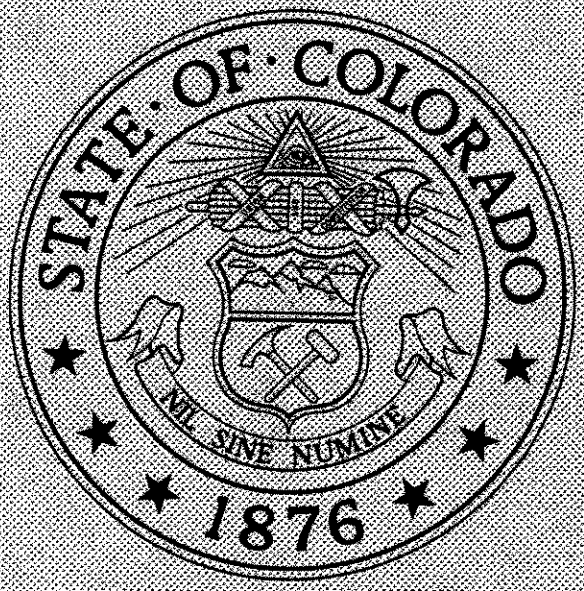
SUNRISE REVIEW

LEAD ABATEMENT PROFESSIONALS



SUBMITTED BY
THE COLORADO DEPARTMENT
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OFFICE OF POLICY AND RESEARCH
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STATE OF COLORADO

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Roy Romer
Governor

July 27, 1993

The Honorable Vickie Agler, Chairperson
Joint Sunrise/Sunset Review Committee
State Capitol Building
Denver, Colorado 80203

Dear Representative Agler:

We have completed our evaluation of the sunrise application for lead abatement professionals and are pleased to submit this written report which will be the basis for my office's oral testimony before the Sunrise and Sunset Review Committee. The report is submitted pursuant to section 24-34-104.1, Colorado Revised Statutes, the "Sunrise Act", which provides that the Department of Regulatory Agencies shall conduct an analysis and evaluation of proposed regulation to determine whether the public needs and would benefit from the regulation.

The report discusses the question of whether there is a need for the regulation in order to protect the public from potential harm, whether regulation would serve to mitigate the potential harm and, whether the public can be adequately protected by other means in a more cost effective manner.

Sincerely,

Joseph A. Garcia
Executive Director

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I. INTRODUCTION

The Colorado Department of Health (CDOH) has requested the Department of Regulatory Agencies (DORA) to evaluate the merits of a lead abatement program in Colorado. Regulation of lead in the environment has become an objective of the federal government over the past several years. By April 1994, the Environmental Protection Agency (EPA) must promulgate regulations for states to use in implementing state programs concerning lead abatement and reduction. By 1996, states will be required to be in compliance with the law. This will either require states to adopt programs that comply with regulations, or the federal government will operate the program in the state.

The Health Department seeks to create and implement a lead abatement regulatory program in Colorado. One major part of such a program involves educating and certifying abatement practitioners. The Department represents that lead poisoning is a serious health hazard and its abatement is important to the public health and welfare of the citizens of Colorado. The Department has, therefore, investigated the Health Department's request as a modified sunrise application. The primary criteria assessed are as follows:

1. Is there a public health risk that should be addressed in Colorado?

2. Could the public benefit from the program proposed to address that risk?

3. Could the public be protected by other means in a more cost effective manner?

II. BACKGROUND

The CDOH currently operates a certification and permitting program for contractors engaged in asbestos abatement. The circumstances of asbestos regulation arose much in the same way as lead abatement. Society became aware of a health problem over time, and the government decided at a later date to address it. Due to lag time in state governmental oversight, however, businesses and individuals were jeopardized in that the public wished to proceed to abate asbestos but there were no controls on who could engage in that activity. Therefore, people may have been exposed or contaminated due to improper removal. Health risks were created by unknowledgeable contractors who did not use the appropriate precautions in dealing with the asbestos. Fraud may have been perpetrated when a dishonest contractor convinced a homeowner that he/she needed to do unnecessary work. Business revenue was lost when contractors engaged in ineffective techniques, and therefore had to take more time to complete an abatement or correct an improper one.

In order to avoid similar problems with lead abatement, the Department wishes to begin a lead abatement program as soon as possible. The federal government is currently regulating lead and will require all states to have a program in place by 1996. The federal government will begin a public education program soon, and as people become knowledgeable about the problem, they will seek ways to cure it. The Department predicts that many of the contractors that were eventually certified for asbestos removal will now seek to enter the lead abatement business. It is their belief that the best way to prevent public harm during lead abatement activities is to certify individuals and contractors up front, after their training and prior to a concerted public demand for services.

The Department represents that it most likely will be able to administer this program with a modest increase in staff and operating budget. The reason for this is because the two programs would be similar in processes (certification of training programs, providers, and contractors are involved in both) so the programs could share resources and infrastructure.

III. PROCESS

DORA interviewed several members of the Colorado Department of Health staff who are knowledgeable about lead contamination. Staff of EPA were also interviewed, since the federal government is creating a model state program for lead abatement. The manager of the lead abatement program of the Denver Housing Authority was also interviewed with regard to the current abatement activity in Denver, and projections about lead contamination. Since it is unknown who would be interested in becoming certified in lead abatement techniques, no public meetings were convened.

IV. POTENTIAL HARM

Assessing the harm from lead exposure is an inexact science. It is important to understand the nature of the sources of lead exposure and the outcome of such exposure in order to assess the seriousness of the public health risk from lead exposure.

A. Sources of lead exposure

Lead is found naturally in our environment and is the most abundant heavy metal on earth.[1] Its toxicity has been recognized for hundreds of years, as early as the Greek and Roman societies.[5] Lead has been a useful component of many modern products, such as paint, ceramic glazes, gasoline, plumbing and solder.[1] The problem arises when lead is ingested by man.

The primary source of lead contamination in our country is lead paint. Lead in paint was predominantly banned in 1978, due to the federal government's recognition of the harmful effects of lead exposure, but the housing built prior to that time probably contains significant levels of lead paint.[3] Paint sold before 1977 may have contained up to 20 to 30 percent lead.[1] It is estimated that six billion pounds of lead persists on houses nationwide.[3] This paint was used to paint the inside and outside of houses, decks, furniture, toys, etc. Deteriorating lead paint is usually the primary source of lead poisoning in children.[2] As the paint ages it sheds lead dust and chips, inside the house and in the soil surrounding the house outside.[2] Lead in this form is then ingested in normal hand to mouth activity. Household remodeling is another way in which lead levels in the house can reach dangerous proportions. Disturbing lead paint that has not deteriorated from such places as woodwork, doors and floors will create the same or greater risks of ingestion as chipping paint.[2,4]

Lead also can be a problem in soil and water. Soil becomes contaminated from vehicle exhaust, industrial emissions, bridge renovations and housing paint deterioration.[3] Lead emitted in the air and deposited on soil remains indefinitely, and children ingest it when playing outside.[3] Although non-leaded gas has reduced lead emissions from that source in the last decade, contamination that was created previously continues to exist.[2] Plumbing installed before 1940 is likely to contain lead, so drinking water in older homes may be contaminated.[2] In newer homes, lead can leach from solder for about five years after installation, so it can still cause a problem.[2] Even brass faucets contain three to five percent lead.[2]

B. Health effects of lead exposure

Most lead poisoning results from ingestion of lead or inhalation of lead dust. Adults are most often exposed in the work place or when redecorating an older home.[6] Children tend to be exposed in the home or nearby yard.[6] Lead, when absorbed, enters the blood stream and migrates both into soft body tissues, including the liver, brain and bone marrow, and hard tissues such as bones and teeth.[2] Although lead only stays in blood 60 to 90 days, residual amounts accumulate in the body over a lifetime and affect various body systems.[5] Fetuses and young children suffer the greatest damage from lead exposure.[2] Children can suffer from sluggishness, attention span deficits, impaired hearing, reading and learning disabilities, delayed cognitive development, reduced IQ scores, mental retardation, seizures, convulsions, and even coma and death should the exposure be great.[5] Adults who are exposed can suffer from hypertension, infertility, damage to the nervous system (from reductions in grip strength and eye-hand coordination to convulsions, intellectual and behavioral impairment, and even death), and anemia.[2]

The United States Center for Disease Control (Department of Health and Human Services) has recognized over the last 40 years that even very low levels of lead in a person's blood can result in adverse health effects such as those previously listed.[5] The amount of blood lead that the Center for Disease Control (CDC) is recommending currently as the actionable level for children is 10 micrograms per deciliter. A surprisingly small amount of lead can create lead poisoning - a few thumbnail size chips of paint, for instance, or the dust from sanding or scraping old paint from a wooden surface.[3,4]

C. Scope of the Problem

Because lead is found throughout our environment and has existed throughout time, it has not been possible to quantify the scope of this problem. Various states have created estimates of the numbers of people who have been affected by lead ingestion and/or toxicity. A 1988 Report to Congress by the Agency for Toxic Substances and Disease Registry estimates that each year in the U.S., an estimated three to four million children under age six have blood lead levels over 15 micrograms per deciliter, and approximately 400,000 fetuses are exposed to lead contamination at levels that can stymie their mental development.[2]

The Colorado Department of Health has not conducted a comprehensive study on lead contamination in our environment and/or our population. CDOH has investigated lead poisoning at some designated Superfund sites and, in some cases, where the CDOH had reason to believe that lead toxicity was a problem. In those particular cases lead poisoning was discovered. The sample numbers were so small, however, the Department was not able to extrapolate from those situations to any other situation.

Denver County is currently engaged in a lead abatement project required by the U.S. Department of Housing and Urban Development (HUD) for those homes HUD subsidizes. Approximately 7,000 units are targeted to be abated. However, this number does not relate to an estimate of the overall numbers needing abatement, but relates to the number of HUD rentals in the Denver area. Denver authorities validated that in Denver homes built before 1965, the lead problem was most severe, especially on the woodwork, trim and eaves of the homes.

There is, therefore, no definitive way to quantify the scope of the lead problem in Colorado. The EPA is involved in a comprehensive analysis of the scope of lead contamination by region throughout the United States. By fall, it anticipates that quantifiable estimates will be completed for Colorado. Without that data, however, it is still apparent that lead poisoning is one of the most serious--and preventable--health problems in our country.

V. REGULATORY DISCUSSION

Several different federal agencies regulate lead exposure and contamination levels (Housing and Urban Development, Environmental Protection Agency, Center for Disease Control, Department of Labor, Occupational, Safety and Health Administration, National Institute of Science and Health). The federal program specifically aimed at reducing unacceptable lead exposures (emphasizing elevated blood lead levels in children) is being implemented by the Environmental Protection Agency.

The federal government has dealt with lead problems in various areas through federal/state programs. Lead contamination in pesticides, public drinking water systems, gasoline and paint has been successfully addressed.[6] Now EPA is creating regulations that will require states to assess the health impacts of lead exposure, measure contamination, develop abatement technology and set standards for abatement contractors. All of these activities are derived from Title X of the Housing and Community Development Act of 1992 (P.L. 102-550), commonly known as the "Residential Lead-Based Paint Hazard Reduction Act of 1992." Over the next 12 months, Title X will alter virtually every aspect of dealing with lead-based paint hazards in U.S. housing, creating changes in the efforts to prevent poisoning in children. The changes will eventually affect property owners, lenders, landlords, insurers, realtors, parents, tenants, abatement contractors, inspectors, laboratories, trainers, home remodeling, and state and local government agencies.[7] The focus of the act is on two types of activity--evaluating hazards (risk assessment or inspection) and reducing hazards (abatement).

Both of those types of activities will be regulated. Title X establishes strict requirements for contractor certification and licensing; training-provider accreditation; laboratory licensing; and performance standards for testing and abatement products. If state programs are created, they will be required to meet these standards as a minimum.

States are encouraged to request authorization to form their own programs within the federal parameters. Both the EPA and HUD will offer grants to the states to assist in beginning such programs, as well as grants to train and educate workers/supervisors engaged in lead reduction activities.[6] Lastly, the states will be authorized to engage in fee collection to support the program in lieu of the federal agencies collecting fees for the regulatory activity.[6]

The CDOH seeks to set up a state program, using the model standards developed by the EPA. The Department already has an infrastructure to deal with certifying, evaluation and abatement activities regarding asbestos. The staff is already familiar with this type of structure. The Department, therefore, believes the lead program would not have to be created from scratch. The Department believes delay in regulating lead abatement could be harmful to the public. This is because incidents arose during asbestos abatement where individuals were removing asbestos from buildings without adequate knowledge, equipment and experience, thus jeopardizing their own health and the health of others. The Department of Health wishes to

avoid similar experiences with the lead abatement program by beginning a program early, prior to the time public knowledge is increased and contractors begin work, so that any unnecessary danger can be avoided. In addition, an early certification program in particular could prevent fraud where unknowledgeable contractors attempt to abate lead unnecessarily.

VI. CONCLUSIONS AND RECOMMENDATIONS

There is logic to the Department's request. Although it is not possible to quantify precisely the amount of risk the public incurs in Colorado due to lead contamination, it is fair to conclude that a significant risk exists. A large number of Colorado homes were built before 1977, and a number of those homes contain children under age 10 or may undergo renovation. Other sources of lead exposure (such as water pipes, soil, gasoline, industrial emissions) add to this total in Colorado. It is uncontroverted that lead exposure and/or lead poisoning are serious medical problems that threaten the health and welfare of the exposed persons. It is also uncontroverted that lead poisoning is a preventable condition that could be decreased or avoided by proper public health education and lead inspection and abatement.

The federal government is about to require states to take positive actions to regulate lead inspection and abatement. The only question is whether the state should operate the program or whether the federal government should run the state's program.

The state has something to gain from operating the program itself. First, it would receive technical assistance from the EPA in implementing the program that would educate state health staff to the issues and problems involved in lead reduction. This would allow for a more thorough and appropriate public health response to lead incidents and crises. The crises are going to occur in Colorado regardless of who operates the program, and the ability to respond effectively on the local level would better protect the health of Coloradans than a deferment to federal response or decision making.

Further, if the state regulates the program, state rule making would occur as well. This allows for input from geographically dispersed populations in Colorado, and also allows the Department to consider local geographic and economic concerns in determining final rules, whereas the federal rules will be generic and finalized prior to program start up. In addition, the EPA is not staffed or funded to actually implement programs at a recipient level. Its mission has always been to create policy guidance and programmatic technical assistance. Turning implementation over to the EPA in these circumstances would most likely not benefit the people of Colorado, but would supply a pretense of protection without real substance so that consumer expectations would be raised but satisfaction would be lacking.

Lastly, the state could probably receive grant money from the federal government to get the program going, so no initial funding would be necessary. If the program is sufficiently similar to the asbestos program, the state should be able to operate it, utilizing its current infrastructure to support the program as well as the fees generated by the certification and permitting segment.

Pursuant to the above, DORA finds and recommends as follows:

1. There is a public health need to address lead poisoning and the risk of exposure in Colorado and the federal government is going to require a program to do so in the next two years;

2. The Colorado Department of Health is the appropriate agency to address this issue and could initiate such a program with a minimum of effort and funds;

3. Local and regional reasons exist that support the state's assumption of this program. There are few reasons to encourage the federal government through the Environmental Protection Agency to operate the program. Therefore, the Joint Legislative Sunrise/Sunset Committee should consider the Department's request to review this program as a sunrise request and handle it accordingly.

4. The public could benefit from a lead reduction program run by the Colorado Department of Health.

5. The public could be protected by a program run by the Environmental Protection Agency. Since the CDOH believes, however, expenses for this program would involve a modest increase in the stationary sources program costs, it is to the state's advantage to maintain control over the program. Should costs escalate, however, this issue should be revisited.