, licensing examinations or training requirements. Additionally, complaint data are often of interest to policymakers since they may demonstrate a need to make changes to the Act or the Commissioner's rules.

Moreover, the Department should track every complaint that comes into the Department, including non-jurisdictional complaints. The Department often receives complaints by telephone, and it is not clear that the Department records every complaint call that it receives including non-jurisdictional complaints. Non-jurisdictional complaint data is also useful for management and policymakers.

Maintaining complaint statistics takes the guesswork out of decision-making, providing objective facts that management and policymakers can rely on.

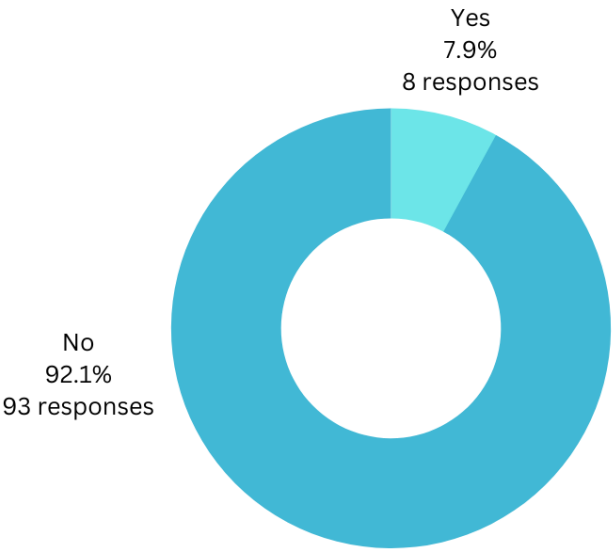
Currently, the Department is working with the Office of Information Technology to develop a database to track complaint data. It reports that completion of this database will likely take several years. In the meantime, the Department should develop and implement a system to track detailed complaint data. For example, the Department could create a spreadsheet to record this information until the database is completed.

For these reasons, the Department should immediately develop a recordkeeping system to track and categorize complaints, including tracking non-jurisdictional complaints and complaints categorized as "Other."

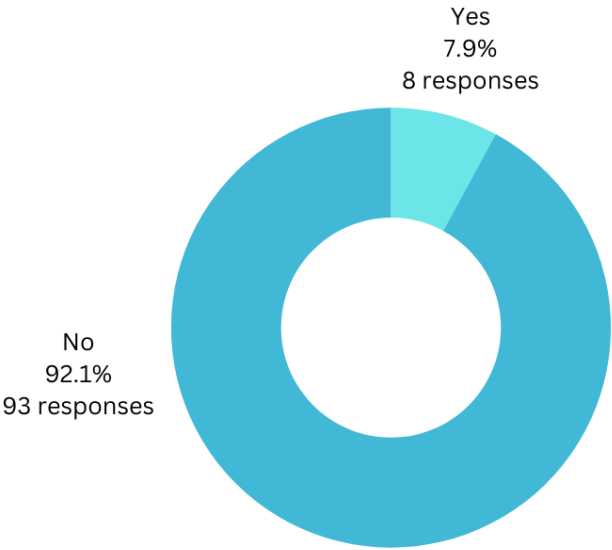
Appendix A - Local Government Survey

Section 35-10-128, C.R.S., requires COPRRR to report on the extent of local regulation of pesticides in Colorado. Consequently, COPRRR staff surveyed municipalities and counties. The response rate was 31 percent.

Has your city, town, county, or city and county enacted a watershed protection ordinance concerning pesticides pursuant to section 31-15-707(1)(b), C.R.S.?



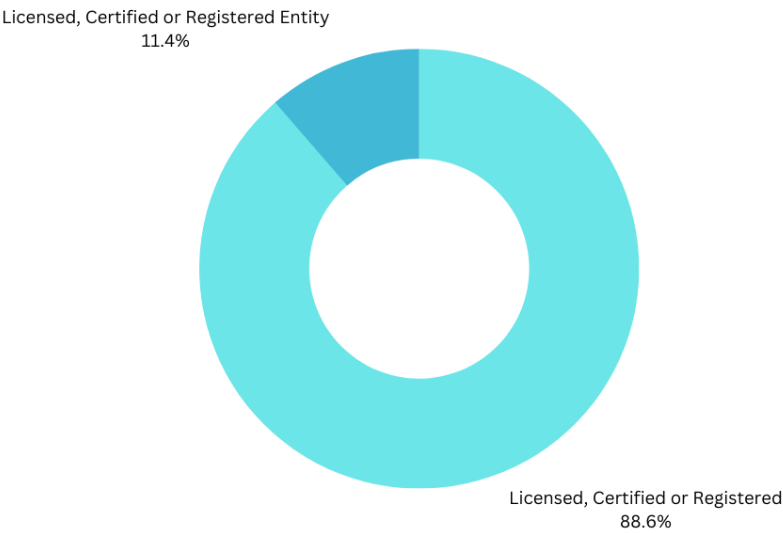
Has your city, town, county, or city and county enacted any other ordinances or regulations concerning pesticides?



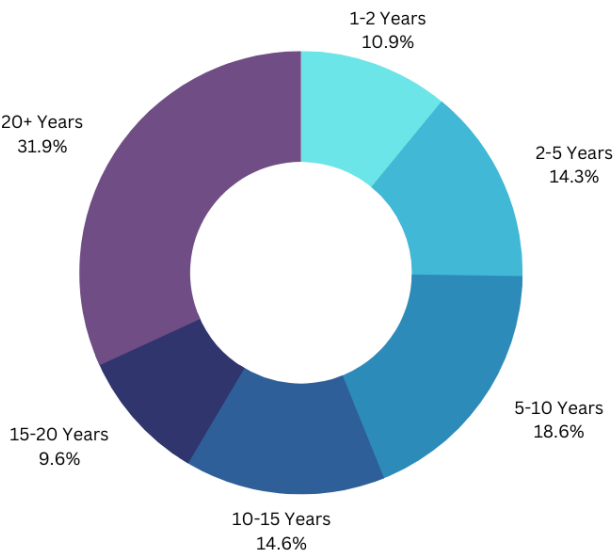
Appendix B - Customer Service Survey

In the spring of 2022, the Colorado Office of Policy, Research and Regulatory Reform staff conducted a survey of all pesticide applicators, entities and individuals, who are licensed or registered by the Commissioner of Agriculture. The survey was sent to 8,368 pesticide applicators; 348 emails were returned as undeliverable. The survey received 932 responses, which is a 12 percent response rate.

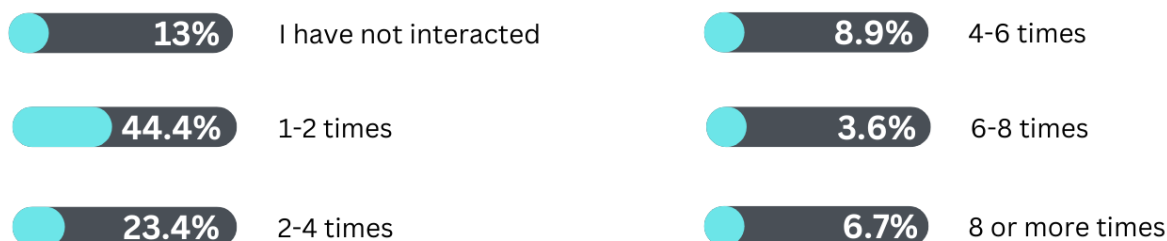
What is your relationship to the Pesticide Applicator Certification and Licensing Program?



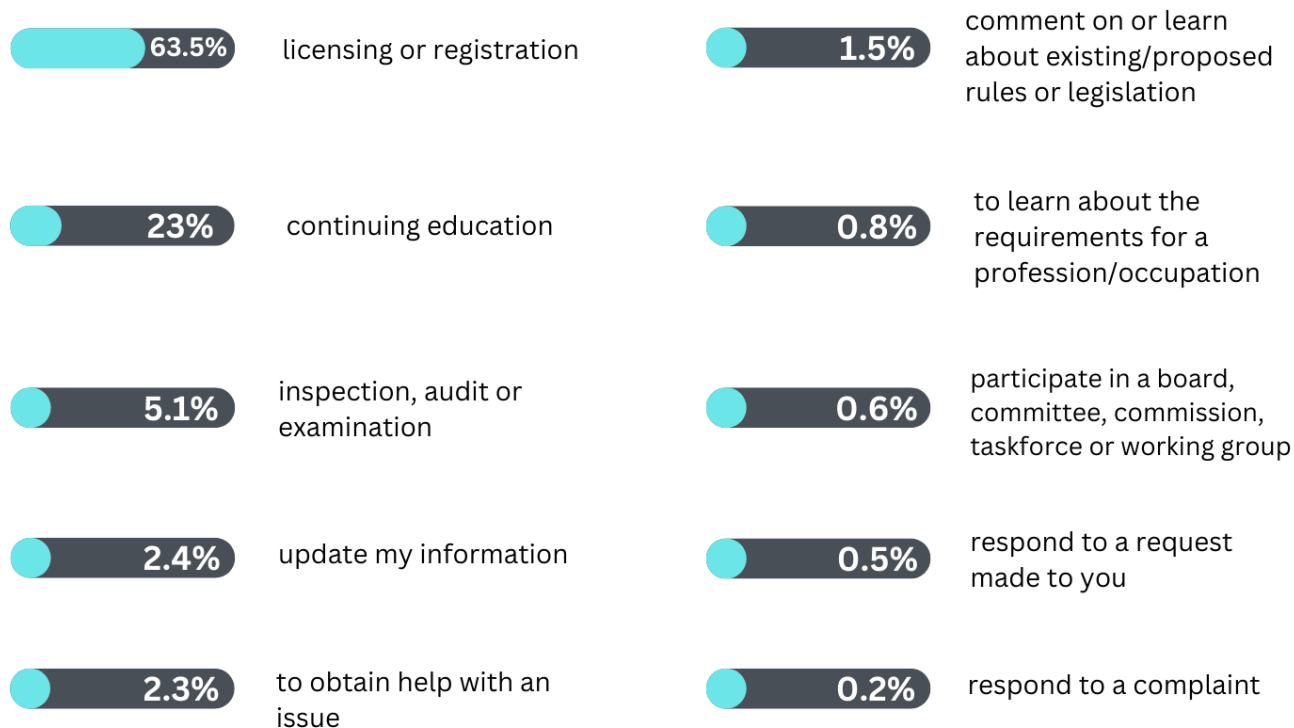
How many years have you worked or operated as a pesticide applicator?



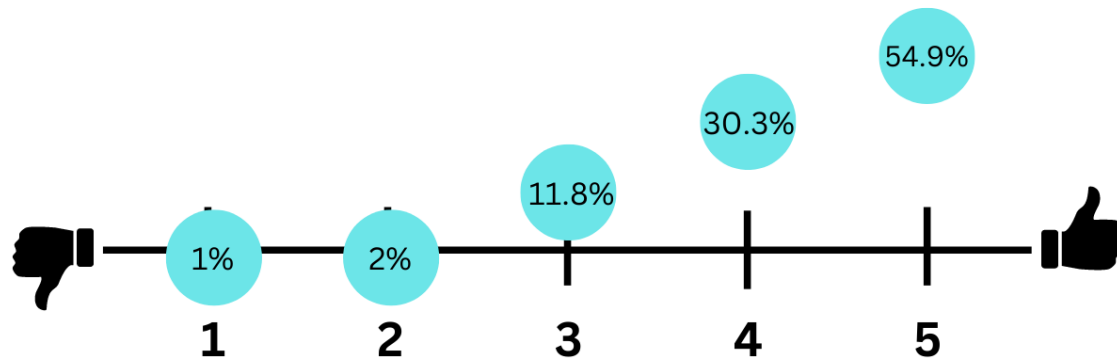
In the past year, how many times have you interacted with the Pesticide Applicator Certification and Licensing Program. Please count all forms of interaction (telephone, e-mail, internet or website, regular mail, in person).



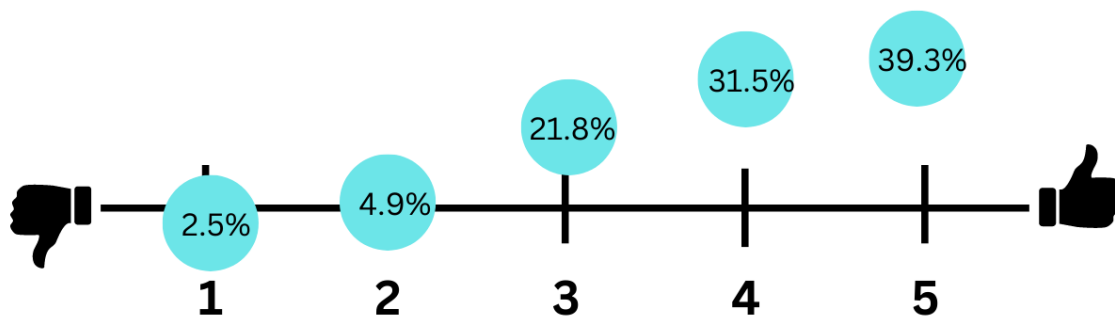
What was your primary purpose in interacting with the Pesticide Applicator Certification and Licensing Program?



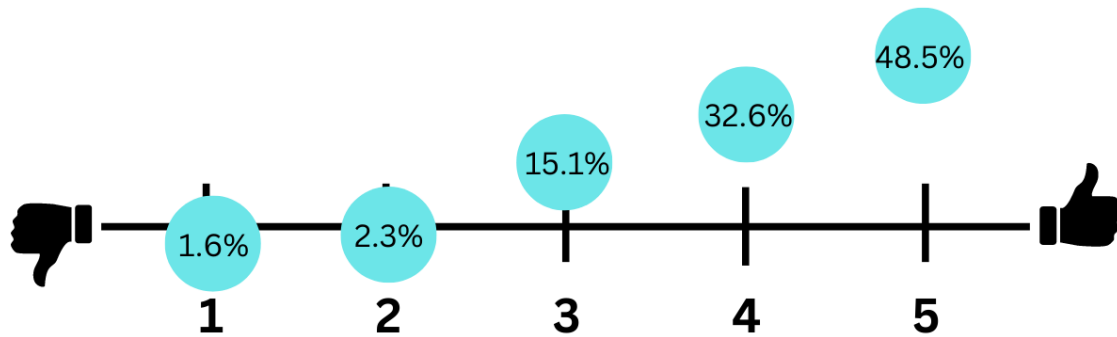
Overall please rate the service provided by the Pesticide Applicator Certification and Licensing Program on a scale of 1 to 5 with 1 being unacceptable and 5 being very acceptable.



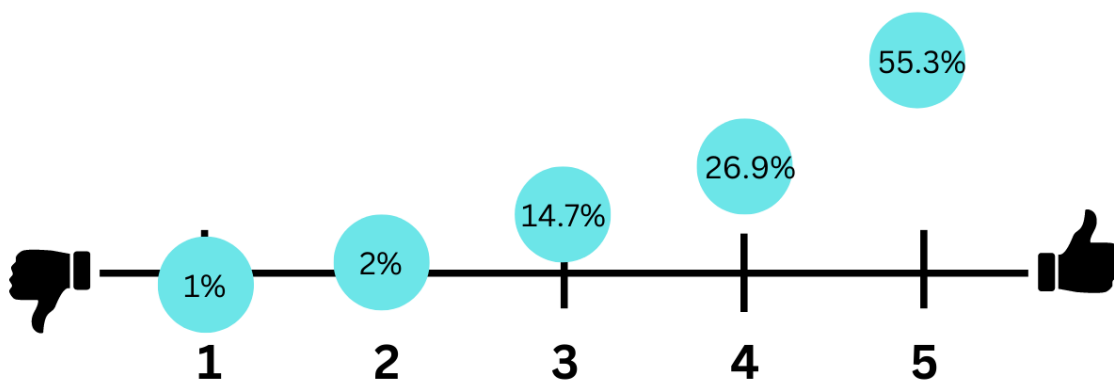
Please rate the the usefulness of the Pesticide Applicator Certification and Licensing Program's website in answering your questions or providing needed information on a scale of 1 to 5 with 1 being not very useful and 5 being very useful.



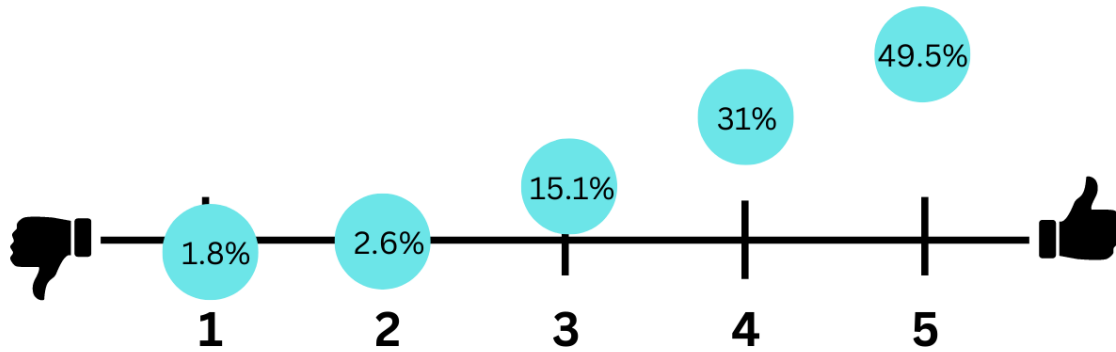
Please rate the usefulness of the Pesticide Applicator Certification and Licensing Program's communications in answering your questions or providing needed information on a scale of 1 to 5 with 1 being not very useful and 5 being very useful.



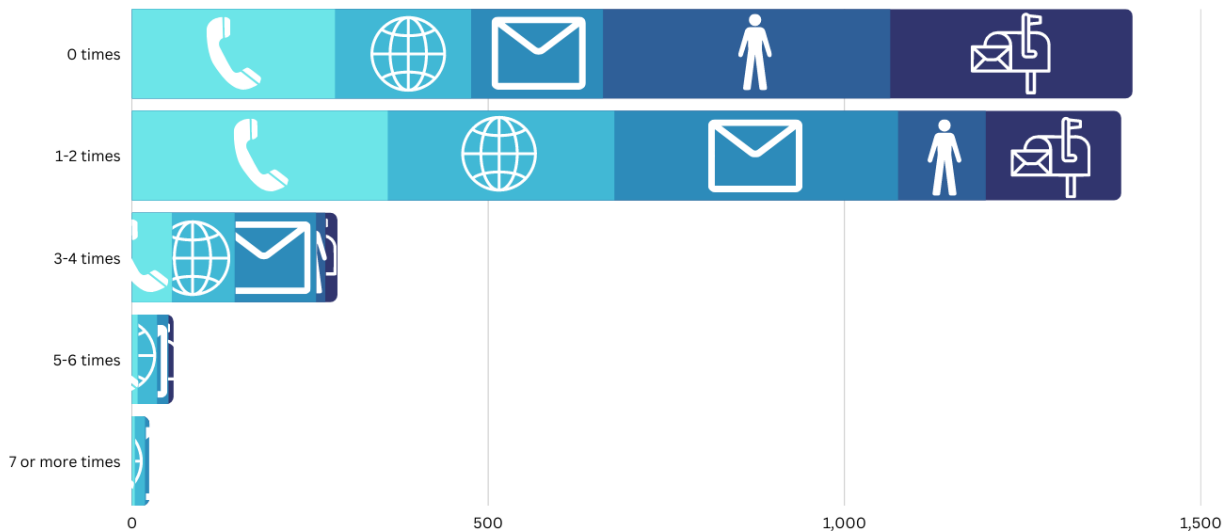
Regardless of the outcome of your most recent issue, do you feel the Pesticide Applicator Certification and Licensing Program listened to your concerns? Please use a scale of 1 to 5, with 1 being none of my concerns were heard and 5 being all of my concerns were heard.



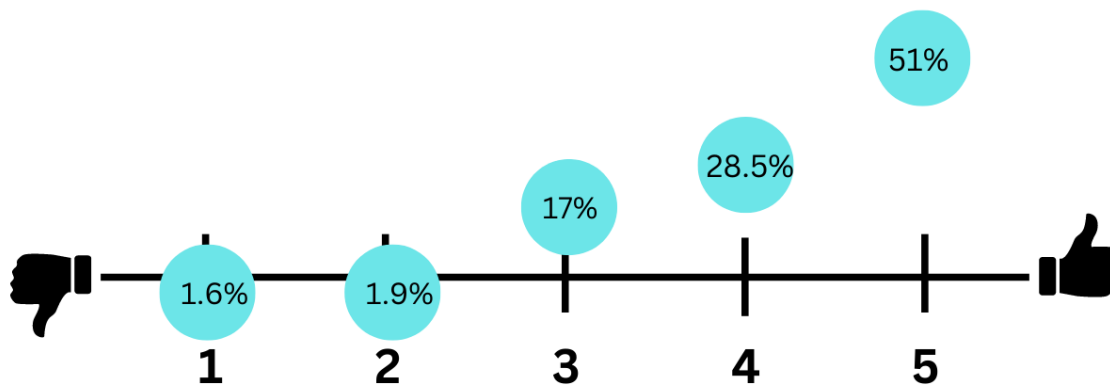
Please rate the timeliness of the Pesticide Applicator Certification and Licensing Program in responding to your issues on a scale of 1 to 5 with 1 being very untimely and 5 being very timely.



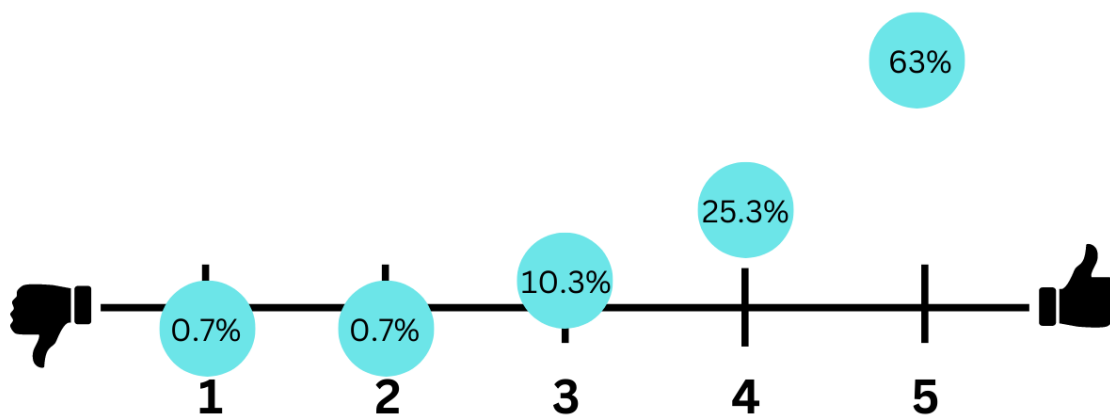
Please provide the number and types of interactions that were required to resolve or address your most recent issue. (Please select all applicable types of interactions used AND the number times for each type interaction selected.)



Please rate the helpfulness of (name of agency) in resolving your issue or need with 1 being not very helpful and 5 being very helpful.



Please rate the professionalism of the program's staff on a scale of 1 to 5 with 1 being very unprofessional and 5 being very professional.



On a scale of 1 to 5 please rate the accuracy of information provided by the agency with 1 being not very accurate and 5 being very accurate.

