



COLORADO

**Department of
Regulatory Agencies**

Colorado Office of Policy, Research &
Regulatory Reform

**2018 Sunset Review:
Colorado Fire Suppression Registration and
Inspection Program**

October 15, 2018



COLORADO

**Department of
Regulatory Agencies**

Executive Director's Office

October 15, 2018

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. Since that time, Colorado's sunset process has gained national recognition and is routinely highlighted as a best practice as governments seek to streamline regulation and increase efficiencies.

Section 24-34-104(5)(a), Colorado Revised Statutes (C.R.S.), directs the Department of Regulatory Agencies to:

- Conduct an analysis of the performance of each division, board or agency or each function scheduled for termination; and
- Submit a report and supporting materials to the office of legislative legal services no later than October 15 of the year preceding the date established for termination.

The Colorado Office of Policy, Research and Regulatory Reform (COPRRR), located within my office, is responsible for fulfilling these statutory mandates. Accordingly, COPRRR has completed the evaluation of the Colorado Fire Suppression Registration and Inspection Program. I am pleased to submit this written report, which will be the basis for COPRRR's oral testimony before the 2019 legislative committee of reference.

The report discusses the question of whether there is a need for the regulation provided under portions of Part 12, of Article 33.5, of Title 24, C.R.S. The report also discusses the effectiveness of the Colorado Department of Public Safety's Division of Fire Prevention and Control in carrying out the intent of the statutes and makes recommendations for statutory changes in the event this regulatory program is continued by the General Assembly.

Sincerely,

Marguerite Salazar
Executive Director





COLORADO

Department of Regulatory Agencies

Colorado Office of Policy, Research &
Regulatory Reform

2018 Sunset Review Colorado Fire Suppression Registration and Inspection Program

SUMMARY

What is regulated?

Fire suppression systems are also referred to as fire sprinklers. The Colorado Fire Suppression Registration and Inspection Program (Program), located in the Department of Public Safety's Division of Fire Prevention and Control (DFPC), registers fire suppression contractors and a qualifies inspectors. It inspects fire suppression systems in public schools, hospitals, and in areas that do not have a local authority to do so.

Why is it regulated?

The Program endeavors to make certain that the life safety safeguards are installed and maintained properly.

Who is regulated?

During 2017, the Program registered:

148 – Suppression Contractors
2 - Suppression Contractors: Residential
144 – Suppression Contractors: Backflow
203 - Suppression Contractors: Underground

During 2017, the Program certified:

71 - Suppression Inspectors
185 - Suppression Plan Reviewers
2 - Suppression Inspectors: Residential

How is it regulated?

Registration is required of any individual or company who physically works on or employs individuals who physically work on fire protection systems. Any installation, modification, alteration, or repair of a fire suppression system is required to be approved by a certified fire suppression systems inspector.

What does it cost?

During fiscal year 16-17, the Division of Fire Prevention and Control expended \$113,418 and allotted 1.1 full-time equivalent employees to Program activities.

What disciplinary activity is there?

When an investigation finds evidence of criminal activity, the case must be referred to a law enforcement agency. During fiscal year 16-17, the DFPC took 21 disciplinary actions and referred 12 of those to law enforcement.

KEY RECOMMENDATIONS

Continue the Program for seven years, until 2026.

Fire suppression systems are potentially life-saving systems. Notwithstanding the advantages, the National Fire Protection Association found that up to 12 percent of installed systems operated ineffectively or they failed to operate when activated. A system can only protect lives if it is the right system and is installed correctly. The Program was established to certify that fire suppression systems installed in buildings are installed correctly and maintained properly and therefore it should be continued by the General Assembly.

METHODOLOGY

As part of this review, Colorado Office of Policy, Research and Regulatory Reform staff attended a Fire Suppression Advisory Committee meeting; interviewed DFPC staff, contractors, and fire officials; observed a facility inspection; reviewed records; interviewed officials with state professional associations; and reviewed Colorado statutes and rules.

MAJOR CONTACTS MADE DURING THIS REVIEW

Colorado Chapter of the International Code Council
Colorado Department of Public Safety-Division of Fire Prevention and Control
Fire Marshals' Association of Colorado
National Fire Sprinkler Association
North Metro Fire Rescue
South Metro Fire Authority
Safebuilt

What is a Sunset Review?

A sunset review is a periodic assessment of state boards, programs, and functions to determine whether they should be continued by the legislature. Sunset reviews focus on creating the least restrictive form of regulation consistent with protecting the public. In formulating recommendations, sunset reviews consider the public's right to consistent, high quality professional or occupational services and the ability of businesses to exist and thrive in a competitive market, free from unnecessary regulation.

Sunset Reviews are prepared by:
Colorado Department of Regulatory Agencies
Colorado Office of Policy, Research and Regulatory Reform
1560 Broadway, Suite 1550, Denver, CO 80202
www.dora.colorado.gov/opr



Table of Contents

Background	1
Introduction	1
Types of Regulation	2
Licensure	2
Certification	3
Registration	3
Title Protection	3
Regulation of Businesses	4
Sunset Process	4
Methodology	4
Profile of the Profession	5
Legal Framework	6
History of Regulation	6
Legal Summary	6
Program Description and Administration.....	11
Regulation of Professionals.....	11
Inspections.....	14
Complaints and Discipline	15
Collateral Consequences - Criminal Convictions	16
Analysis and Recommendations	17
Recommendation 1 - Continue the Colorado Fire Suppression Registration and Inspection Program for seven years, until 2026.	17

Background

Introduction

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 based on the following statutory criteria:

- 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;
- 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;
- 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 an analysis of agency operations indicates that the agency performs its statutory duties efficiently and effectively;
- 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;
- The economic impact of regulation and, if national economic information is not available, whether the agency stimulates or restricts competition;
- 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;
- Whether the scope of practice of the regulated occupation contributes to the optimum utilization of personnel and whether entry requirements encourage affirmative action;

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

-
- Whether the agency through its licensing or certification process imposes any disqualifications on applicants based on past criminal history and, if so, whether the disqualifications serve public safety or commercial or consumer protection interests. To assist in considering this factor, the analysis prepared pursuant to subparagraph (i) of paragraph (a) of subsection (8) of this section shall include data on the number of licenses or certifications that were denied, revoked, or suspended based on a disqualification and the basis for the disqualification; and
 - Whether administrative and statutory changes are necessary to improve agency operations to enhance the public interest.

Types of Regulation

Consistent, flexible, and fair regulatory oversight assures consumers, professionals and businesses an equitable playing field. All Coloradans share a long-term, common interest in a fair marketplace where consumers are protected. Regulation, if done appropriately, should protect consumers. If consumers are not better protected and competition is hindered, then regulation may not be the answer.

As regulatory programs relate to individual professionals, such programs typically entail the establishment of minimum standards for initial entry and continued participation in a given profession or occupation. This serves to protect the public from incompetent practitioners. Similarly, such programs provide a vehicle for limiting or removing from practice those practitioners deemed to have harmed the public.

From a practitioner perspective, regulation can lead to increased prestige and higher income. Accordingly, regulatory programs are often championed by those who will be the subject of regulation.

On the other hand, by erecting barriers to entry into a given profession or occupation, even when justified, regulation can serve to restrict the supply of practitioners. This not only limits consumer choice, but can also lead to an increase in the cost of services.

There are also several levels of regulation.

Licensure

Licensure is the most restrictive form of regulation, yet it provides the greatest level of public protection. Licensing programs typically involve the completion of a prescribed educational program (usually college level or higher) and the passage of an examination that is designed to measure a minimal level of competency. These types of programs usually entail title protection - only those individuals who are properly licensed may use a particular title(s) - and practice exclusivity - only those individuals who are properly licensed may engage in the particular practice. While these requirements can be viewed as barriers to entry, they also afford the highest level of consumer protection in that they ensure that only those who are deemed competent may practice and the public is alerted to those who may practice by the title(s) used.

Certification

Certification programs offer a level of consumer protection similar to licensing programs, but the barriers to entry are generally lower. The required educational program may be more vocational in nature, but the required examination should still measure a minimal level of competency. Additionally, certification programs typically involve a non-governmental entity that establishes the training requirements and owns and administers the examination. State certification is made conditional upon the individual practitioner obtaining and maintaining the relevant private credential. These types of programs also usually entail title protection and practice exclusivity.

While the aforementioned requirements can still be viewed as barriers to entry, they afford a level of consumer protection that is lower than a licensing program. They ensure that only those who are deemed competent may practice and the public is alerted to those who may practice by the title(s) used.

Registration

Registration programs can serve to protect the public with minimal barriers to entry. A typical registration program involves an individual satisfying certain prescribed requirements - typically non-practice related items, such as insurance or the use of a disclosure form - and the state, in turn, placing that individual on the pertinent registry. These types of programs can entail title protection and practice exclusivity. Since the barriers to entry in registration programs are relatively low, registration programs are generally best suited to those professions and occupations where the risk of public harm is relatively low, but nevertheless present. In short, registration programs serve to notify the state of which individuals are engaging in the relevant practice and to notify the public of those who may practice by the title(s) used.

Title Protection

Finally, title protection programs represent one of the lowest levels of regulation. Only those who satisfy certain prescribed requirements may use the relevant prescribed title(s). Practitioners need not register or otherwise notify the state that they are engaging in the relevant practice, and practice exclusivity does not attach. In other words, anyone may engage in the particular practice, but only those who satisfy the prescribed requirements may use the enumerated title(s). This serves to indirectly ensure a minimal level of competency - depending upon the prescribed preconditions for use of the protected title(s) - and the public is alerted to the qualifications of those who may use the particular title(s).

Licensing, certification and registration programs also typically involve some kind of mechanism for removing individuals from practice when such individuals engage in enumerated proscribed activities. This is generally not the case with title protection programs.

Regulation of Businesses

Regulatory programs involving businesses are typically in place to enhance public safety, as with a salon or pharmacy. These programs also help to ensure financial solvency and reliability of continued service for consumers, such as with a public utility, a bank or an insurance company.

Activities can involve auditing of certain capital, bookkeeping and other recordkeeping requirements, such as filing quarterly financial statements with the regulator. Other programs may require onsite examinations of financial records, safety features or service records.

Although these programs are intended to enhance public protection and reliability of service for consumers, costs of compliance are a factor. These administrative costs, if too burdensome, may be passed on to consumers.

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: www.dora.colorado.gov/opr.

The regulatory functions of the Colorado Division of Fire Prevention and Control (DFPC), in the Department of Public Safety as enumerated in sections 1204.5, 1206.1 through 1206.6, and 1207.6, of Article 33.5, of Title 24, Colorado Revised Statutes (C.R.S.), shall terminate on September 1, 2019, 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 fire suppression program pursuant to section 24-34-104, C.R.S.

The purpose of this review is to determine whether the currently prescribed regulation should be continued and to evaluate the performance of the DFPC. During this review, the DFPC 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, Colorado Office of Policy, Research and Regulatory Reform staff attended a Fire Suppression Advisory committee meeting; interviewed DFPC staff, contractors, and fire officials; interviewed officials with state professional associations; observed a facility inspection; reviewed records and Colorado statutes and rules.

Profile of the Profession

Fire suppression systems, also referred to as fire sprinklers, were invented in the United Kingdom in 1864. These systems are the most common type of fixed fire protection system. More than 40 million sprinklers are fitted worldwide each year.²

Most often, fire sprinkler systems are networks of pipes supplied with water and sprinkler heads fitted at recommended intervals. Sprinkler heads can be placed in various places in a building such as enclosed roof spaces, floor ducts, in the storage racks, as well as a roof. When heat is applied from a fire, water flows through the sprinkler head. Hot gases from a fire raise the temperature and when the area close to the head reaches a specified temperature, the sprinkler head will spray the fire. The sprinklers over the fire should be the only heads that turn on and the others should remain closed limiting damage and reducing the amount of water needed.³

Because sprinklers react quickly, they reduce heat, flames, and smoke, which provides people an opportunity to evacuate. In homes that do not have systems, a fire may grow to perilous levels before the fire department arrives. The systems can reduce property damage and save lives.

Sprinkler systems are installed by contractors who follow National Fire Protection Association codes and standards as well as any other local requirements.

Because systems are used in many different settings, different types have developed over time. The different types include pre-action, dry pipe, wet pipe, and deluge. Each type has its own unique set of characteristics that protect the type of building and property where it is installed.⁴

Installations in Colorado must be performed by a registered contractor and inspected by a certified inspector. The DFPC is responsible for the registration of qualified installation contractors and the certification of qualified inspectors.

Though the systems are very similar to plumbing, they are not considered plumbing. They are exempt from plumbing regulation with one exception – a multipurpose system attached directly to a building’s plumbing system without a backflow device. Such a system is part of the building’s plumbing system and is therefore considered plumbing. These systems must be installed by licensed plumbers and inspected by local or state plumbing inspectors.

² Fire Safety Advice Centre. *Industrial Fire Sprinklers*. Retrieved January 31, 2018, from <https://www.firesafe.org.uk/industrial-fire-sprinklers/>

³ *ibid.*

⁴ Fireline, *4 Types of Fire Sprinkler Systems*. Retrieved January 31, 2018, from <https://www.fireline.com/blog/4-types-fire-sprinkler-systems/>

Legal Framework

History of Regulation

The Colorado Fire Suppression Registration and Inspection Program (Program) began on January 1, 1991. The purpose of the Program is to ensure that the life safety systems installed in buildings are installed and maintained properly, according to nationally recognized standards.⁵

Since its inception, there have been few major changes to the Program. Following recommendations in the 2005 sunset report, the Director of the Division of Fire Prevention and Control (Director and DFPC, respectively) was required by the General Assembly to maintain records of applications, complaints, investigations, and disciplinary actions and maintain a system to track complaints. The Director was also given the power to issue letters of admonition, when necessary, as a form of discipline.

Legal Summary

Statutes in Part 12 of Article 33.5, Title 24 (Part 12) Colorado Revised Statutes (C.R.S.) govern the operation of the DFPC. Part 12 authorizes the entire DFPC, sections of which are the subject of this sunset review.

The Program has two main regulatory components: a registration component which registers fire suppression professionals and qualifies system inspectors, and a fire suppression inspection component which records, reviews, and inspects fire suppression systems. The Director is instructed by statute to establish a fire suppression contractor registration program and to adopt rules necessary to implement the Program.⁶

The Director is also instructed to:

- Establish fees and charges to defray the costs of administration;⁷
- Maintain records of all applications, complaints, investigations, disciplinary or other actions, and registrants;⁸
- Receive, investigate, and act upon complaints against people who violate the laws or rules associated with the Program;⁹
- Conduct disciplinary hearings, issue subpoenas, compel attendance of witnesses, compel the production of books, records, papers, and documents, administer oaths to persons giving testimony at hearings, and recommend prosecution of persons who are in violation of Program laws and rules;¹⁰

⁵ 8 CCR 1507-11 § 1, Fire Suppression Rules

⁶ § 24-33.5-1204.5(1)(a), C.R.S.

⁷ § 24-33.5-1204.5(1)(b), C.R.S.

⁸ § 24-33.5-1204.5(1)(d)(I), C.R.S.

⁹ § 24-33.5-1204.5(1)(c), C.R.S.

¹⁰ § 24-33.5-1204.5(1)(e), C.R.S.

-
- Implement a tracking system, separate from the individual records of fire suppression contractors and inspectors, regarding the disposition of complaints;¹¹
 - Establish a program for the inspection of health facilities and review of system plans for areas where there is no local building department or fire department. The program must include the certification of health facility life safety inspectors;¹² and
 - Provide an online complaint form and internet access to the tracking system.¹³

Contractor Registration

Colorado has a mandatory practice provision which states that, “No person shall act, assume to act, or advertise as a fire suppression contractor” who is not registered as a fire suppression contractor with the Director.¹⁴ This means that any individual or company who physically works on or installs, or employs someone who physically works on or installs, any part of a fire protection system must be registered.¹⁵ In fact, statute prohibits an unregistered person from bringing legal action to collect for any services for which registration is required.¹⁶

There are limited registration exemptions for building owners and for individuals or companies that install pre-engineered range hoods and duct extinguishing systems.¹⁷ State registration does not, however, exempt a contractor from any locally required licenses or permits.¹⁸

A violation of the contractor registration provisions warrants criminal, class 3 misdemeanor, sanctions.¹⁹ If the violator is an individual, he or she may be fined between \$50 and \$750, sentenced to six months in jail, or both.²⁰ If the violator is a corporation, conviction means a fine of no more than \$5,000. Any subsequent violation is a class 2 misdemeanor,²¹ conviction of which carries a sentence of 3 to 12 months in jail, a \$250 to \$1,000 fine, or both.²²

Moreover, a person commits a class 1 misdemeanor when he or she, knowingly and willfully, makes any false statement or conceals a material fact in any application, form, claim, advertisement, contract, warranty, guarantee, or statement, with the intent to influence the actions or decisions of any owner or contractor negotiating or contracting for the installation, alteration, or repair of any fire suppression system, or to any bonding agent.²³

¹¹ § 24-33.5-1204.5(2)(a), C.R.S.

¹² § 24-33.5-1204.5(1)(f.5), C.R.S.

¹³ § 24-33.5-1204.5(2)(b), C.R.S.

¹⁴ § 24-33.5-1206.1(1), C.R.S.

¹⁵ 8 CCR 1507-11 §§ 3.1 and 3.2, Fire Suppression Rules.

¹⁶ § 24-33.5-1206.6(4), C.R.S.

¹⁷ 8 CCR 1507-11 § 3.1, Fire Suppression Rules.

¹⁸ § 24-33.5-1206.1(2), C.R.S.

¹⁹ § 24-33.5-1206.5(1), C.R.S.

²⁰ § 18-1.3-501, C.R.S.

²¹ § 24-33.5-1206.5(1), C.R.S.

²² § 18-1.3-501, C.R.S.

²³ § 24-33.5-1206.5(2), C.R.S.

If convicted, the person can be fined between \$500 and \$5,000, sentenced up to 18 months in prison, or both.²⁴

A registered contractor is responsible for all actions of his or her agents and employees.²⁵ That responsibility includes making sure that all installations are executed by qualified individuals, designed and installed to appropriate standards, and ensuring all inspections and tests are completed.²⁶ The contractor must also furnish the user with operating instructions for the equipment installed and diagrams of the final installation.²⁷

Inspector Certification

The Director sets training requirements for and certifies qualified system inspectors. Beyond completing the required training to become a certified inspector, an individual must:²⁸

- Be at least 18 years old;
- Not have committed any of the unlawful acts enumerated in the Program statutes; and
- Have satisfactorily completed the fire suppression systems inspector certification examination, demonstrate other such equivalent experience, such as a nationally recognized certification, or have a current and valid certification from a jurisdiction with equivalent requirements.

An inspector certification is valid for three years. Renewal requires submitting a renewal application and completing any other renewal requirements prescribed by the Director, including passing an examination.²⁹

Discipline

The Director may withhold, deny, suspend, or revoke the registration or certification of any applicant, registered fire suppression contractor, or certified fire safety inspector if he or she finds that any contractor or inspector did any of the following unlawful acts:³⁰

- Committed fraud or made a material deception in obtaining or renewing a registration or certification;
- Committed professional incompetence as manifested by poor, faulty, or dangerous workmanship;
- Engaged in conduct that is likely to deceive, defraud, or harm the public in the course of providing professional services;

²⁴ § 18-1.3-501, C.R.S.

²⁵ § 24-33.5-1206.1(3), C.R.S.

²⁶ §§ 24-33.5-1206.1(4) and 1206.3, C.R.S.

²⁷ § 24-33.5-1206.3(2), C.R.S.

²⁸ § 24-33.5-1206.4(3), C.R.S.

²⁹ § 24-33.5-1206.4(4), C.R.S.

³⁰ § 25-33.5-1206.6(2), C.R.S.

-
- Performed any services in a negligent manner or permitted any of its agents or employees to perform services in a grossly negligent manner, regardless of whether actual damage or damages to the public is established;
 - Received, directly, indirectly, or willfully, any compensation for professional services not actually rendered;
 - Failed to comply with any provision of the laws governing the DFPC or the standards or rules promulgated by the Director; or
 - Contracted with or assisted unregistered persons to perform services for which registration is required under the laws governing the DFPC.

An individual may be fined by the Director for violating any of the registration, inspection, review, and installation and maintenance provisions of the statutes. A first offense carries a fine of \$100 to \$1,000. Any subsequent offense incurs a fine of \$1,000 to \$10,000.³¹

When a complaint or investigation discloses an instance of misconduct that, in the opinion of the Director, does not warrant formal action but that should not be dismissed, the Director may issue a letter of admonition to the contractor or inspector. The letter of admonition must notify the fire suppression contractor or inspector of the right to request that formal disciplinary proceedings be initiated to settle the matter. The request must be made in writing within 20 days after receipt of the letter. If the request for a proceeding is made in a timely manner, the letter of admonition is vacated and formal disciplinary proceedings begin.³²

A person who lodges a complaint or provides testimony in a disciplinary matter is immune from civil liability in an action arising from being a witness or complainant. This immunity applies only if the person made a reasonable effort to obtain the facts and action was warranted by the facts.³³

Job Registration and Inspection

Any modification, alteration, or repair that affects the integrity of a suppression system must be registered with and be approved by, the Director or a local fire safety agency. The registration must include the name, address, and registration number of the contractor, the address and description of the job, and the name and address of the general contractor or of the building owner if there is no general contractor.³⁴

Working plans and hydraulic calculations must have the signature and certification number of either a licensed professional engineer or a level three or higher fire suppression engineering technician certified by the National Institute for the Certification in Engineering Technologists. The signature certifies that the plan and design meet the necessary standards and system requirements.³⁵

³¹ § 24-33.5-1206.6(1), C.R.S.

³² § 24-33.5-1206.6(6), C.R.S.

³³ § 24-33.5-1206.6(5), C.R.S.

³⁴ § 24-33.5-1206.2(1), C.R.S.

³⁵ § 24-33.5-1206.2(2)(a), C.R.S.

In conjunction with the inspection component of the Program, the Director is specifically tasked with establishing a public school and junior college construction and inspection program, and a health facility construction and inspection program.³⁶ The programs are administered by the Director, who may receive advice from an advisory committee.

Every installation, modification, alteration, or repair of a fire suppression system must be inspected and approved by a certified fire suppression systems inspector.³⁷ It is the responsibility of each county, municipality, or special district that has a fire suppression systems enforcement program to arrange for a certified fire suppression systems inspector.³⁸ If repeated deficiencies concerning any contractor are noted by any local inspection authority, the local authority must inform the Director about the contractor.³⁹

³⁶ §§ 24-33.5-1204.5(1)(f) and (1)(f.5), C.R.S.

³⁷ § 24-33.5-1206.4(1), C.R.S.

³⁸ § 24-33.5-1206.4(2), C.R.S.

³⁹ § 24-33.5-1206.2(2)(b), C.R.S.

Program Description and Administration

Colorado’s Fire Suppression Registration and Inspection Program (Program) is housed in the Department of Public Safety’s Division of Fire Prevention and Control (DFPC). The Program has two main charges, the regulation of system installation professionals and verifying the conformity of installations to established standards.

The Program is cash funded. Table 1 illustrates the expenses to operate the Program.

Table 1
Program Expenses
Fiscal Years 13-14 through 16-17

Fiscal Year	Total Program Expenditures	FTE
13-14	\$101,077	1.5
14-15	\$101,582	1.5
15-16	\$114,158	1.0
16-17	\$133,418	1.1

DFPC was able to provide data for this sunset review going back only four years. Typically, to give readers an accurate, longitudinal overview of programs under review, the Colorado Office of Policy, Research, and Regulatory Reform reports at least five years of data.

Table 1 shows that the monetary expenditures rose approximately 32 percent during the period under review but the number of full-time equivalent (FTE) employees was stable. Staff explained that the increase in expenditures was due to program operating expenses. DFPC employs 18 inspectors. However, the FTE in Table 1 is an estimation of the time allotted to this program for all DFPC staff.

Regulation of Professionals

An individual or company who employs a person that works on fire protection systems must be registered as a fire suppression system contractor.⁴⁰ Every applicant must submit a completed, signed application with the registration fee, currently \$100, to the DFPC.⁴¹ The applicant is required to be the principal of the company recorded with the Colorado Secretary of State’s Office.⁴² He or she must also submit proof that the company holds at least a \$1 million general liability insurance policy related to the installation of sprinkler systems.⁴³

⁴⁰ 8 CCR 1507-11 § 3.1.1, Fire Suppression Rules

⁴¹ 8 CCR 1507-11 § 11.1.1, Fire Suppression Rules

⁴² 8 CCR 1507-11 §3.3.2, Fire Suppression Rules

⁴³ 8 CCR 1507-11 §3.3.1, Fire Suppression Rules

A contractor registration is valid from the time of issue until December 31, unless revoked or suspended. Registration renewal is required annually on or before December 31. If it has not been completed by January 30, a late fee will be charged.⁴⁴

There are four types of contractor registrations:⁴⁵

- *Fire Suppression System Contractor: Underground*, for individuals or companies who install an underground water supply from public water lines to a system’s riser.
- *Fire Suppression System Contractor: Backflow*, for individuals or companies who install, maintain, or service backflow devices to protect the water supply from suppression system flow reversal.
- *Fire Suppression System Contractor*, for individuals or companies who install a fire suppression system in commercial, civil, or residential settings.
- *Fire Suppression System Contractor: Residential*, for individuals or companies that install residential fire suppression systems only.

Every Fire Suppression Contractor must be, or employ, a Responsible Managing Employee.⁴⁶

Table 2 lists the number of contractors registered with the Program during the period covered by this sunset review. The registrations are active from January 1 through December 31, consequently the data are recorded by calendar year rather than fiscal year.

**Table 2
Contractor Registrations
Calendar Years 2014-2017**

	2014	2015	2016	2017
Suppression Contractor	234	127	125	148
Suppression Contractor: Residential	0	0	2	2
Suppression Contractor: Backflow	80	124	116	144
Suppression Contractor: Underground	99	154	162	203

Registration of Fire Suppression Contractor: Residential did not begin until 2016. While there has been a steady increase in the number of contractors who install the external portions of the systems, the contractors who install the systems inside of the buildings dropped approximately 37 percent during the period covered by the review. Staff explained that the number of contractors had shifted among registration categories during the first three years considered for this review but the total remained generally

⁴⁴ 8 CCR 1507-11 §3.4.5, Fire Suppression Rules

⁴⁵ 8 CCR 1507-11 §3.2, Fire Suppression Rules

⁴⁶ 8 CCR 1507-11 § 3.5.1, Fire Suppression Rules

stable. However, there was an overall increase in the number of registrations during 2017.

In addition to registering contractors, the Program registers sprinkler fitters who are the people that install fire sprinkler systems.⁴⁷ Sprinkler fitter registration is not specifically covered under this sunset review. However, because they are important to system installations, the registration numbers are included in this program description to give the reader a sense of the size of the industry/profession. Table 3 shows the number of individuals registered during the period examined for this sunset review.

Table 3
Sprinkler Fitter Registrations
Calendar Years 2014-2017

	2014	2015	2016	2017
Sprinkler Fitter	219	241	308	352

Table 3 indicates that the number of sprinkler fitters has steadily increased over the period examined. This is likely due to the increase in construction in Colorado during that time.

All inspections and plan reviews must be performed by a certified inspector unless it is a multipurpose residential sprinkler system. Those systems are inspected by the State Board of Plumbing and are not regulated under the Program.⁴⁸ When Program staff performs a plan review, the codes governing fire suppression system regulation adopted by the DFPC apply. However, qualified local authorities may adopt codes and standards different from those of the Program. Consequently, there is no uniformity across Colorado. Regardless of where an inspector is employed, the Program certifies the inspectors who review plans and inspect system installations. Where no local inspections or plan review exists, Program staff inspectors perform those tasks.⁴⁹

To become a certified Fire Suppression Systems Inspector: Plan Reviewer, Fire Systems Inspector, or Fire Systems Inspector: Residential, an individual must meet one of these preconditions for their particular certification category:⁵⁰

- Successfully complete a DFPC-administered, multiple choice examination;⁵¹
- Hold a valid inspector certification that meets Program standards;
- Establish that he or she has equivalent education, training, and experience in the categories of fire suppression, fire sprinkler, or life safety qualifications; or
- Hold a valid certification from another state with equivalent requirements.

⁴⁷ 8 CCR 1507-11 § 2.29, Fire Suppression Rules

⁴⁸ 8 CCR 1507-11 § 4.1.1, Fire Suppression Rules

⁴⁹ 8 CCR 1507-11 § 9.7.2, Fire Suppression Rules

⁵⁰ 8 CCR 1507-11 § 4.5, Fire Suppression Rules

⁵¹ 8 CCR 1507-11 § 4.7.2, Fire Suppression Rules – 80 percent correct answers are required to pass inspector examinations.

Table 4 enumerates the certifications issued by the Program during the period examined for this sunset review.

**Table 4
Inspector Certifications
Calendar Years 2014 through 2017**

	2014	2015	2016	2017
Suppression Inspector	210	0	39	71
Suppression Plan Reviewer	0	241	208	185
Suppression Inspector: Residential	0	0	0	2
Total	210	241	247	258

Inspector certifications went through a reclassification beginning in 2015, subsequently, a residential inspector classification began in 2017. The total number of inspectors has shown a gradual increase over the review period. Again, this is likely due to an increase in construction during that time.

Inspections

Each system must be permitted and inspected prior to it is approved. The Program does not keep track of the individual inspections performed, but each system and installation must be inspected and periodically. Recall that the Program is responsible for inspecting all health facilities and public schools.

Table 5 enumerates the permits issued during the period under review.

**Table 5
Suppression System Permits Issued
Fiscal Years 13-14 through 16-17**

	FY13-14	FY14-15	FY15-16	FY16-17
Permits	59	92	80	66

While the number of permits issued dropped during fiscal year 16-17, that does not mean that the workload for the Program decreased. Consider that the permitted projects may overlap from one fiscal year to the next and that the number of periodic inspections has increased over time.

Noting the low number of permits issued and staff allotted to the Program for plan review and inspection, compared to the high number of professionals regulated, one can validly infer that the vast majority of installations and modifications occur in local jurisdictions rather than under the purview of the Program.

Complaints and Discipline

Program rule 6.5 states:

Registered contractors and their employees who identify significant or repeated design or installation deficiencies or other violations of these rules by coworkers, other contractors, or certified Fire Suppression System Inspectors or Plan Reviewers must report them to the [DFPC] in accordance with the complaint procedures ...⁵²

The rules also dictate that it is a violation to fail to report “deficiencies or other violations.”⁵³

Table 6 enumerates the complaints submitted to the Program during the period covered by this sunset review.

Table 6
Complaint Information
Fiscal Years 13-14 through 16-17

Nature of Complaints	FY14-15	FY15-16	FY16-17
Working While Unregistered	5	7	7
Using Unregistered Fitters	2	2	1
Working Without a Permit	0	5	2
Misrepresentation	0	0	11
Improper Installation	2	2	0
Unprofessional Practices	0	2	0
Multiple	0	3	0
Undetermined	0	3	0
Total	9	24	21

The Program has no record of the complaint data prior to the final nine months of fiscal year 14-15. Consequently, fiscal years 15-16 and 16-17 are the only full years’ worth of data. The data show some of the violations concern life/safety issues, such as misrepresentation, improper installation, or unprofessional practice, but the majority concern administrative issues such as registration or permitting.

⁵² 8 CCR 1507-11 § 6.5.1, Fire Suppression Rules

⁵³ 8 CCR 1507-11 § 6.5.3 Fire Suppression Rules

There are times when disciplinary action was taken. Table 7 lists the actions taken by the Program during the period examined for this sunset review.

**Table 7
Disciplinary Actions
Fiscal Years 13-14 through 16-17**

Action Taken	FY13-14	FY 14-15	FY 15-16	FY 16-17
Warning	0	7	10	4
Letter of Admonition	0	0	3	3
Suspension	0	0	0	0
Revocation*	0	0	0	12
Criminal Referral*	0	0	0	12
Dismissal	0	2	11	2
Total	0	9	24	21

*A criminal referral also results in a revocation so the same cases are listed in each category.

Program rules direct that if an investigation finds evidence of fraud or any other criminal activity, the case must be referred to the jurisdictional law enforcement agency(s).⁵⁴ Table 7 illustrates that outside of the 12 cases that resulted in revocation and a criminal referral, most cases typically resulted in a dismissal or a warning.

Collateral Consequences – Criminal Convictions

Section 24-34-104(6)(b)(IX), C.R.S., requires the Colorado Office of Policy, Research and Regulatory Reform to determine whether the agency under review, through its licensing processes, imposes any disqualifications on applicants or registrants based on past criminal history, and if so, whether the disqualifications serve public safety or commercial or consumer protection interests.

There are no statutory prohibitions based on criminal history attached to this program.

⁵⁴ 8 CCR 1507-11 § 10.1.4, Fire Suppression Rules

Analysis and Recommendations

Recommendation 1 – Continue the Colorado Fire Suppression Registration and Inspection Program for seven years, until 2026.

The Division of Fire Prevention and Control (DFPC) is tasked with implementing the Colorado Fire Suppression Registration and Inspection Program (Program). The Program was established to certify that fire suppression systems installed in buildings are installed correctly and maintained properly. The Program ensures that a registered contractor or a Responsible Managing Employee (RME), designs, lays out, fabricates and installs the fire suppression systems.

Fire suppression systems are potentially life-saving systems. The life-safety ramifications associated with proper engineering and installation are obvious. Because the statutes require certain qualifications of the individuals who install or modify fire suppression systems, the occupants of the buildings are safer.

A qualified contractor or an RME must be a professional engineer, a person certified by the National Institute for Certification in Engineering Technologies at a level III or level IV in fire protection engineering technologies, or someone certified by another nationally recognized organization approved by the DFPC. A contractor is also required to have a sprinkler systems installation liability insurance policy of a least \$1 million.⁵⁵ Moreover, the physical installations or modifications must be performed by registered sprinkler fitters.

In addition to ensuring that installers are qualified, the Program inspects or delegates to local jurisdictions, such as local building departments or fire agencies, the authority to inspect installations. In the cases of delegated authority, the DFPC is tasked with ensuring that all inspectors are qualified. Inspectors are responsible for reviewing and endorsing all plans, and inspecting the installations.

The first criterion that directs sunset reviews of regulatory programs instructs that analysis consider whether a program is necessary to protect the public’s health, safety, and welfare.

The National Fire Protection Association (NFPA) reported that in 2016, fires caused 3,390 civilian deaths in the U.S.,⁵⁶ 28 of those occurred in Colorado.⁵⁷ Statistics starkly illustrate that fires can be deadly and that fire suppression systems are an efficacious way of protecting life and property when installed correctly.

⁵⁵ 8 CCR 1507-11 § 3.3.1, Fire Suppression Rules

⁵⁶ National Fire Protection Association. *Fire in the United States*. Retrieved September 5, 2018, from <https://www.nfpa.org/News-and-Research/Fire-statistics-and-reports/Fire-statistics/Fires-in-the-US>

⁵⁷ Marty Ahrens and Ben Evarts, 2017, “U.S. Fire Deaths by State,” *NFPA Research*, p.5. Retrieved September 5, 2018, from, <https://www.nfpa.org/News-and-Research/Fire-statistics-and-reports/Fire-statistics/Fires-in-the-US/Overall-fire-problem/Fire-deaths-by-state>

The NFPA reports that from 2010 to 2014: sprinklers operated effectively in 88 percent of the fires in which they were activated; sprinklers successfully controlled 96 percent of those fires;⁵⁸ the civilian death rate was 87 percent lower in properties with sprinklers; and the firefighter death rate was 67 percent lower compared to fires with no fire suppression system.⁵⁹

Notwithstanding the advantages of fire suppression systems, the NFPA did find that in 12 percent of the fires that were large enough to activate sprinklers, the systems operated ineffectively.⁶⁰ This emphasizes the need to have the plans reviewed by engineers and all installations and modifications inspected. A system can only protect lives if it is the right system and it is installed correctly.

While statistics clearly indicate that there is a need for regulation, interested stakeholders also support continuation of regulation with valid reason. Professional fire fighters indicated to the Colorado Office of Policy, Research, and Regulatory Reform that the experience in states that do not have regulation is that when problems occur, there is no way to resolve issues because there is no regulatory authority. Fire safety is improved, they observed, when the quality of an installation is inspected and the contractor is held accountable for meeting system specifications.

To protect buildings, the contents, and the occupants, the General Assembly should continue the Program. However, because the DFPC continues to have problems keeping track of data necessary to evaluate a regulatory program, the General Assembly should continue the program for only seven years, until 2026. Persistent General Assembly scrutiny may help drive Program efficiencies.

⁵⁸ National Fire Protection Association. *Fact Sheet>>Research, Sprinklers in Reported U.S. Fires during 2010*. Retrieved September 5, 2018, from https://www.nfpa.org/-/media/Files/News-and-Research/Fire-statistics/Fact-sheets/sprinkler_fact_sheet.pdf

⁵⁹ *ibid.*

⁶⁰ *ibid.*