

Office of Policy, Research and Regulatory Reform

# 2012 Sunset Review: Colorado Asbestos Control Act

October 15, 2012





#### **Executive Director's Office**

Barbara J. Kelley Executive Director

John W. Hickenlooper Governor

October 15, 2012

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 mission of the Department of Regulatory Agencies (DORA) is consumer protection. As a part of the Executive Director's Office within DORA, the Office of Policy, Research and Regulatory Reform seeks to fulfill its statutorily mandated responsibility to conduct sunset reviews with a focus on protecting the health, safety and welfare of all Coloradans.

DORA has completed the evaluation of the Colorado Asbestos Control Act. I am pleased to submit this written report, which will be the basis for my office's oral testimony before the 2013 legislative committee of reference. The report is submitted pursuant to section 24-34-104(8)(a), of the Colorado Revised Statutes (C.R.S.), which states in part:

The department of regulatory agencies shall conduct an analysis of the performance of each division, board or agency or each function scheduled for termination under this section...

The department of regulatory agencies shall 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 report discusses the question of whether there is a need for the regulation provided under Part 5 of Article 7, Title 25, C.R.S. The report also discusses the effectiveness of the Colorado Department of Public Health and Environment and staff 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,

Barbara J. Kelley Executive Director

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John W. Hickenlooper. Governor

Barbara J. Kelley Executive Director

## 2012 Sunset Review: Colorado Asbestos Control Act

#### Summary

#### What Is Regulated?

The Colorado Department of Public Health and Environment (CDPHE) regulates asbestos abatement in locations where the general public has access. It also certifies the individuals who conduct abatement activities in accordance with Colorado and federal guidelines.

#### Why Is It Regulated?

Asbestos was banned because inhaling microscopic asbestos fibers can cause health problems such as asbestosis and mesothelioma, both of which may be fatal.

The CDPHE ensures that abatement activities are performed in a manner that minimizes the risk of the release of asbestos fibers.

#### Who Is Regulated?

The CDPHE examines and certifies approximately 2,400 people or businesses that perform asbestos abatement activities in Colorado. The CDPHE also regulates certification instructors and monitors certification classes.

#### How Is It Regulated?

The CDPHE addresses multiple regulatory concerns:

- It qualifies the individuals and entities that perform asbestos abatement related activities;
- It issues permits for approximately 2,800 projects annually:
- It performs approximately 640 inspections annually;
- It inspects schools for the presence of asbestos and a management plan, if required; and
- It performs public education and outreach concerning the issues surrounding the dangers of asbestos and the abatement process.

#### What Does It Cost?

During fiscal year 09-10 the CDPHE spent \$1.1 million and employed 9.49 full-time equivalent employees implementing the Colorado Asbestos Control Act (Act).

#### What Disciplinary Activity Is There?

The demeanor taken by the CDPHE in implementing the program is to protect people from asbestos exposure and to work with the regulated community to help ensure that happens. The CDPHE staff believes more positive results come from collaboration with the abatement professionals on issues rather than strict and inflexible "by-the-book" enforcement of the laws. Notwithstanding, the following represents fining activities during the period studied for this sunset review:

| Fiscal Year | Fines Collected |
|-------------|-----------------|
| 06-07       | \$21,234        |
| 07-08       | \$19,730        |
| 08-09       | \$2,138         |
| 09-10       | \$18,164        |
| 10-11       | \$3,159         |

#### **Key Recommendations**

#### Continue the Act for nine years, until 2022.

The public interest and the goal of the Act is very clearly laid out by the General Assembly in the Act; the purpose is to "minimize the risk of release of asbestos."

The U.S. Environmental Protection Agency labeled asbestos a hazardous material four decades ago. Virtually no level of asbestos exposure is safe, and it is still widely found in buildings today. Exposure in schools prompted the 1986 passage of the federal Asbestos Hazard Emergency Response Act (AHERA). AHERA is the underpinning of the asbestos abatement program adopted in Colorado and implemented by the CDPHE.

#### Raise awareness concerning asbestos in buildings with additional disclosures.

The Act regulates "the wrecking or removal of structural members that contain friable asbestos containing materials (ACM). Air Quality Control Commission Regulation 8 Part B conditions that any renovation or demolition which may disturb greater than the trigger levels of ACM must be inspected to determine if abatement is necessary.

The greatest challenge to implementation of the Act is that the general public is unaware of the extent to which ACM exists in everyday life.

Requiring that building permit applicants disclose if an asbestos inspection has occurred, raises awareness because it requires the applicant to think about the possibility that there are ACM present.

#### **Major Contacts Made During This Review**

City and County of Denver
City of Aspen
City of Aurora
City of Fort Collins
City of Thornton
Colorado Association of Realtors
Colorado Counties, Incorporated
Colorado Environmental Professionals Association
Colorado Municipal League
Delta County
Nebraska Department of Health and Human Services
Office of the Colorado Attorney General
U.S. Environmental Protection Agency
Restoration Industry Association
Wyoming Department of Environmental Quality

#### What is a Sunset Review?

A sunset review is a periodic assessment of state boards, programs, and functions to determine whether or not 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
Office of Policy, Research and Regulatory Reform
1560 Broadway, Suite 1550, Denver, CO 80202
www.askdora.colorado.gov



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### **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 Department of Regulatory Agencies (DORA) conducts a thorough evaluation of such programs based upon specific statutory criteria<sup>1</sup> 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;
- Whether administrative and statutory changes are necessary to improve agency operations to enhance the public interest.

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

#### 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 via DORA's website at: <a href="https://www.askdora.colorado.gov">www.askdora.colorado.gov</a>.

The regulatory functions of the Colorado Department of Public Health and Environment (CDPHE) as enumerated in Part 5 of Article 7, Title 25, Colorado Revised Statutes (C.R.S.), shall terminate on July 1, 2013, unless continued by the General Assembly. During the year prior to this date, it is the duty of DORA to conduct an analysis and evaluation of the administration of the asbestos abatement program pursuant to section 24-34-104, C.R.S.

The purpose of this review is to determine whether the currently prescribed regulation of asbestos abatement activities should be continued for the protection of the public and to evaluate the performance of the CDPHE. During this review, the CDPHE must demonstrate that the regulation serves to protect the public health, safety or welfare, and that the regulation is the least restrictive regulation consistent with protecting the public. DORA's findings and recommendations are submitted via this report to the Office of Legislative Legal Services.

#### Methodology

As part of this review, DORA staff attended CDPHE public rulemaking meetings; interviewed CDPHE staff; reviewed CDPHE records including complaint and disciplinary actions; observed CDPHE staff at work; interviewed officials with professional associations, local building and health departments, individual asbestos abatement professionals, and the U.S. Environmental Protection Agency; reviewed Colorado statutes and Colorado Air Quality Control Commission rules; reviewed federal laws; and examined the asbestos abatement programs of other states.

#### **Profile**

Asbestos is a group of naturally occurring minerals used to resist heat and corrosion. Asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these materials that have been chemically treated and/or altered.<sup>2</sup> Because of its resistance to heat and corrosion, it is used in products such as insulation, fire-retardant materials, cement, and some vinyl floor tiles.<sup>3</sup>

While many uses for asbestos have been banned, it is still commonly used today. With the passage of the North American Free Trade Act, products made in Canada and Mexico which may contain asbestos, are available today in the U.S. Additionally, not all U.S.-made products and processes are asbestos free. Asbestos-cement corrugated sheet, asbestos-cement flat sheet, asbestos clothing, pipeline wrap, roofing felt, vinyl-asbestos floor tile, asbestos-cement shingles, millboard, asbestos-cement pipe, automatic transmission components, clutch facings, friction materials, disc brake pads, drum brake linings, brake blocks, gaskets, non-roofing coatings, roof coatings, as well as some troweled or sprayed applications were not banned.<sup>4</sup>

The only way to know with any degree of certainty if a material contains asbestos is to have the material tested by a laboratory. Likewise, the only way to know where most asbestos-containing material is located in a home or any other building is to have it inspected by an asbestos inspector.<sup>5</sup>

Asbestos was banned because inhaling microscopic asbestos fibers can cause health problems such as asbestosis and mesothelioma.

Asbestosis is a breathing disorder caused by inhaling asbestos fibers. Prolonged accumulation of these fibers in the lungs can cause scarring of lung tissue and shortness of breath. Asbestosis symptoms can range from mild to severe, and usually do not appear until many years after exposure.<sup>6</sup>

Mesothelioma is an aggressive and deadly form of cancer that occurs in the thin layer of tissue that covers the majority of internal organs. Asbestos exposure is the primary risk factor for mesothelioma. If someone has been exposed to asbestos risk is greatly increased. The specific incident rate for Colorado is 0.9 per 100,000 people. This is below the average rate of 1.1 per 100,000 people.

<sup>6</sup> Mayo Clinic. *Asbestosis*. Retrieved February 27, 2012 from http://www.mayoclinic.com/health/asbestosis/DS00482

<sup>&</sup>lt;sup>2</sup> Occupational Safety and Health Administration. *OSHA Fact Sheet: Asbestos*. Retrieved January 9, 2012, from <a href="http://www.osha.gov/OshDoc/data\_AsbestosFacts/asbestos-factsheet.pdf">http://www.osha.gov/OshDoc/data\_AsbestosFacts/asbestos-factsheet.pdf</a>

<sup>&</sup>lt;sup>3</sup> Mayo Clinic. Asbestosis. Retrieved February 27, 2012, from http://www.mayoclinic.com/health/asbestosis/DS00482

<sup>&</sup>lt;sup>4</sup> CDPHE, Asbestos Bans. Retrieved February 27, 2012, from http://www.cdphe.state.co.us/ap/asbestos/AsbestosBans.pdf

<sup>°</sup> ibid.

<sup>&</sup>lt;sup>7</sup> Mayo Clinic. *Mesothelioma*; *Definition*. Retrieved February 27, 2012, from

http://www.mayoclinic.com/health/mesothelioma/DS00779

<sup>&</sup>lt;sup>8</sup> Mayo Clinic. Mesothelioma: Risk Factors. Retrieved February 27, 2012, from http://www.mayoclinic.com/health/mesothelioma/DS00779/DSECTION=risk-factors

<sup>&</sup>lt;sup>9</sup> Surviving Mesothelioma: A Patients Guide; Colorado Mesothelioma Fact Sheet. Retrieved February 27, 2012, from http://www.survivingmesothelioma.com/colorado-mesothelioma-facts.cfm

Often exposure occurs when workers disturb asbestos-containing materials during the renovation or demolition of buildings.<sup>10</sup>

The Colorado asbestos abatement program is National Emissions Standards for Hazardous Air Pollutants (NESHAP)-based and Asbestos Hazard Emergency Response Act (AHERA)-compliant. It addresses multiple concerns: ensuring that asbestos abatement is conducted by qualified individuals, controlling asbestos exposure in single-family dwellings, commercial, and public buildings, and limiting asbestos exposure during the abatement process. The program is broader than the basic NESHAP standards. Though AHERA is school-centered policy, the Colorado program incorporates many of the AHERA standards for non-school application.

Depending on the size and scope of the project and the amount of asbestos in the material being removed, abatement may be required. The design of the project is site-specific but the purpose is always the same: to limit the amount of asbestos fibers released into the air.

Engineering controls employed during abatement vary from simply wetting the material being removed to keep fibers from discharging, to sealing an entire building in a protective envelope and adding a negative High Efficiency Particulate Air filtration system.

On top of containing the release of asbestos from a project, the Occupational Safety and Health Administration has promulgated standards which are geared to ensuring abatement worker safety. To safeguard against exceeding the permissible exposure limit, employers must create, "regulated areas" that are controlled zones designed to protect employees where regulated work with asbestos takes place. Access to regulated areas is limited to authorized persons.<sup>11</sup>

The U.S. Department of Labor, Bureau of Labor and Statistics (BLS) does not single out "asbestos abatement worker" as an occupation but does have a category named "hazardous waste removal worker." BLS shows that in 2011, Colorado employed 1,020 hazardous waste removal workers. The Denver-Aurora-Broomfield metropolitan area had the third highest employment level compared to all other metropolitan areas nationally, with 790 people employed. The mean annual wage for a Colorado hazardous waste removal worker was \$39,130 while the national mean was \$41,750 per year. Colorado workers made 6.7 percent less than the national, per year average. <sup>12</sup>

<sup>11</sup> Occupational Safety and Health Administration. *OSHA Fact Sheet: Asbestos*. Retrieved January 9, 2012, from http://www.osha.gov/OshDoc/data\_AsbestosFacts/asbestos-factsheet.pdf

<sup>12</sup> U.S. Department of Labor, Bureau of Labor and Statistics. Occupational Employment Statistics. Retrieved August 24, 2012, from http://www.bls.gov/oes/current/oes474041.htm

<sup>&</sup>lt;sup>10</sup> Occupational Safety and Health Administration. *OSHA Fact Sheet: Asbestos*. Retrieved January 9, 2012, from http://www.osha.gov/OshDoc/data\_AsbestosFacts/asbestos-factsheet.pdf

## **Legal Framework**

#### History of Colorado Regulation

The U.S. Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (EPA) to develop and enforce regulations to protect the general public from exposure to airborne contaminants that are known to be hazardous to human health. In accordance with Section 112 of the CAA, the EPA established National Emissions Standards for Hazardous Air Pollutants (NESHAP) to protect the public. Asbestos was one of the first hazardous air pollutants regulated under Section 112. On March 31, 1971, the EPA identified asbestos as a hazardous pollutant, and on April 6, 1973, EPA first promulgated the Asbestos NESHAP. 13

In 1990, a revised NESHAP regulation was promulgated by the EPA.

The Asbestos NESHAP specifies practices to be followed during demolitions and renovations of all structures, installations, and buildings (excluding residential buildings that have four or fewer dwelling units). In addition, the regulations require the owner of the building and/or the contractor to notify applicable state and local agencies and/or EPA Regional Offices before all demolitions, or before renovations of buildings that contain a certain threshold amount of asbestos. The EPA has designated the Colorado Department of Public Health and Environment (CDPHE) as its representative agency in Colorado.

The original Colorado Asbestos Control Act (Act) was enacted in 1985. The resulting regulatory program was designed to protect workers and the public from exposure to asbestos. This original Act did not contain a certification program for practitioners. Rather, the legislation directed the CDPHE Air Pollution Control Division (Division), Air Quality Control Commission (Commission) to produce a report on asbestos-related issues, including performance standards and practices for asbestos abatement and a maximum allowable asbestos level. The report, which did not contain a recommendation for a certification program, was submitted to the General Assembly on January 15, 1986.

In 1987, the General Assembly passed House Bill 1239 (HB 1239), bringing the Act into compliance with the 1986 federal Asbestos Hazard Emergency Response Act (AHERA). AHERA requires all inspectors, management planners, project designers, work-site supervisors and asbestos abatement workers engaged in asbestos abatement work in schools to be certified.

<sup>&</sup>lt;sup>13</sup> Santa Barbara County Air Pollution Control District. *Common Questions about the Asbestos NESHAP*. Retrieved February 16, 2012, from <a href="http://www.sbcapcd.org/biz/faqs\_asbes.htm">http://www.sbcapcd.org/biz/faqs\_asbes.htm</a> ibid.

The revised Act imposed a certification requirement on persons engaged in asbestos abatement work as general abatement contractors and supervisors. It also required general abatement contractors to train all workers in proper abatement procedures. Finally, HB 1239 established dual certification programs, one for schools and one for non-school workers.

In 1988, the General Assembly passed Senate Bill 191. The bill limited CDPHE jurisdiction to asbestos abatement activities conducted in areas of public access. The revised Act also established a maximum allowable asbestos level of fibers in the air in areas of public access.

Changes made in 1990 were a result of recommendations made during the 1989 sunset review. Amendments to the Act required the Division to develop or purchase examinations to be administered to applicants for certification. In addition, the Act established procedures to be followed and requirements for applicants who failed such examinations and sought reexamination. The sunset legislation also created grounds for disciplinary action against persons certified under the Act.

Approval of Colorado's asbestos control program was conferred by the EPA under AHERA in 1994, by the granting of a waiver to CDPHE. This waiver, regarding school asbestos inspections, allows CDPHE to directly enforce a notice of noncompliance instead of submitting such notices to EPA for enforcement.

1995 changes came from recommendations made in the 1994 sunset review. The levels of asbestos containing materials (ACM) that trigger a need for a given asbestos abatement project to obtain a permit, went from not less than 50 linear feet on pipes, to not less than 260 linear feet, and from 32 square feet on other surfaces, to 160 square feet. Additional provisions served to further align the Act with federal requirements, including requiring the completion of refresher courses prior to recertification and increasing training requirements for asbestos abatement workers.

Another sunset review was conducted in 2000, resulting in two major changes to the Act during the 2001 legislative session. "Area of public access" was redefined to include single-family residential dwellings and provision was made to permit homeowners to "opt out" of regulation under the Act.

The General Assembly authorized the Division to certify Air Monitoring Specialists (AMS). This authority included the authority to establish training requirements and grounds for disciplinary action, but not the authority to require air monitoring specialist candidates to take and pass any type of examination.

The most recent sunset review, conducted in 2005, resulted in slight changes to the Act. Among those were an examination requirement for AMS certification and a requirement that an AMS be independent of the job's General Abatement Contractor.

Since that time there have be no other changes to the Act.

#### **Asbestos Control Act**

The Act is found in Part 5 of Article 7, Title 25, Colorado Revised Statutes (C.R.S.). The intent of the Act is to protect the public by regulating asbestos abatement activities to minimize the risk of release of asbestos in areas of public access.<sup>15</sup> The Act provides a limited exemption for individuals who perform asbestos abatement on their own single-family, primary residences.<sup>16</sup>

Asbestos abatement is removing or containing friable ACM from a building.<sup>17</sup> Friable ACM holds more than one percent asbestos by weight, area, or volume and can be crumbled, pulverized, or reduced to powder by hand pressure.<sup>18</sup>

The Act directs the CDPHE and the Commission to follow federal laws, rules, and policies, and to establish rules to operate a state asbestos abatement program.

The program established to administer the Act is cash-funded by certification and permit fees that are established by the Commission. <sup>19</sup> The Act also empowers the Commission to:<sup>20</sup>

- Promulgate rules to comply with the federal Occupational Safety and Health Administration (OSHA) standards, and these rule cannot be more restrictive than the OSHA standards:
- Promulgate rules necessary to implement relevant portions of the CAA in conjunction with the AHERA and EPA guidelines;
- Promulgate rules setting minimum asbestos sampling standards for air and regulating the people who conduct the sampling;
- Promulgate rules determining training, certification, recertification, or renewal of certificates required by the EPA or OSHA; and
- Approve the trained supervisor certification examination.

The CDPHE is required by the Act to certify, in accordance with federal law, all persons engaged in the inspection for the presence of asbestos, preparation of asbestos management plans, or designing and conducting abatement activities in public, commercial, or school buildings. <sup>21</sup>

To promote uniformity in the asbestos abatement process, the Act prohibits any State political subdivision from requiring certification or licensing of asbestos abatement projects or persons certified under the Act. However, it does allow that professionals can be registered locally.<sup>22</sup>

16 § 25-7-504(3), C.R.S.

<sup>22</sup> § 25-7-509, C.R.S.

<sup>&</sup>lt;sup>15</sup> § 25-7-501(1), C.R.S.

<sup>17 § 25-7-502(3),</sup> C.R.S.

<sup>&</sup>lt;sup>18</sup> § 25-7-502(6), C.R.S.

<sup>&</sup>lt;sup>19</sup> § 25-7-510, C.R.S.

<sup>&</sup>lt;sup>20</sup> § 25-7-503, C.R.S.

<sup>&</sup>lt;sup>21</sup> §§ 25-7-504(1), 25-7-504(2), and 25-7-507, C.R.S.

A person becomes certified through training and examination sanctioned by the CDPHE, or by endorsement. A certification by endorsement is issued to those who possess a valid license, certificate, or other registration in good standing from another state, territory, or the District of Columbia. The applicant must present "proof satisfactory" that when applying, he or she possesses qualifications substantially equivalent to the Act.<sup>23</sup>

If a person is denied certification he or she may request a hearing with the Office of Administrative Courts held in accordance with the State Administrative Procedure Act.<sup>24</sup>

The CDPHE has the power to take a variety of disciplinary actions against those certified under the Act for violating or assisting in violating the Act or associated regulations.<sup>25</sup> It may issue a letter of admonition, suspend, revoke, or refuse to renew a certification.<sup>26</sup> order corrective education in asbestos abatement.<sup>27</sup> or issue a fine.<sup>28</sup>

The CDPHE also has the ability to issue a cease and desist order to anyone it believes has violated the Act.<sup>29</sup> It may also apply for an injunction to prohibit any person from practicing under the Act or committing any action prohibited by the Act. These proceedings are in addition to, rather than in lieu of, other disciplinary actions taken under the Act. 30

The CDPHE may issue fines of up to \$25,000 per day. In determining the amount of the penalty, it must consider the seriousness of the danger to public health; whether or not the violation was willful; the duration of the violation; and the record of the person committing the violation.<sup>31</sup> All fines are credited to the State General Fund.<sup>32</sup>

The Act enumerates grounds for discipline. The grounds include but are not limited to having been disciplined in any jurisdiction for what is also a violation of the Act, making misleading or fraudulent statements, or conducting misleading or fraudulent activities. and not meeting the standards of the Act or associated regulations.<sup>33</sup>

<sup>&</sup>lt;sup>23</sup> § 25-7-505.5, C.R.S.

<sup>&</sup>lt;sup>24</sup> § 25-7-508(1), C.R.S.

<sup>&</sup>lt;sup>25</sup> § 25-7-508(2)(a)(I), C.R.S.

<sup>&</sup>lt;sup>26</sup> § 25-7-508(2)(a), C.R.S.

<sup>&</sup>lt;sup>27</sup> § 25-7-508(4), C.R.S.

<sup>&</sup>lt;sup>28</sup> § 25-7-508(5), C.R.S.

<sup>&</sup>lt;sup>29</sup> § 25-7-511(1), C.R.S.

<sup>&</sup>lt;sup>30</sup> § 25-7-511.5, C.R.S.

<sup>&</sup>lt;sup>31</sup> § 25-7-511.(4), C.R.S. <sup>32</sup> § 25-7-511(6), C.R.S. <sup>33</sup> § 25-7-508(2)(a)(II), C.R.S.

#### **Regulation 8 Part B**

The regulatory program is established by the Act but it is administered under Commission Regulation 8, "The Control of Hazardous Air Pollutants," Part B, "Emission Standards for Asbestos" (Reg.8). This document is so central to the regulatory process that it gives the program its identity. Both the regulators and the regulated community informally refer to the program as the "Reg.8" program.

Reg.8 defines 113 terms<sup>34</sup> and another 55 acronyms<sup>35</sup> used throughout the rules as well as incorporating materials from eight federal laws or references.<sup>36</sup> Beyond these it also contains rules that give detail on the following subjects:

- Certification Requirements:
  - This rule fulfills the Act's statutory obligations to establish guidelines and procedures for certification for various asbestos abatement professionals.
- Abatement, Renovation, and Demolition Projects;
  - This rule comprehensively outlines the processes by which an asbestos abatement project proceeds and emergency contingencies for unforeseen happenings.
- School Requirements;
  - This rule fulfills an AHERA requirement that all schools be inspected for asbestos. It also contains guidelines for asbestos management plans for each facility.
- State Building Requirements;
  - This rule requires that a State agency must have its facility assessed for friable asbestos and work with the facility managers concerning an appropriate response.
- Use of Asbestos in Manufacturing, Commerce, and Construction Industries;
  - This rule lists allowable limits for asbestos in asbestos mills, roadways, manufacturing, insulating materials, spraying asbestos-containing materials, and fabricating asbestos containing products.

Reg.8 attempts to provide protection to the public and clarity to both the regulators and the workers who perform asbestos abatement.

<sup>35</sup> Commission Regulation 8B,I.C.

<sup>&</sup>lt;sup>34</sup> Commission Regulation 8B,I.B.

<sup>&</sup>lt;sup>36</sup> Commission Regulation 8B,I.A.

### **Program Description and Administration**

Part 5 of Article 7 of Title 25, Colorado Revised Statutes (C.R.S.), the Colorado Asbestos Control Act (Act), limits the general public's exposure to friable asbestos.<sup>37</sup> The Act accomplishes this by regulating asbestos abatement projects to ensure they are performed in a manner that minimizes the release of asbestos into the air. 38

The Act directs the Air Quality Control Commission (Commission) to promulgate rules and establish standards to be implemented by the Colorado Department of Public Health and Environment (CDPHE) regarding asbestos abatement projects. The associated responsibilities are educating, training, and certifying asbestos abatement workers and permitting and inspecting abatement projects. These are accomplished under the Commission's Regulation 8, Part B (Reg.8).

The implementation of Reg.8 is designated to the Asbestos Unit (Unit) of the CDPHE Indoor Environment Program. It is a cash-funded, revenue-neutral program. Revenues come from permit and certification fees but some also come from a U.S. Environmental Protection Agency (EPA), Asbestos Hazard Emergency Response Act of 1986 (AHERA) grant program. To receive the grant, Colorado must partially fund the program, a 75 percent federal, 25 percent state match. As depicted in Table 1, the Unit expended approximately \$1 million and employed nine full-time equivalent (FTE) employees annually during the period reviewed.

Table 1 **Asbestos Unit Fiscal Information** 

| Fiscal Year | Total Program<br>Expenditure | FTE  |
|-------------|------------------------------|------|
| 06-07       | \$862,391                    | N/A  |
| 07-08       | \$1,083,408                  | 9.02 |
| 08-09       | \$1,150,673                  | 8.87 |
| 09-10       | \$961,382                    | 7.28 |
| 10-11       | \$1,110,345                  | 9.49 |

<sup>&</sup>lt;sup>37</sup> Friable asbestos-containing material contains asbestos and when dry can be crumbled, pulverized, or reduced to powder by hand pressure and contains more than one percent asbestos by weight, area, or volume. § 25-7-502(6),

<sup>§ 25-7-501(1),</sup> C.R.S.

Of the FTE, seven are professional staff who work solely with the Unit, and the remainder are disbursed on shared management, administration, and certification functions.

The activities of the Unit professional staff include:

- Auditing approved training classes;
  - Review initial proposals for training classes and instructors,
  - o Perform initial and maintenance audits on courses,
  - o Perform initial and maintenance audits on instructors, and
  - Inspect training provider facilities.
- Issuing permits;
  - Respond to inquiries,
  - Review and process permits, and
  - Meet with individuals/companies to advise/strategize on permit-related issues.
- Inspecting sites;
  - Perform routine compliance inspections and follow-up inspections,
  - Investigate complaints,
  - o Collect samples, and
  - Respond to emergencies.
- Enforcing Reg.8;
  - Write enforcement documents,
  - Meet internally on enforcement issues,
  - Hold Notice of Alleged Violation conferences, and
  - Hold settlement meetings.
- Inspecting for AHERA compliance; and
  - Inspect schools,
  - Assist schools with compliance,
  - Prepare EPA grant documents, and
  - Prepare Neutral Inspection Schemes which determine the schools/school districts inspected under the AHERA grant.
- Reaching-Out/Educating.
  - Present to local building departments,
  - Dialog with regulated community,
  - Teach homeowner associations.
  - o Appear before the Commission in public hearings, and
  - Attend Colorado Environmental Professionals Association meetings.

#### **Training and Certification**

It is both a federal and state requirement that all individuals performing asbestos abatement-related activities in single-family residential dwellings, schools, and public and commercial buildings be trained and certified in the discipline in which they are working. The Unit certifies six abatement worker disciplines: Worker, Supervisor, Building Inspector, Management Planner, Project Designer, and Air Monitoring Specialist, 39 as well as General Abatement Contractors (GAC).

With the exception of GACs,<sup>40</sup> to become certified an individual must supply the CDPHE with the original training certificate from an approved training course, pass a discipline-specific examination, and pay the associated fee.<sup>41</sup> No training is required for a GAC certification.<sup>42</sup>

To be approved, a training course must adequately address the topics and format contained in the EPA Asbestos Model Accreditation Plan.<sup>43</sup>

Any entity wishing to offer courses in disciplines for which training or certification is required must be registered as an Asbestos Training Provider. All instructors must also be registered and approved. Table 2 shows the number of registered providers and instructors by discipline, for calendar year 2011.

Table 2
Approved Training Providers and Instructors
Calendar Year 2011

| Certification Type        | Providers | Instructors |
|---------------------------|-----------|-------------|
| Worker                    | 13        | 28          |
| Supervisor                | 14        | 28          |
| Project Designer          | 10        | 14          |
| Building Inspector        | 11        | 18          |
| Management Planner        | 8         | 14          |
| Air Monitoring Specialist | 5         | 7           |

The table lists the number of individual providers and instructors but there is significant overlap among the disciplines, i.e., a single provider may employ multiple instructors and teach multiple discipline certification courses.

Initial training courses must be at least three days long for Building Inspector and Project Designer certifications, four days for Worker certifications, and the Supervisor and Management Planner training is at least five days.<sup>44</sup>

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<sup>&</sup>lt;sup>39</sup> Air Monitoring Specialist certification is not a federal requirement.

No training is required for a General Abatement Contractor Certification. Commission Regulation 8B, II.B.3.

<sup>&</sup>lt;sup>41</sup> Colorado Department of Public Health and Environment. *Asbestos Compliance Assistance Group.* Retrieved January 10, 2012, from http://www.cdphe.state.co.us/ap/asbestos/index.html#Certification and Training.

<sup>42</sup> Commission Regulation 8B, II.B.3.

<sup>&</sup>lt;sup>43</sup> Commission Regulation 8B, II.E.2.

Building Inspector training must include lectures, demonstrations, at least four hours of hands-on training, individual respirator fit testing and a written course examination.<sup>45</sup> Building Inspectors identify, quantify and assess the condition of asbestos containing materials (ACM), or suspect ACM.

Project Designer training must include lectures, demonstrations, field instruction, and a written examination.<sup>46</sup> Project Designers determine how best to conduct asbestos abatement work.

Worker and Supervisor training must include lectures, demonstrations, at least 14 hours of hands-on training, individual respirator fit testing, course review and a written course examination. The hands-on training segments must permit students to acquire actual experience performing tasks associated with asbestos abatement.<sup>47</sup>

Management Planner training includes successful completion of the three-day inspector training course and examination prior to taking a two-day Management Planner training course. It also includes individual lectures, demonstrations, course review, and a written examination. Management Planners use data gathered by inspectors to assess the degree of hazard posed by ACM. They also determine the scope and timing of appropriate response actions needed in schools or other buildings.

Air Monitoring Specialist (AMS) certification applicants must have a high school diploma or General Equivalency Diploma, and successfully complete an approved Air Monitoring Specialist course. A candidate must also complete 80 hours of on-the-job training of ambient air monitoring as well as pass an examination. Included in the 80 hours must be a minimum of two final visual inspections and two final air clearances. An AMS performs the visual inspections and takes samples of the air in an abatement area to determine the asbestos levels.

There are also annual continuing education refresher and examination requirements for recertification in all disciplines. The requirement for Workers, Supervisors, and Project Designer is eight hours. The requirement for Building Inspectors and Air Monitoring Specialists is four hours. Management Planner refreshers contain four hours of Building Inspector and four hours of Management Planner review. <sup>50</sup>

Certificates are issued for one, three, or five years, and are valid as long as training, examination, and refresher requirements are met annually.<sup>51</sup>

<sup>44 40</sup> C.F.R. Part 763, Subpart E, Appendix C. § I.B.
45 40 C.F.R. Part 763, Subpart E, Appendix C. § I.B(3).
46 40 C.F.R. Part 763, Subpart E, Appendix C. § I.B(5).
47 40 C.F.R. Part 763, Subpart E, Appendix C. §§ I.B(1) and B(2).
48 40 C.F.R. Part 763, Subpart E, Appendix C. § I.B(4).
49 Commission Regulation 8B, II.D.3.
50 Commission Regulations 8B, II.C.5.b and D.3.b(i).
51 Commission Regulation 8B, II.C.1.

The Unit provides a combined certification for Supervisor/Project Designer and Building Inspector/Management Planner.

Training is provided in a vocational school atmosphere with many training providers having set class schedules and times. Additional classes may be scheduled by a provider when there is a demand. For example, if a contractor needs to add several new workers, he or she might arrange for an approved provider to provide the instruction and inform the Unit that a class is taking place. To ensure that classes are up-to-date and that the instructors are covering the material that should be covered, the Unit occasionally audits the courses and the providers. Table 3 shows the number of audits performed from fiscal year 06-07 through 10-11.

Table 3
Unit Educational Audits
Fiscal Years 06-07 through 10-11

| Fiscal Year | Number of Audits |
|-------------|------------------|
| 06-07       | 24               |
| 07-08       | 16               |
| 08-09       | 26               |
| 09-10       | 30               |
| 10-11       | 36               |

Every person certified under Reg.8 must have either a certification identification card or state certificate and copies of training and refresher certificates available at each work site so the Unit may check credentials.<sup>52</sup>

Table 4 breaks down the number of active Reg.8 certifications, by category, during the period under review. Renewals are not treated any differently than original certificates by the Unit or in Table 4.

Table 4
Asbestos Unit Certifications
Fiscal Years 06-07 through 10-11

| Certification Type                    | 06–07 | 07–08 | 08–09 | 09–10 | 10–11 |
|---------------------------------------|-------|-------|-------|-------|-------|
| Worker                                | 712   | 925   | 1,268 | 884   | 1,016 |
| Supervisor                            | 390   | 476   | 509   | 453   | 584   |
| Supervisor/Project Designer           | 58    | 60    | 57    | 52    | 60    |
| Project Designer                      | 62    | 83    | 88    | 83    | 101   |
| Building Inspector                    | 281   | 386   | 412   | 442   | 502   |
| Building Inspector/Management Planner | 127   | 140   | 129   | 117   | 117   |
| Air Monitoring Specialist             | 215   | 213   | 194   | 183   | 198   |
| General Abatement Contractor          | 38    | 54    | 61    | 84    | 126   |
| Total                                 | 1,883 | 2,337 | 2,718 | 2,298 | 2,704 |

<sup>&</sup>lt;sup>52</sup> Commission Regulation 8B, II.A.2.

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The Unit is a cash-funded endeavor partially funded through certification and permit fees. Table 5 lists the fees associated with certification.

Table 5
Certification Fees

| Certification                         | 1 Year | 3 Years | 5 Years |
|---------------------------------------|--------|---------|---------|
| Worker                                | \$125  | \$375   | \$625   |
| Supervisor                            | \$250  | \$750   | \$1,250 |
| Building Inspector                    | \$175  | \$525   | \$875   |
| Management Planner                    | \$175  | \$525   | \$875   |
| Project Designer                      | \$250  | \$750   | \$1,250 |
| Supervisor/Project Designer           | \$275  | \$825   | \$1,375 |
| Building Inspector/Management Planner | \$275  | \$825   | \$1,375 |
| Air Monitoring Specialist             | \$250  | \$750   | \$1,250 |

GACs are required to ensure that all Workers and Supervisors are certified and that there is at least one Colorado-certified Supervisor on-site when abatement work is underway.<sup>53</sup> Initial certification for a Colorado-resident GAC is \$2,000 per year and \$1,000 per year to renew. Initial certification for an out-of-state GAC is \$3,000 and renewals are \$2,000 per year.<sup>54</sup>

The CDPHE also requires Asbestos Consulting Firm and Asbestos Laboratory registration. Annual registration fees are \$500 and \$250 respectively.

#### **Examinations**

The CDPHE administers the asbestos certification examinations in Denver twice weekly. Guaranteed spaces may be reserved and drop-in candidates are accommodated when space is available. Testing is also offered in Grand Junction and Pueblo several times per year. Table 6 shows the number of examinations given and the pass rate for each discipline.

<sup>&</sup>lt;sup>53</sup> Commission Regulation 8B, II.B.4.

<sup>&</sup>lt;sup>54</sup> Commission Regulation 8B, II.B.2.

The certification examinations are discipline-specific, closed book, written examinations. In addition to the discipline specific examination, Supervisors and Project Designers are required to take an examination based solely on Reg.8.

Table 6
Aggregate Examination Data
Calendar Years 2008-2011

| Certification Type        | Number of Exams Administered | Pass Rate (%) |
|---------------------------|------------------------------|---------------|
| Worker                    | 4,419                        | 90            |
| Supervisor                | 2,409                        | 95            |
| Project Designer          | 600                          | 98            |
| Regulation 8              | 3,911                        | 90            |
| Building Inspector        | 2,231                        | 99            |
| Management Planner        | 503                          | 100           |
| Air Monitoring Specialist | 695                          | 87            |

As Table 6 illustrates, it is rare for someone to fail an examination. If an examinee fails the test, a retest may be allowed once the individual pays a retesting fee of \$125 and submits proof of attendance at a remedial training course if one is demanded by the CDPHE.

#### Inspections

There are two types of inspections performed regarding asbestos management and abatement projects.

One type of asbestos building inspection is performed by private sector professionals who are certified by the Unit. These certified asbestos building inspectors inspect prior to any renovation or demolition to identify, quantify, and assess the condition of ACM. If more than the allowable level of ACM will be disturbed by the work, then abatement is required. If it is assumed that abatement is necessary this inspection is not necessary. If abatement is necessary in a project, then the GAC must submit a plan to the Unit and obtain a permit.

If abatement is necessary in a project, then the owner must submit a plan and obtain a permit from the Unit. Following the guidelines specified in Reg.8., Unit inspectors monitor as many job sites as time allows ensuring the project meets the necessary standards.

<sup>&</sup>lt;sup>55</sup> Commission Regulation 8B, III.A.1.

The other inspections are performed by Unit staff to ensure compliance with Reg.8, respond to an emergency, or respond to a complaint. Unit inspectors inspect as many abatement sites as time allows to ensure projects meet the required standards.

AHERA governs the management of asbestos in elementary and secondary schools. AHERA instructs that local education agencies must have an up-to-date Asbestos Management Plan in place. The plan is to be derived from an inspection of the building by a certified inspector. After the inspection locates all the ACM in the building, the Management Planner defines the location(s) and strategies to keep it intact and undisturbed. Any time there is an alteration in those areas of the school, planned or not, protocols must be followed and recorded in the Management Plan. Periodically, Unit staff visits schools to verify that the Management Plan is in place and up-to-date.

Table 7 lists the number and type of permits issued by the Unit and the time period for which each is valid.

Table 7
Unit Permits Issued
Fiscal Years 07-08 through 10-11

| Fiscal<br>Year | SFRD*<br>30 Day | SFRD<br>90<br>Day | SFRD<br>1 Year | P&C**<br>30 Day | P&C<br>90 Day | P&C<br>1 Year | P&C<br>Notice | SFRD<br>Notice | Demolition<br>Notice | Total |
|----------------|-----------------|-------------------|----------------|-----------------|---------------|---------------|---------------|----------------|----------------------|-------|
| 07-08          | 109             | 1                 | 0              | 346             | 54            | 24            | 302           | 59             | 982                  | 1,877 |
| 08-09          | 227             | 6                 | 0              | 463             | 80            | 40            | 670           | 65             | 1,604                | 3,155 |
| 09-10          | 264             | 7                 | 0              | 464             | 41            | 25            | 690           | 99             | 1,445                | 3,035 |
| 10-11          | 374             | 9                 | 0              | 505             | 71            | 24            | 732           | 92             | 1,418                | 3,225 |

<sup>\*</sup>SFRD - Single Family Residential Dwelling

Table 7 illustrates that the majority of permits issued are demolition notices. Asbestos abatement may not be required prior to demolishing a building if the building does not contain asbestos or if the ACM is non-friable and will remain non-friable during demolition activities.

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<sup>\*\*</sup>P&C - Public and Commercial

<sup>&</sup>lt;sup>56</sup> 40 C.F.R. § 763.80

The permit fees for 2011 were:

| Permit Fees for Abatement Projects |  |  |  |  |  |
|------------------------------------|--|--|--|--|--|
| Project                            | Applies to all structures including<br>single-family residential dwellings | Applies only to single-family residential dwellings  |  |  |  |
| Project<br>Length                  | Greater than 260 linear feet/160 square feet/55-gallon drum                | Greater than 50 linear feet/32 square feet/55-gallon drum but less than or equal to 260 linear feet/160 square feet/55-gallon drum |  |  |  |
| 1 - 30 days                        | \$400  | \$180  |  |  |  |
| 31 – 90 days                       | \$800  | \$300  |  |  |  |
| 91 – 365 days                      | \$ 1,200   | \$420  |  |  |  |

| Notice Fees for Abatement Projects                   |  |  |  |  |  |
|--|--|--|--|--|--|
|  | Applies to all structures including                            | Applies only to single-family  |  |  |  |
| Project  | single-family residential dwellings                            | residential dwellings  |  |  |  |
| Length   | Greater than 260 linear feet/160 square feet/55-gallon<br>drum | Greater than 50 linear feet/32 square feet/55-gallon drum but less than or equal to 260 linear feet/160 square feet/55-gallon drum |  |  |  |
| Any  | \$80   | \$60   |  |  |  |
| Non-Public<br>Access Notice                          | \$80   | Not Applicable   |  |  |  |
| Single–Family<br>Residential<br>Dwelling Opt-<br>Out | Not Applicable   | \$60   |  |  |  |

| Notice Fees for Demolition Projects |   |  |
|-------------------------------------|---|--|
| Project<br>Length                   | Applies to all structures including single-family residential dwellings   |  |
| Any                                 | A base fee of \$50.00 is required plus an additional \$5.00 per 1,000 square feet, or any portion thereof, of the structure footprint |  |

The implementation of Reg.8 involves the inspection of permitted job sites. However, because of complaints, emergencies, disasters, routine AHERA school inspections, and random checks of active construction projects, the Unit inspectors often inspect sites that are not permitted.

Table 8 enumerates the number of inspections performed by the Unit annually during the period reviewed.

Table 8 Inspections

| Fiscal Year | Number of Inspections |
|-------------|-----------------------|
| 06-07       | 649                   |
| 07-08       | 744                   |
| 08-09       | 631                   |
| 09-10       | 554                   |
| 10-11       | 608                   |

These figures show that the Unit inspectors performed an average of approximately 637 inspections annually. Some are in conjunction with permits and others are in conjunction with complaints and "spills." A spill is an unplanned release of asbestos fibers and is regarded as an emergency situation by the Unit. Given that the Unit employs six inspectors responsible for Reg.8 implementation and enforcement for the entire state, time must be maximized. Emergencies take the highest priority with Unit staff.

CDPHE contracts with the Denver Department of Environmental Health, Jefferson County Health Department and Pueblo City-County Health Department to conduct routine and emergency asbestos inspections in their respective jurisdictions. CDPHE refers complaints and spills that occur in those jurisdictions to the local agency. If a situation calls for it, CDPHE will send Unit inspectors to collaborate with the local jurisdiction. If an enforcement action is necessary, it is dealt with by the CDPHE. In those cases the CDPHE will have the local inspector attend the Notice of Alleged Violation (NOAV) conference to testify.

In addition to the tasks above: proctoring certification examinations, auditing training, and inspecting sites, the Unit also performs educational outreach to local building departments, professional associations, and consumers. In that vein, it also maintains a comprehensive web site that provides information on several aspects of Reg.8 implementation and enforcement.

### **Complaints/Disciplinary Actions**

The demeanor taken by the Unit in implementing the program is to protect people from asbestos exposure and to work with the regulated community to help ensure that happens. The Unit believes more positive results come from collaboration with the abatement professionals rather than strict and inflexible "by-the-book" enforcement of the laws.

When a Unit inspector discovers a violation of Reg.8, the first step is to take actions to correct the violations and protect the public from exposure. On occasion, an Early Settlement Agreement (ESA) may be issued for simple cases in which a violator is offered a reduced penalty in exchange for a quick and simple resolution of the case. If the person is not interested in the early settlement offer, then the disciplinary process proceeds.

If, in the opinion of the Unit, the situation warrants it, a Notice of Alleged Violation (NOAV) letter is sent to the violator. The NOAV sets out the allegations and a date for the NOAV conference. The conference is a meeting between the Unit and involved parties to discuss and explore the alleged violations. According to the Unit supervisor, vital in this process is not limiting the meeting's scope to determining if something went wrong, but also exploring the reasons why. It is fundamental to helping prevent the same violations/issues from reoccurring and limiting public exposure to asbestos.

When the enforcement process concludes, the CDPHE issues an agency determination, called the Compliance Determination Letter (CDL). If the party was determined to have been in compliance, the alleged violations are dropped. If the party rectifies the problem(s) or was in compliance the issue may be dropped. However, if the party is found to have violated Reg.8 or applicable standards, a penalty is assessed.

The CDL also explains the appeals process. An appeals hearing may be requested of the Commission. The hearing must be scheduled not less than 15 nor more than 90 calendar days after the hearing request is received.<sup>57</sup> After considering statements, testimony, and arguments the Commission must make a finding within 30 calendar days.<sup>58</sup> The CDPHE carries the burden of proof in every hearing concerning an alleged violation.<sup>59</sup>

Table 8 enumerates the disposition of enforcement cases considered during the period under review. Notices of Noncompliance are only issued to schools and are a duty designated to the Unit under AHERA.

Table 8 **Asbestos Enforcement Cases** Fiscal Years 06-07 through 10-11

| Case Finding               | 06-07 | 07-08 | 08-09 | 09-10 | 10-11 |
|----------------------------|-------|-------|-------|-------|-------|
| Notice of                  | 28    | 27    | 31    | 29    | 17    |
| Noncompliance              | 20    | 21    | 31    | 29    | 1 /   |
| Pending at Year End        | 3     | 32    | 21    | 47    | 117   |
| Compliant                  | 0     | 1     | 1     | 2     | 13    |
| Dismissed*                 | 2     | 17    | 7     | 6     | 1     |
| Lack of Evidence*          | 0     | 2     | 0     | 0     | 0     |
| Inquiry Only*              | 2     | 3     | 0     | 2     | 0     |
| Rectified*                 | 13    | 13    | 6     | 17    | 12    |
| Statute of Limitations*    | 6     | 14    | 13    | 5     | 0     |
| Timeliness*#               | 2     | 0     | 0     | 0     | 0     |
| Warning                    | 22    | 38    | 14    | 9     | 8     |
| Guilty                     | 19    | 18    | 12    | 16    | 10    |
| Total Enforcement<br>Cases | 97    | 165   | 105   | 133   | 178   |

<sup>\*</sup> Indicates a dismissal

<sup>57</sup> § 25-7-119(1), C.R.S. <sup>58</sup> § 25-7-119(6), C.R.S. <sup>59</sup> § 25-7-119(7), C.R.S.

<sup>#</sup> CDPHE did not act within statutorily allotted time

When calculating penalties, CDPHE uses a formula considering four factors: duration of the violations, willfulness, seriousness of the danger to the public's health, and the record of the person committing such violation. Table 9 enumerates the fines issued by the CDPHE during the period under review. Most fines are issued in tandem with a CDL.

Table 9
Fines
Fiscal Years 06-07 through 10-11

| Fiscal<br>Year | Number of<br>New<br>Cases | Number of<br>Fines<br>Imposed | Assessed Value of Fines | Value of<br>Reduced<br>Fines | Total Fines<br>Collected |
|----------------|---------------------------|-------------------------------|-------------------------|------------------------------|--------------------------|
| 06-07          | 56                        | 19                            | \$127,334.00            | \$35,634.50                  | \$21,233.51              |
| 07-08          | 124                       | 21                            | \$462,307.50            | \$315,105.10                 | \$19,730.01              |
| 08-09          | 65                        | 13                            | \$128,298.76            | \$98,598.79                  | \$2,137.50               |
| 09-10          | 88                        | 16                            | \$138,663,56.00         | \$92,834.20                  | \$18,164.08              |
| 10-11          | 136                       | 10                            | \$22,317.51             | \$9,097.24                   | \$3,159.38               |

The Unit believes its enforcement program is generally effective in correcting unsafe activities. Although there are occasional repeat offenders, violators typically take the lessons learned from the inspection and NOAV conference and avoid committing similar violations in the future. Enforcement actions can carry multiple costs for an abatement contractor: financial and to one's reputation.

A GAC who is a repeat offender may also be subject to additional Reg.8 requirements, such as having independent, third party oversight on abatement projects. If a GAC continues to be noncompliant, the Unit can move to revoke certification. However, this rarely occurs and did not occur during the period under review.

The Unit's website lists the enforcement history of all licensees. A consumer, or any other interested party, can check the compliance record of abatement companies.

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<sup>&</sup>lt;sup>60</sup> § 25-7-511(4), C.R.S.

### **Analysis and Recommendations**

# Recommendation 1 – Continue the Colorado Asbestos Control Act for nine years, until 2022.

The first question a sunset review is expected to answer is: Is regulation of Colorado asbestos abatement projects necessary to protect public health, safety and welfare?

The U.S. Environmental Protection Agency (EPA) labeled asbestos a hazardous material four decades ago, virtually no level of asbestos exposure is safe, and it is still widely found in buildings today. Therefore, the answer to this question is an unequivocal, "yes."

Inhaling microscopic asbestos fibers can cause asbestosis and mesothelioma. These are diseases associated with asbestos that typically have a long latency period. The onset of asbestosis, for example, averages from about 10 to 20 years after exposure to asbestos fibers and the latency period for mesothelioma typically ranges from 20 to 40 years. The length of the latency periods depends on things such as the size of asbestos fibers and whether the affected individual is a smoker.<sup>61</sup>

Because of the long latency period, children are at a higher risk of actually living long enough to contract asbestos-related diseases than adults exposed at the same time.

According to a 1984 EPA survey, approximately 34,800 schools were believed to have friable asbestos containing materials (ACM), potentially exposing an estimated 15 million students and 1.4 million school employees. Exposure in schools prompted the 1986 passage of the Asbestos Hazard Emergency Response Act (AHERA). AHERA directed the EPA to develop a regulatory framework to inspect school buildings for asbestos and abate when necessary using qualified, accredited persons for the inspections and abatements.<sup>62</sup>

AHERA is the underpinning of the asbestos abatement program adopted in Colorado and implemented by the Colorado Department of Public Health and Environment (CDPHE). The standards developed by the EPA for abatement in schools are integrated into the Colorado Air Quality Control Commission Regulation 8, Part B (Reg.8), which governs the asbestos abatement process across Colorado for all public buildings.

<sup>62</sup> U.S. Environmental Protection Agency. *Signing of Asbestos Hazard Emergency Response Act.* Retrieved April 16, 2012, from http://www.epa.gov/history/topics/tsca/05.html

<sup>&</sup>lt;sup>61</sup> Asbestos.net. *Latency Period.* Retrieved April 16, 2012, from http://www.asbestos.net/medical-glossary/l/latency-period

The second statutory criterion that guides the sunset review process, requires analysis as to whether the programs undergoing sunset review represent the least restrictive regulatory environment consistent with public interest. While it is clear that asbestos abatement is necessary to prevent needless exposure to a hazardous material, the degree of regulation and the utility of a program expanded beyond the bare minimum National Emission Standards for Hazardous Air Pollutants (NESHAP) is less clear.

Asbestos's danger is based on the characteristic that it is fibrous and can be inhaled or swallowed. However, one fiber could be deadly to one person but have little effect on another. It cannot be predicted who will be adversely affected. Though it is a well-known fact that asbestos is dangerous, the variable nature of the effects and danger has led states to have a mixed bag of state regulatory programs.

The continuum of state regulation ranges from ceding all regulatory power to the federal government and no state certification of abatement workers or state issued project permits, to comprehensive programs that have a state-specific examination and certification of workers, project design approval, and project permitting. How does Colorado justify the higher level of regulation?

The Colorado Asbestos Control Act (Act) has the following legislative declaration,

It is the intent of the General Assembly to ensure the health, safety, and welfare of the public by regulating the practice of asbestos abatement in locations to which the general public has access for the purpose of ensuring that such abatement is performed in a manner which will minimize the risk of release of asbestos. <sup>63</sup>

The public interest is very clearly laid out by the General Assembly in this explicit statutory assertion. The specific intent of the Act is to "minimize the risk of release of asbestos." Therefore, a program that regulates abatement in all public areas, requires a highly trained workforce, has state-specific permits, and asbestos-specific inspections, appears to be entirely within the notion of the least restrictive environment consistent with public interest described in the legislative declaration. This is preferable to leaving regulation in the hands of the EPA because the EPA does not actively permit and inspect sites. Anecdotal indications are that in the places where only federal implementation exists, application of the standards is less comprehensive and more sporadic.

The notion underlying a certification program is to ensure that the credentialed individuals who perform tasks have a minimal amount of training. In this case, trained individuals performing abatement related activities, pose less of a health threat to themselves and the public than untrained individuals.

The permitting of a project follows the same rationale. Prior to commencement of a project, CDPHE staff analyzes the proposed work procedures. If the procedures meet the necessary protective standards, a permit is issued.

<sup>&</sup>lt;sup>63</sup> § 25-7-501(1), C.R.S.

There are no guarantees that any project is going to proceed flawlessly. However, following the Reg.8 guidelines, certifying the workforce, and permitting projects are public policy mechanisms that will "minimize risk." Minimizing risk is the standard set by the General Assembly concerning asbestos release.

Additionally, because Reg.8's regulatory framework determines the minimum workforce certification standards, this sunset review determines those standards represent the least restrictive environment in regulating the workforce.

Therefore, the General Assembly should continue the Act for nine years, until 2022.

# Recommendation 2 – Raise awareness concerning asbestos in buildings with additional disclosures.

The greatest challenge to implementation of the Act is that the general public is unaware of the extent ACM exist in their everyday lives. The Act regulates "the wrecking or removal of structural members that contain friable ACM"<sup>64</sup> in any area of public access. Most people, including construction professionals, are uninformed of the amount of ACM in the buildings where they work which could become friable during a renovation.

There may be asbestos in very old buildings, brand new buildings, and in every building in between. Unless the original builder guaranteed only asbestos-free building materials were used, asbestos is possibly in or on pipes, walls and wall coverings, floors, doors, heating and ventilation systems, mechanical ducts, electrical systems, roofing, and other building products. An overwhelming majority of people interviewed for this sunset review outside of the asbestos abatement industry, had no idea the extent to which asbestos exists in buildings today. Most people are under the misunderstanding that asbestos was banned in the 1970s and that it is not much of a danger today.

In most cases the asbestos is encapsulated and does not affect the public. The danger occurs when the asbestos is disturbed, often unknowingly, and the fibers are released into the environment.

What public policy change will increase public awareness, i.e., protect the public, and stay within the sunset statutory criteria of establishing the least restrictive regulation consistent with the public interest?

<sup>&</sup>lt;sup>64</sup> § 25-7-502(3)(a), C.R.S.

<sup>&</sup>lt;sup>65</sup> EPA. Asbestos Containing Material. Retrieved May 17, 2012, from http://www.epa.gov/region6/6pd/asbestos/asbmatl.htm

The Act states that a disturbance of asbestos in a public area is regulated and must be abated in accordance with Reg.8. Reg.8 also requires that any renovation or demolition which may disturb greater than the trigger levels of ACM must be inspected to determine if abatement is necessary. The lack of awareness centers on whether a property owner knows if asbestos is present on a property scheduled for renovation or demolition. Demanding an asbestos inspection prior to commencing every renovation in Colorado is within the power of the General Assembly given the intention of the Act. However, this change seems overly restrictive considering no one knows with any certainty how often an asbestos abatement will be required.

Policies that would accomplish the goal of raising awareness could be modeled after the real estate disclosure policies. Prior to selling a property in Colorado, a seller must disclose whether or not it is aware of any structural, environmental, or other conditions which may be a problem or hazard for a prospective buyer. Asbestos is included in the list of hazardous materials. Under one of the options, the seller may state that it does not know about the property's condition. After reading the disclosure, the consumer can make an informed decision about proceeding. He or she can opt to purchase or not, inspect or not, or perform remedial action or not.

This disclosure policy has raised awareness about the existence of hazardous materials such as asbestos, radon, and lead-based paint with the public compared to the time period prior to the disclosures. Over time the disclosure creates a history of each building sold in Colorado.

In the case of a building renovation, a building owner can either assume that ACM is present and proceed accordingly, or get an inspection to substantiate or deny the existence of ACM. Notwithstanding, the General Assembly should require that each building department within the state put a check-off on its application for a renovation or demolition indicating whether an asbestos inspection has occurred.

Many of the building departments contacted for this sunset review explained that the extent of the asbestos outreach its department does is to place CDPHE asbestos literature in its permitting area. If the consumers happen to see it, they may pick it up. The check-off is another subtle method of raising awareness. The permit applicant will at least have to read the word and think about asbestos during the permitting process.

This recommendation will not increase enforcement actions, because there is to be no requirement in law that an inspection must occur. The requirement is merely that applicants disclose if an inspection occurred. This requires any applicant to, at least, think about an inspection and the possibility that there are ACM present.

So as not to place an unfunded mandate on local jurisdictions, the check-off should be placed on the application the next time a new one is developed and promulgated by the permitting jurisdiction.

Therefore, to increase awareness concerning the presence of ACM, the General Assembly should require an asbestos inspection disclosure by property owners when applying for building renovation permits.

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<sup>&</sup>lt;sup>66</sup> Commission Regulation 8B, III.A.1.