

EPA RADON POLICY AND ITS EFFECTS ON THE RADON INDUSTRY

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Although the EPA has always stated a goal of solving the indoor radon problem through private sector testing and mitigation, EPA programs may be impeding the development of a viable private radon industry. Several possibilities for modification of the EPA programs are discussed: 1) "sunset" provisions for EPA programs that would schedule their termination so that the private sector could plan for privatization, 2) increased utilization of voluntary consensus standards organizations such as ASTM and ASHRAE to replace EPA protocols and guidelines, 3) cost/benefit analyses of impact of past and future EPA programs on the radon industry, 4) an EPA ombudsman to serve as a contact point for radon industry comments to the EPA, 5) increased radon industry participation in future development of EPA programs and guidelines to prevent surprises and allow for longer term planning, 6) a revision of the EPA authority to issue guidelines, protocols, examinations, etc. so that this de facto rulemaking would be subject to the same review as formal EPA rule making.

## INTRODUCTION

What is the proper response of the federal government to the indoor radon problem? This paper will briefly consider policy approaches, outline the problems with the current EPA indoor radon programs, and offer suggestions for a change in direction current federal policy that should offer better services to the public by allowing market forces to operate more efficiently.

Under our constitutional republic, all governmental authority must be authorized by the constitution which makes no mention of indoor radon. We must assume that the current activities are authorized under the "general welfare" clause in the preamble. This phrase allows for broad interpretation which varies with the vision of the current executive, legislative and judicial branches. The EPA, as a member of the executive branch, appears to be following President Bush's vision (last stated in The State-of-The-Union address) of relying on the private sector whenever possible and returning power to the states and localities. Congress appears to have agreed by authorizing the EPA to assist the states in developing and regulating radon activities, and the most recent legislation is the Indoor Radon Abatement Act (IRAA) of 1988. All of this activity has been characterized the EPA and Congress as "non regulatory" since radon is naturally occurring and its primary exposure has been in private residences where the government does not want to intrude. The EPA has issued radon guidelines and has provided "voluntary" proficiency demonstration programs to assist the states in determining who is capable of measuring and mitigating radon problems. The EPA has also provided extensive public information, and it has often stated that it wants private industry to provide a solution to the indoor radon problem through a non regulatory program.

Unfortunately, this non regulatory approach has resulted in a highly regulated marketplace from the point of view of private industry participants. More and more states have enacted regulation to make it impossible to perform radon related work without full compliance with all the latest EPA "voluntary" programs. Mandatory state regulation through the use of voluntary EPA programs appears to be an ideal situation to state regulators since they can rely on the authority of the EPA to legitimize the state programs at little or no expense. But it presents an increasing burden to those in the industry who face increased competition from competitors trained by EPA developed courses and certified by EPA developed examinations, increased costs to private industry from fees mandated to support these programs, and an increased paperwork burden from an ever increasing "voluntary" protocols and revisions to these programs. The EPA has not attempted to justify these programs by offering proof that these programs offer the public a higher quality and more cost effective service.

These programs each appear to be well intentioned, but in their sum they are creating an industry that is focussed around the lowest common denominator. The only standard of quality is whether a firm has the required EPA "certification". These programs were created without significant industry input, they are completely controlled and managed by the EPA without continuing industry input, there is no plan for eventual privatization of these programs, an increasing bureaucracy is being created to support these programs, and Congress has directed the EPA to support these programs through the imposition of user fees on the industry but not the States who are the prime beneficiaries. Many persons who have remained in the industry despite the current severe recession are discussing whether to hold on a little while longer in the hope that the competition will succumb before they do, or whether to begin a strike against the increasing governmental regulations on the industry.

## POSSIBLE EPA APPROACHES

What approaches could the federal government have used in dealing with the indoor radon problem? Within the current federal economic and political constraints at least three approaches can be imagined:

### Laissez-faire Approach

Although true laissez-faire would involve no governmental programs, we can imagine approaching laissez-faire by limiting the federal government to the conduct of limited research to identify the problem, issuing recommendations, and leaving the market place to develop solutions. This approach assumes the indoor radon problem is not an immediate emergency of such complexity that emergency measures are called for, and that the complexity of society requires the variety of solutions that can best be offered by relying on individual initiative rather than a bureaucracy. The primary disadvantage of this approach is that it might have taken longer for a significant market solution to have developed, given what we now know about the public apathy and the extraordinary amount of education that it has taken to generate even today's marginal response. Possible advantages of this approach include low cost to the federal government, and the potential for the development of a "Sears or McDonalds" approach to radon where some large, well financed company would have the incentive to devote the resources necessary to develop a high quality radon service firm. In today's market where anyone can get EPA "certification" there is little advantage to offering a well established, brand-name, quality service. One disadvantage is that the states would have to develop their own programs for certifying competent firms, such as they currently do for home improvement contractors.

### Bootstrap-Sunset Approach

Under a bootstrap-sunset approach, the federal government assumes that the problem is serious enough to justify the development of programs for training and proficiency demonstration to get the industry started, but the government realizes that this bureaucracy can never be able to deal with the evolving complexities of the situation and so each program would have a sunset provision so that they could be taken over by industry groups or private firms. In this way, the EPA could prevent the heavy hand of bureaucracy from becoming a permanent burden on the industry and determining every aspect of its future. One disadvantage is that the states would eventually have to develop their own programs to identify the competent members of the profession. This approach would not require continuing expenditures by the federal government and the imposition of user fees to pay for them.

### Bureaucratic Approach

Under the bureaucratic approach, the federal government assumes that the problem is so complex that a permanent federal bureaucracy should be developed to control all aspects of the radon industry through "voluntary" guidelines and programs that are offered to the states as the basis for their non-voluntary regulation. One disadvantage of this plan is that it is expensive, even if it is financed by mandatory user fees, because in any case the funding will come from the public. Another hidden cost of the program is that it stifles new market solutions to the problems because the heavy hand of bureaucracy drives out the best services, reducing everything to a common denominator. The primary advantages are that the states will have a simple solution to the problems of providing lists of competent "EPA certified" firms. This appears to be the approach that the EPA has selected.

## EVALUATION OF CURRENT EPA PROGRAMS

When the indoor radon problem was first identified in the mid 1980s, EPA researchers provided contractors with vital information on radon mitigation and testing, and the EPA policy office provided much needed public information material. This activity seemed to be an excellent marriage between public and private interests that served to bootstrap a market solution to the problem. However, now that the radon industry is maturing, it is time to consider the potential benefits of returning as much of the EPA radon program as possible to the private sector. Many of the services now being provided by the EPA are in areas such as training, certification, and calibration are not special types of services (such as law enforcement and court systems) that can only be provided by the government. Privately provided services are generally acknowledged to be more efficient, and this privatization of indoor radon will certainly provide a welcome reduction of government expenditures in this time of budget deficits. An orderly transition to private services should provide services that are more responsive to the marketplace, and the alternative to privatization is a permanent government bureaucracy which has never been the stated intention of the EPA or Congress.

### RMP Program

Consider, for example, the EPA's Radon Measurement Proficiency (RMP) Program. Certainly everyone wants to have accurate measurements, and RMP initially provided a valuable service when no private sector services were available. Unfortunately, the current program may actually be impeding the development of private sector efforts to provide calibration and quality assurance services. Wouldn't it be preferable to have many private calibration facilities, conveniently located, offering competitive services; rather than a few of EPA laboratories in distant locations offering very limited services? The presence of the "implied EPA certification" provided by RMP makes it difficult for anyone to take the private labs seriously. The private sector can not compete with the authority of EPA pronouncements, even if the private service is demonstrably better.

A second problem with RMP is that it is a proficiency demonstration program that does not certify contractors, but everyone who uses the program (contractors, states, and local governments, etc.) treats it as a certification of calibration. Private labs find it impossible to sell real calibration services since they do not have the EPA authority, and why should anyone go to the extra expense of going through two programs (RMP and private) when all anyone asks for is the RMP seal of authority. The net result is that RMP has resulted in a low level of calibration in the industry because it has monopolized the calibration business and then offered very infrequent services (approximately every 2 years).

A simple privatization plan for the EPA RMP program would begin with an announcement by EPA of a date (e.g. June 1, 1992) after which the EPA would no longer provide laboratory services for the RMP program. The EPA would also announce conditions under which private laboratories could provide the equivalent laboratory service in lieu of the EPA labs. This would allow the private laboratories to make plans to take over this service. The EPA might initially provide an intercalibration service to certify these new labs, and it might even work with the National Institute of Standards and Technology (NIST) to develop improved radon calibration standards. Currently there does not appear to be any EPA effort to assist private labs in taking over the RMP role. In addition, EPA literature would be modified to indicate that the public should look for testing firms that can "demonstrate fulfillment of a plan to provide accurate measurements either through private calibration facilities or through the temporary EPA RMP". Ultimately the EPA could turn the remainder of the RMP program (record keeping, publishing lists, etc.) over to the highest bidder or an industry trade group.

### RCP Programs

In contrast to RMP, the EPA Radon Contractor Proficiency (RCP) Program is an example of an EPA program where some consideration has been given to privatization. In order to stimulate and guide the radon mitigation industry, the EPA developed training courses and exams on radon mitigation, and these courses were originally given by the EPA. To protect its investments in this program, and guarantee geographic distribution of these services, the EPA competitively selected regional training centers where the courses and exams are given from the EPA prepared materials. In addition to these centers, private firms can apply to give the courses if they met specified criteria.

Ideally, the entire RCP program would be turned over to the private sector. This includes updates to the courses and exams, and will require a number of changes since the program was developed without significant industry input or control. Today the radon industry does not have a formal role in revising the examinations or courses, there is no formal plan to phase out EPA control, there is no appeals process for RCP examination results, no grading criteria have been published, and there is no EPA response to comments submitted after completion of the examination or course. The RCP exam also diminishes the possibility of competition among radon mitigation companies. Home owners do not want to hear about a contractor's years of high quality work and innovative solutions, they just want to know "Are you EPA certified?".

### De Facto Rulemaking

All the EPA guidelines, recommendations, and proficiency demonstrations quickly become de facto rules because the states are quick to incorporate them into law or local regulations. But the EPA is not required to subject these de facto rules to the same level of public scrutiny as their other formal rule making activity. All of these activities should be open to public scrutiny, and anyone who submits written comments should have a response in writing as to the disposition of the comments. An EPA indoor radon ombudsman is recommended as a contact point for comments on current EPA programs. The industry has lost confidence that any of its comments are taken seriously unless they are made through congress.

### User Fees for EPA Programs

The EPA was authorized by the IRAA to implement user fees with the goal of recovering costs in programs like RMP and RCP. Again this appears to be an excellent idea in these days of budget deficits and "pay as you go". Since RCP and RMP are voluntary and provide valuable services, why shouldn't the users pay for them.

The case for user fees would be stronger if the programs were truly voluntary and the programs had not made it impossible for the private sector to provide equivalent services. Much of the industry does not have any choice, they must participate in RCP and RMP or the State will not allow them to stay in business. For this reason, the EPA should consider privatization of these services as an alternative to user fees for cost recovery.

It is well known that the demand for free or underpriced services/items of value is very large, and I think that the EPA has proven this again at great expense, especially in the RMP program. Some sort of price (not necessarily money) must be imposed in order to avoid wasting money on applications that come from companies that are not serious about providing radon services. But this does not mean that the proposed fees must be related to cost recovery.

Let's take cost recovery to its logical extreme. There is only one ultimate "payer" in business and that is the customer. If there are increased costs to the industry, then the customer is ultimately going to have to pay for it. In today's radon mature market, the consumer has largely decided to ignore the problem, and the radon business is primarily related to a small percentage

house sales. I estimate that in this market approximately 10,000 mitigation jobs and about 100,000 testing jobs are done every year, and a mitigation job costs about ten times more than a test. I also estimate that the EPA is spending about \$10 million per year on indoor radon, and if this was allocated to each test and mitigation and test proportional to their present cost, then simple algebra shows that we would have to add \$500 to the cost of each mitigation and \$50 to each test in order to provide full cost recovery for the EPA radon program. Would the public put up with this surcharge or even a fraction of it?

#### Quality Assurance Programs

A Quality Assurance (QA) Program has been suggested as part of RMP for all radon test companies. This could be considered as a response to the realization that RMP has become the primary radon industry calibration program, even though it was never meant to provide that service, and it is a very poor substitute. Privatization of this aspect of RMP is somewhat confusing because the marketplace would probably not recognize the artificial distinction that is being made between "demonstrating proficiency" and running a measurement QA program. Again we see an apparently good idea that could result in all companies offering "EPA certified QA Plans", making it impossible for the consumer to determine which companies have a serious commitment to QA. A more effective approach to accurate measurements might be to encourage "double blind" evaluations of testing companies where testers would be evaluated without their knowledge, and the results would be published for all to see. Then there would be a real premium on QA - not just a paper requirement

#### RMP Examinations

A "voluntary" examination for radon testers is under development that would require that all test personnel attend EPA approved training courses. Again, no cost/benefit or industry impact studies have been offered by the EPA to justify this program to the industry, but it will certainly give the states an easy way to recommend test companies. Again, the radon industry has had no part in this development, and no plan for its ultimate privatization has been suggested.

#### RCP Mitigation Protocols

The next step in the RCP program appears to be the promulgation of EPA protocols for radon mitigation. It seems that when radon mitigators signed up for the voluntary RCP exam, they agreed to adhere to EPA mitigation guidelines. The draft protocols contain valuable material, and they would make a useful technical resource document that might replace or supplement the aging 1987 EPA Technical Guidance document on radon mitigation. Unfortunately, the new document was produced without formal industry input, without a cost/benefit analysis, and without plans for consensus approval and periodic updates. The IRAA directed the EPA to work with consensus standards groups such as ASTM, and this should be expedited by EPA. During the extensive open review necessary to arrive at a consensus document, all substantive comments must be dealt with in writing, and there is an automatic provision for periodic updates. The EPA is currently under no such restrictions for developing its current "voluntary" guidance and recommendations. Under current EPA policy, we can expect a cursory review period for the EPA mitigation protocols, after which the states will pick them up, as gospel, and create an increased level of regulation for the radon industry.

#### Redraft of "Citizen's Guide to Radon"

The EPA recently asked for comment on a new draft of the "Citizens Guide to Radon" which contained major shocks for the radon industry. Since this draft was prepared in response to the IRAA which directed EPA to recommend that home owners reduce their indoor radon levels as close to ambient as possible, few in the radon industry expected new EPA guidance that

would effectively raise the radon action level that the radon industry is currently implementing. The technical arguments in this debate are outside the scope of this paper, but I think it is safe to say that if the industry had understood that the EPA was heading in this direction, then many in the industry would have reconsidered their commitment to the radon business. As you can understand, business people have to make long range plans, and it would be very helpful if they knew as early as possible about major policy shifts that might radically alter the economics of their business. Preliminary EPA response to industry comments suggests that the EPA did not anticipate the negative industry response to the draft Guide. This misunderstanding might have been avoided if the EPA had performed a cost/benefit analysis on the radon industry in addition to their study of the impact on the U.S. population. The radon industry could provide valuable input in these matters if there was a partnership between EPA and industry that allowed for continuing communication during the development of these guidelines, protocols, examinations, etc. Although the Citizens Guide contains only recommendations and guidance, it has an impact on the U.S. population and the radon industry that is comparable to any EPA rule making. Therefore, this guidance should be subject to the same full public review as formal EPA rule making.

### RECOMMENDATIONS

It appears that Congress did not direct the EPA to work as a partner in assisting the private sector to create a high quality radon industry with a planned rapid transition to a fully private sector effort. Rather, it has effectively directed the EPA to create programs that have taken over the management of the industry with no plans for future privatization. It is no wonder that there are few signs from the industry of increasing self management, since the burden of EPA regulation increases daily.

It's ironic that these problems are taking place as Eastern Europe throws off the shackles of central planning and acknowledges that most problems are more efficiently solved by the free market. Well meaning controls that stifle innovative market solutions must be guarded against with constant vigilance. Sometimes we forget that the radon industry is a trade that is closer to home improvement contracting than it is to brain surgery, and radon industry regulation should be consistent with that fact.

### DISCLAIMER

The work described in this paper was not funded by the U.S. Environmental Protection Agency and therefore the contents do not necessarily reflect the views of the Agency and no official endorsement should be inferred.