# THE EPA'S PROGRESS IN REDUCING UNNECESSARY REGULATORY AND PAPERWORK BURDENS UPON SMALL BUSINESS 

## Y 4. SM 1:104-64

The EPA's Progress in Reducing Unne...

## HEARING

BEFORE THE

# COMMITTEE ON SMALL BUSINESS 

 HOUSE OF REPRESENTATTVESONE HUNDRED FOURTH CONGRESS
SECOND SESSION

## WASHINGTON DC, MARCH 7, 1996

## Printed for the use of the Committee on Small Business

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# THE EPA'S PROGRESS IN REDUCING UNNECESSARY REGULATORY AND PAPERWORK BURDENS UPON SMALL BUSINESS 

THURSDAY, MARCH 7, 1996

> House of Representatives, Committee on SmalL Business, Washington, $D C$.

The Committee met, pursuant to notice, at 10 a.m., in room 2359, Rayburn House Office Building, Hon. Jan Meyers, (Chair of the Committee presiding.)

Chair Meyers. This is the fourth in a series of oversight hearings our Committee is conducting on both Congressional and administration initiatives to reduce regulatory and paperwork burdens on small business. We have been evaluating what Agencies are doing in meeting the President's March 4th directive to Agency heads to read every page of their regulations, make regulatory reform a priority, fulfill the recommendations of last June's White House Conference on Small Business and accomplishing the burden reduction goals of the 1995 Paperwork Reduction Act. Our intent is to develop a report card on these activities later this year.

Now, my understanding is that President Clinton's directive was last year, and he made his speech to the White House Conference in June, almost a year ago, and so far we have not seen the kinds of results in regulation reform and the reduction of burden on small business that we think we should have seen.

In these other hearings, we have impaneled a distinguished executive branch official with representatives of small business, and frequently in hearings like this, those of you who have gone to a lot of them, you know that the administration makes their statement and then gets up and leaves with their entire retinue, and then the other panel comes to the table and speaks. In this Committee we decided we would put everybody together and let them have an exchange of ideas and a dialogue. We thought we could safely do this without it having come to a fight or anything, and so far it's worked out just fine. Our three other hearings have been with Joe Dear, of OSHA, Peggy Richardson, the Commissioner of the IRS, and Sally Katzen, of OIRA.
I want to thank Fred Hansen, the Deputy Administrator of EPA, for his willingness to participate. I also want to thank our small business witnesses, two of whom were conference delegates. I think Mr. Igdaloff and Mr. Risalvato-

Mr. Risalvato. Very good.

Chair Meyers. I asked for some help ahead of time-two of whom were White House conference delegates. They have come from all over the country, and I very much appreciate the effort and we look forward to your participation. Mr. Murphey, of course, is from God's country in Kansas.
Our hearing is very timely. Two days ago I held a press conference in this hearing room with other Members and 17 small business organizations, to endorse the Small Business Growth, and Administrative Accountability Act. The administration has threatened a veto on the bill based on it's objections to Title II. Yesterday, the bill was pulled.

Title II concerns periodic review of regulations. An existing regulation would have to be reviewed in a staggered basis, every 9 years; a new regulation, in a staggered basis, over 7 years. This, for a periodic review, did not seem onerous to us, but I know it was of great concern to the environmental community, and to Ms. Browner at EPA. The bill was pulled and we are trying to adjust it.

Judicial review of the Regulatory Flexibility Act is in Title I; and that's the issue that is of deep and great concern to small business, and something we've worked for many years, and that and Section 3 of the bill are acceptable to the President and everybody, I believe. But Section 2 was problematic and so the bill was pulled until we can adjust it. We think it will be back next week, at least we hope so, and we'll be able to look at it again.

I intend to ask Mr. Hansen today, if he doesn't respond in his opening statement, to respond to what we are proposing the Agencies do in that bill is more than what the EPA would be called upon to undertake with the Presidential directive from last year. We need to know what the problems are there.

At our press conference Tuesday I said that nothing has happened as a result of all the President's talk at the White House Conference on Small Business, and I think that's true-I don't mean to be harsh, I don't think everybody deserves an F, I just don't think they deserve, maybe, anywhere near an A or B. It's discouraging to Congress when the President asks for something and so little has happened in the following year.

I know the small business community who recommended these steps. We are going to talk with a few of their representatives today. No one is interested in "rolling back environmental protection." We are all interested in eliminating unnecessary barriers, and enabling small businesses to grow and create new and more jobs.

I believe our discussion today should contribute to the overall objective of regulatory relief for small business. At this time I would like to defer to my-colleague, Mr. LaFalce, the Ranking Member of the Committee.
[Chair Meyers' statement may be found in the appendix.]
Mr. LaFalce. Thank you very much, Madam Chairman, for calling the hearing, and for starting it a little bit late so I could get here.

Easing the regulatory burden on small business has been a priority of President Clinton's administration, and I appreciate the opportunity to hear from another Federal Agency on the effort that
they have made to eliminate obsolete regulations, and to clarify, to scale back, or to otherwise update a host of other regulations.

I also appreciate your affording small business representatives a forum so that a dialogue can be conducted with those responsible for balancing the economic concerns of our Nation's businesses, with the public health and environmental concerns of all our Nation's people.

Last, I'd like to give a special welcome to our witness from the Environmental Defense Fund, Ms. Carol Andress, who has had experience and success in effecting this balancing act, particularly in the printing industry.

My introduction to an environmental degradation was rather dramatic and complex. Not too long into my Congressional service, I discovered an abandoned hazardous waste site in my Congressional district. It has become known as the Love Canal. We had an EPA in existence at that time, not too many years old, but there was no legislative mechanism in place for dealing with man made environmental problems of that magnitude or kind.

So in response to this situation, I offered the first version of what eventually became the Superfund Law. Under that program, as approved in December, 1980, and reauthorized in 1986, the Love Canal hazardous toxic waste site has been cleaned up. Just last December, the polluter was ordered by the courts to pay the Government for the cost of the cleanup.

The success of the Superfund Program can be debated ad nauseam. There have been a great many difficulties, a great many with its administration and implementation; some difficulties with the law itself. I'm very pleased that this administration has dived into the Superfund thicket to do all that they can administratively to get it on track. I think over the past 3 years, and Mr. Hansen, I'd like you to articulate this, you have made great strides. I also know that in the last Congress, you suggested remedial legislation that still hasn't been enacted, either by the Democratic Congress or by this Republican Congress, that would make your job in life a lot easier, and it would assist in the administration and implementation of the purposes of Superfund.

Now, there's no one who's never met a regulation they didn't like. We all have our horror stories, whether we work with the Environmental Defense Fund or the Sierra Club, you have to admit that there are certain horror stories that exist. This means we must consider not only the cost involved to comply with regulations designed to protect the environment, but it also means we must explore the cost of not protecting the environment, too. We really need to do both.

There are many livelihoods that are dependent on preserving the environment: agriculture, forestry, tourism, recreational industries involving any number of sports and hobbies. They are but a few. We have had a great many layoffs in my Congressional District on the part of companies who are reliant on Federal moneys to cleanup the environment, because that Federal money had been shut off. Declines in profitability for the past 8 quarters, because of difficulties in getting monies to fulfill contracts.

Public health risks are another cost that accompany a poor environment. They, of course, involve economic losses such as lower
productivity because of sick days and increased medical costs for individuals in companies.

In an article entitled "Jobs, Competitiveness, and Environmental Rate Regulations," which I'd like to offer for the record, author, Robert Reppeto, of the World Resources Institute counters the argument that environmental regulation hurts productivity or competitiveness.

He cites one study that claims that as environmental standards tighten around the world, firms that are technically ready to compete will have an advantage. He also notes that in the business world, the real issue is not environment vs. jobs. "Each year," he says, "many companies downsize in response to declining demand or technological change, and others expand employment shifts that dwarf those even remotely attributal to environmental protection."

He goes on to write, "That people have repeatedly stated that they want both relatively unpolluted air and water, safer and healthier neighborhoods and work places, and undegraded natural resources. The challenge is not to weaken environmental regulation, but to improve it, to make it more rational, reasonable, cost effective."

I think I'll conclude my remarks and offer the entirety of my statement in the record. But it's with that spirit that I hope all members of the panel can come together in dialogue. Might I say on the bill that was before us yesterday, Madam Chair, I hope we can take up Titles I and III and pass them expeditiously, perhaps even by voice vote. Title II is, however, quite problematic and rather than delays Titles I and III, I'd like to see those passed and then we can attempt to resolve our differences, if they are resolvable, on Title II.
[Mr. LaFalce's statement may be found in the appendix.]
Chair Meyers. Thank you, Mr. LaFalce. We have been joined by Mr. Chabot and Mr. Luther, and I would say that anyone who would like to offer an opening statement for the record, without objection, that will be so ordered.

At this point in time, I would like to introduce Mr. Fred Hansen, who is the Deputy Administrator of the Environmental Protection Agency. We'll ask Mr. Hansen if he'd like to talk for 10 or 15 minutes then we will go to our business panel and ask them to speak for 5 minutes apiece, and then at the end we will have discussion and questions. Mr. Hansen.

## TESTIMONY OF FRED HANSEN, DEPUTY ADMINISTRATOR, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Mr. Hansen. Thank you, Madam Chair, Congressman LaFalce, members of the Committee. I am pleased to be here and I will take less time than you suggested, because I do think it's very important to be able to have a dialogue among the members of the panel and with the Committee.

I am delighted to testify today about EPA's initiative to reinvent environmental regulations and to assist small businesses. As you know, President Clinton has made common sense Government a top priority for his administration. For the past 3 years, EPA Administrator, Carol Browner, has worked to reform EPA's activities across the board in order to reduce complexity, paperwork, and cost
to regulated businesses without sacrificing public health and environmental protection.

I do believe that, whether or not we are graded by the letter grade process that you had indicated or not, that we have made substantial progress in reinventing regulations over this past year in particular, since the President announced priority initiatives and asked all Agencies to look at additional reinvention opportunities. I do believe that we have an exemplary record, though that does not mean that we don't have more things to do.

In this overall context of reinvention, our common sense cost effective efforts to assist small businesses are, in our view, a very critical component. We understand that small businesses have a particularly difficult time understanding and complying with all their environmental responsibilities. We know they need common sense compliance assistance, cost effective and streamlined procedures, and less paperwork.

At the same time, I know from conversations I've had with people running small businesses that I have met with across the country and especially at the various State and regional small business conferences that have been held over this past year, that many people running those same small businesses-share in the Nation's concerns about public health and environmental quality.

Like other Americans, small business owners want to live and work in safe, clean communities, and they want to make certain that valuable natural resources like safe drinking water and clean air, will be available for future generations.

We at the EPA want to help them do the right thing and thus contribute to the protection of public health and the environment in this country. We are doing this in three different ways that make both economic and environmental sense. First, by reducing the paperwork burden of current laws and regulations; second, by helping small businesses comply with environmental requirements; and third, by encouraging the involvement and views of small businesses in EPA activities, especially the development and reinvention of environmental regulations.

Let me expand each of those three areas. First, EPA has undertaken the most extensive effort in the Agency's history, to review all its regulations and identify opportunities for eliminating red tape and paperwork. We are paying special attention in that effort, to the concerns of small businesses.

Just 1 year ago this month, Administrator Browner directed the Agency to reduce the paperwork associated with environmental reporting 20 million burden hours and to do that without sacrificing our ability to protect public health and the environment. We are now about halfway toward meeting that goal and the benefits will improve to businesses, both large and small.

Last year, EPA implemented a new universal waste rule. By streamlining the regulations related to common hazardous waste like batteries and certain pesticides, it will greatly ease the burden on retail stores and other small businesses that collect these wastes for recycling.

We have reduced the burden for small businesses required to report to the Toxics Release Inventory, or TRI requirements. We are going to cut, also, the frequency of reports required by the Clean

Air Act, again, an improvement that will help small businesses. Businesses such as chrome plating operations, will be able to meet the requirements of the law.

We are also helping to ease the overall reporting burden by phasing in an electronic reporting system. Beginning this spring, discharge monitoring reports, often times referred to by the acronym DMR's, which is, by the way, the Agency's single biggest reporting requirement. We expect that those, by the spring, DMR's will be able to be submitted through a keyboard instead of through the mail.

Environmental compliance assistance is the second way we are helping small businesses. Last June at the White House Conference on Small Businesses, Administrator Browner announced a new common sense compliance policy, effective that day, that waived penalties for small businesses for noncriminal, first-time violations of environmental requirements, provided that those violations were being corrected and that there was no serious harm to public health and the environment.

We will soon be issuing a final version of that policy, but again, let me stress that it was in effect since Carol Browner announced it last year. That new policy will even go further to be able to help small businesses. We are also funding small business compliance assistance centers for four sectors dominated by small businesses: Automotive service shops, printing plants, metal finishing operations, and small farms. These centers provide information on regulations, compliance costs, and most importantly, pollution prevention opportunities. We hope to establish at least two more centers this year, the budget allowing so.

Finally, besides welcoming and encouraging the views of small businesses at all our rulemaking activities, we are including small businesses in those initiatives that are changing our Agency culture, and shaping our new EPA for the future. We are reinventing the Agency for a number of reasons, but among them is our need to do a better job responding to the concerns of small businesses.

A good example is our Common Sense Initiative, which is bringing together all stakeholders in six specific industries, to look for cleaner, cheaper, and smarter ways of protecting public health in the environment. Of those six industry sectors involved, two of them, metal finishing and printing, are dominated by small businesses.
To help facilitate all aspects of our dealings with small businesses, 10 years ago, EPA established a Small Business Ombudsman as a convenient first stop for businesses with environmental problems, questions, or grievances. Karen Brown, who is that Small Business Ombudsman, is here with me today. The Ombudsman has helped us better solicit and better understand the point of view of small businesses across the country. Judging by the workload, that office really has provided a very valuable service because we had over 20,000 inquiries last year from small businesses to that office.

At EPA, we are proud of the progress we are making. We are working with small business owners to break down old patterns of adversarial behavior, emphasizing instead, a new, common sense results oriented partnership. We are spending less time counting
the number of enforcement cases filed, and more time helping small businesses comply voluntarily with environmental law.

We are looking at the overall regulatory system from the point of view of small businesses, and wherever possible, streamlining the system and cutting back on red tape.

Administrator Browner and I appreciate your interest in these programs; and we welcome constructive feedback from you. We are committed to listening, we are committed to changing, and we are committed to making our small business programs cleaner, cheaper, and smarter, so that we all do a better job of protecting the public health and the environment.

Last, I might mention that the Superfund, which is one of the area's of recommendation from the White House Small Business conference is an area where we have taken numerous steps as Congressman LaFalce has indicated. We have taken numerous steps to be able to assist not only small businesses but all businesses that come under the regulatory requirements. We can only do so much under the statute that is written, and as we proposed at the last Congress and still believe very importantly so, that we need to be able to make fundamental changes in the Superfund law. Those changes, among other things, give us the authority to address the concerns of small businesses.

Thank you very much. I will be happy to answer any questions or engage in whatever dialogue you have later on.

Chair Meyers. Thank you very much, Mr. Hansen. Next I would like to call on Dennis Murphey and then Carol Andress, because as I understand, she has a conflict and has to-

Ms. Andress. Because of the equipment.
Chairwoman Meyers. All right. Well, we will get to you before the equipment problem, and then Andy Hines, Harold Igdaloff, and Sal Risalvato.

Dennis Murphey is the Director of the Center for Environmental Education and Training at Lawrence, Kansas, which is in my district. I'm very pleased to have you here, Mr. Murphey. Thank you.
[Mr. Hansen's statement may be found in the appendix.]
TESTIMONY OF DENNIS MURPHEY, DIRECTOR, CENTER FOR ENVIRONMENTAL EDUCATION \& TRAINING, DIVISION OF CONTINUING EDUCATION, UNIVERSITY OF KANSAS
Mr. Murphey. Thank you very much. Madam Chair, Congressman LaFalce, and members of the Committee, I'm the Director of the Center for Environmental Education and Training at the University of Kansas. The center serves as small business assistance program contractor for the State of Kansas pursuant to provisions of the Federal Clean Air Act Amendments of 1990 and the 1993 amendments to the Kansas Air Quality Act.

In that role, the center leads a consortium that includes our colleagues at the Pollution Prevention Institute at Kansas State University and the Center for Technology Application at Wichita State University. The consortium provides free technical and regulatory compliance assistance to small businesses across the State.

The program is unusual because it's operated external to the State Environmental Regulatory Agency. Most States operate their small business assistance programs within their agencies, often
within organizational units which have regulatory responsibilities. The Kansas Department of Health and Environment made the decision to contract with a consortium of State universities. A major consideration was KDHE's recognition that to be successful, the program needed to be conducted by an entity that would be less intimidating to small businesses than a regulatory agency.

In addition to my present position as Director of the center, I have also served as the Director of Environmental Affairs for a national trade association representing small businesses, and as the Administrator of the Hazardous Waste Management program for the State of Kansas. In all three of these positions I have observed the dread, and even fear, experienced by small business owners and operators regarding the U.S. Environmental Protection Agency and State environmental agencies.

In our center's efforts to be a support system for small businesses regarding environmental affairs, one of the biggest challenges we face is establishing a degree of credibility with the small businesses we want to serve. I have had telephone conversations with people who would not register to attend one of the center's free seminars until they were assured that attendance would not result in them being visited by a regulatory agency inspector or being put on a list that would eventually target them for enforcement action.

Effectively raising the level of awareness and understanding of environmental issues among small businesses will not happen in short order. Nor will dispelling the fear they hold for environmental agencies. These perceptions of environmental agencies as enforcement-minded rather than assistance-minded organizations will not change based upon public announcements regarding policy shifts that reduce regulatory burdens on small businesses. Such assertions have to be followed by concrete actions that demonstrate fundamental shifts in agency policies, not just tweaking the system around the edges.
One necessary step in this direction is to avoid the creation of new regulations that result in unreasonable burdens on the regulated community with little or no benefits to environmental quality.

Beyond avoiding the creation of counter productive regulatory requirements, legislative bodies and regulatory agencies must be willing to move beyond the previous reliance upon a command and control approach. The movement at the State level to enact audit privilege statutes is one manifestation of such a change. Without debating the merits of specific provisions of various audit privilege statutes, I would assert that providing incentives for businesses to evaluate and assess their operations for regulatory compliance status, and to identify potential environmental problems that should be resolved is a sound concept.

At a time when much discussion regarding environmental management is directed at risk assessment, risk-based decisionmaking, and risk management, there is a critical need for industry, regulatory agencies, and environmental groups to accept the "risk" of working together in new ways to achieve environmental goals.

We have seen the beginnings of this transition. The great Printers Project in the Great Lakes area appears to be a success story worthy of replication. Organizations such as trade associations and
universities can, and should be, integral to EPA's attempts to reinvent itself as a compliance assistance organization.

Two models of such cooperation exist within the Agency. EPA's Small Business Ombudsman has a significant track record of cooperating with associations, business groups, and universities to network into the small business community. For many years this office has accomplished much with little, even at a time when an enforcement mentality was more prevalent within the Agency.

Another EPA success story is its Pollution Prevention Program. Working in concert with State agencies and universities across the country, the Agency has utilized training and technology transfer as the primary means to promote voluntary pollution prevention efforts. This partnership has made substantial progress in support of a national transition integrating pollution prevention into all environmental management programs, public and private.

While enforcement will always be a necessary activity of EPA, the Agency's overall success should be indicated by its ability to protect environmental quality and achieve broad environmental regulatory compliance with a lesser dependence upon enforcement as the primary means.

Until the confidence of the small business community is earned, merely building an assistance program and hoping they will come is a flawed approach. With sufficient time and new approaches, we can develop positive working relationships with small businesses in order to protect the environment while maintaining their viability.

I thank you for the opportunity to share my comments with you today.

Chair Meyers. Thank you very much, Mr. Murphey. We are very glad to have you here today. Our next witness is Carol Andress, and she has brought a show and tell here for us. So we'll have about a 5 minute slide show from Carol Andress, who is the Project Manager of the Great Lakes Printers Project and Economic Development Specialist of the Environmental Defense Fund.
[Mr. Murphey's statement may be found in the appendix.]

## TESTIMONY OF CAROL ANDRESS, PROJECT MANAGER, GREAT LAKES PRINTERS PROJECT, AND ECONOMIC DEVELOPMENT SPECLALIST, ENVIRONMENTAL DEFENSE FUND

Ms. Andress. Good afternoon. I am very please to be invited to testify today about reducing regulatory burdens on small businesses. As you stated, I am a Economic Development Specialist at the Environmental Defense Fund, an environmental advocacy organization based in New York City.

EDF is unique among environmental organizations for trying to promote environmental policies that treats a business like a business, and I want to spend my time talking today about a project that best exemplifies this approach, the Great Printers Project which is joint initiative of EDF, the Printing Industries of America, and the Council of Great Lakes Governors, which is chaired by my Michigan Governor, John Engler.

EDF Selected the printing industry in part because they represent a prime example of small businesses. The more than 50,000 lithographic printers in the country employ an average of 11 people. As small businesses they simply do not have the resources to
devote huge amounts of time to deciphering regulations, searching to see if requirements apply to their products, and filling out forms.

We found that printers, like many businesses, do not object to achieving the environmental goals of existing laws. What they do object to, understandably, is dealing with frustrating, cumbersome paperwork. To address this problem the Great Printers Project team had advocated that EPA and the States reform their reporting systems to reduce time spent on reporting and record keeping, make then user-friendly or making them understandable to an intelligent business person who's not an expert on environmental matters, offer information about technologies and materials that can help the print shop reduce waste and improve their bottom line.

Finally, the system should bring together all relevant reporting requirements; air, water, and waste requirements. To quickly illustrate what we are trying to achieve, I do want to show you some software that was developed for EDF by some graduate students using printers in Wisconsin as a case study.

Known as the Printers Environmental Compliance Assistance or PECA, the system combines air and hazardous waste reporting forms which a majority of the 1,300 printers in Wisconsin must complete each year.

Rather than the questions being organized around statutory requirements such as how much effluent is discharged from a shop. Rather than organizing our own statutes for example, how much effluent do you discharge into a waste stream, the system leads the printer through a series of questions organized by printing operations, or these work sheets that say, for example, "Do you have any prepress operations at your business?" If the answer is "No," it simply scrolls on to the next question. If the answer is "Yes," a window comes up showing ways that the printer can reduce their prepress waste and improve efficiency.

Another screen that I want to show is the system also trying to help printers make calculations that are relevant to reporting requirements. Again, printers use a lot wash solvents in their system. This questions asks, "Do you use blanket or roller wash?" If the answer is "Yes," this is work sheet that can help them actually calculate their volatile organic emissions into their print shop, and automatically calculates it based on data readily available from a printer's inventory records.

I am just going to key in a couple of things because I want to show you one feature of this system which is that in addition to being able to calculate easily the VOC emissions from the shop. Also you see the green box up there, in Wisconsin, printers are charged an emission fee that varies depending on their VOC calculations. From this work sheet they can easily see how they can, by say substituting a lower VOC chemical, actually reduce their emissions charge.

So it is a way of showing how the calculations-first of all it gives them information about how they can reduce waste, but it also directly relates it to the bottom line which in this case shows exactly how they can save on their emissions fees.

The information from these work sheets can then be imported directly to the required forms which can then be electronically trans-
mitted to the State agency. The work sheets themselves can be printed out and used by the printer to better understand the environmental impacts of their operations. It basically prints out a kind of internal environmental assessment.
Wisconsin, with support from EPA, is proceeding with refining and operationalizing this system, first for printers but eventually for other businesses. While recognizing that this is not a panacea for all small businesses, the software does demonstrate that it is possible to use modern technology to design a user friendly system that makes it easier for small businesses to complete the necessary paperwork, understand environmental requirements, and be informed about alternatives that can improve the business' environmental and economic performance.

I am happy to answer any questions or dialogue.
Chair Meyers. I am sure that the Committee will have some questions for you and I thank you very much, Ms. Andress.
Our next witness is Andy Hines and he is Vice President of Emerald Green LawnCare, Athens, Georgia. He is testifying not only on behalf of himself but of the U.S. Chamber of Commerce.
[Ms. Andress' statement may be found in the appendix.]

## TESTIMONY OF ANDY HINES, VICE PRESIDENT, EMERALD GREEN LAWNCARE

Mr. Hines. Chair Meyers and members of the Committee, thank you for inviting me to present the experiences of Emerald Green LawnCare in regards to EPA regulations concerning pesticide labeling. I am Andy Hines, Vice President of the Athens, Georgia division of Emerald Green LawnCare. Our company is a member of the U.S. Chamber of Commerce Federation of more than 215,000 businesses, local and State chambers of commerce, trade and professional associations. I am also a member of the Chamber's Small Business Council.

While most of my remarks will be directed to my personal experiences, I am confident the problems are typical of what many small businesses experience when they have to deal with "one size fits all" mentality. I know the U.S. Chamber has been active in support to assure that the whole process makes sense and has worked hard for reforms, such as regulatory flexibility. I hope my story helps illustrate why continued changes are necessary.

In 1989, my wife and I moved to Athens from Tulsa, Oklahoma to help the owner of Shrub \& Turf straighten out his business. Our company has come to serve approximately 1,000 customers in the Athens area, and by 1995 , gross sales were about $\$ 400,000$. Last year, Emerald Green, based out of Indianapolis, proposed a merger with Shrub and Turf based on initiatives and performance of our company as a small business. As a result of this merger, our goal for projected growth the next 2 years is to obtain sales of about a $\$ 1,000,000$. We have also increased our work force from 6 employees to 11.

A while back, my company began working with a creative new herbicide product called Gallery. Due to red tape and confusing regulations regarding pesticide labeling, we have been unable to take advantage of existing technology to reduce pesticide usage. Costs will be higher, growth will be limited as resources from our
company are diverted to spraying post emergent weed control for broadleaf weeds, such as dandelions and buckhorn. My purpose today is to illustrate to this panel the problems involved label registration and to propose a very easy solution. Again, my experiences help explain why small businesses are so frustrated by regulatory insensitivity and lack common sense.

The number one complaint in our industry is weeds. Customers don't want weeds, and 80 to 90 percent of all cancellations of services can be traced to failed weed control applications. Reducing the number of weed control service calls, as well as reducing the number of canceled customers due to weeds is a high priority for LawnCare ownership and management. The industry standard for controlling weeds is to use post emergent applications of herbicides. While our industry has always treated crabgrass as a preventable problem, because these preemergent have always been available, broadleaf weeds have always been sprayed with post emergent applications.

In 1989, this changed with the introduction of Gallery herbicide. Its contribution to our industry is that it is the only product that prevents dandelions and other such troublesome weeds. Immediately, I began to see the benefits of this product and devised a technique for incorporating its usage into our services and the results have been very dramatic. By preventing weeds, we have some customers that have not had a post emergent weed application in 4 years.

I have been attempting to combine Gallery and TEAM, a crabgrass control product, in fertilizer to take advantage of this ability to prevent broadleaf weeds. Only one label exists with this combination of products, but this label was created before Gallery's properties were properly understood. The label's ratio of Gallery to TEAM is acceptable, but the label analysis of both products need to be higher. Labels with the proper analysis do exist for both products individually, but not in combination with each other. To make use of this product, we need a label that simply combines both of these products into one label.

To add this new label, the company needs to go through an entire process of retesting. This can take anywhere from to 2 years and will cost about $\$ 60,000$. This is particularly frustrating because it is so needless, the label ratios already exist.

I am requesting EPA allow these labels to go forward immediately. I have other companies willing to purchase the product and fertilizer companies willing to sell the product if the red tape surrounding this label can be overcome. Reasons to move forward with the label include: Both labels for the requested products already exist; both products are already in combination but at a lower ratio of label that we need; custom label laws already allow these products to be combined for use on golf course and agricultural needs, but not for lawncare; and, not allowing this label will cause more pesticides to be used, not less.

The benefits of giving this new label would be: Gallery would be more widely available in a form acceptable to a wider range of LawnCare operators; without the use of Gallery, the number of reduced post emergent herbicides being implemented would be in-
creased; total costs for our industry can be lowered and environmental inputs would be reduced.

It is frustrating that despite the fact we have devised a better and more cost effective and environmentally conscious way to combine these products, EPA paperwork and labeling requirements prevent us from going forward. In this case, regulations are working against the presumed desire to improve the environment.

Thank you for the opportunity to testify before you on behalf of the U.S. Chamber. I will be happy to respond to any questions you might have.

Chair Meyers. Thank you for your testimony, Mr. Hines.
Our next witness is Harold Igdaloff, President of Sungro Chemicals of Los Angeles, California. He is testifying on behalf of himself of course, National Small Business United, and he was a White House Conference delegate as I mentioned previously.

Mr. Igdaloff.
[Mr. Hines' statement may be found in the appendix.]

## TESTIMONY OF HAROLD IGDALOFF, PRESIDENT, SUNGRO CHEMICALS

Mr. Igdaloff. Madame Chairman and members of the Committee, thank you for the opportunity to share our views regarding the need for, and the progress of efforts at reducing the regulatory burden on small business, especially as it relates to the Environmental Protection Agency. I am Harold Igdaloff, President of Sungro Chemicals, Inc., in Los Angeles. Sungro Chemicals is a formulator of pesticide products. We have over 50 products registered with the Environmental Protection Agency, so we have a great deal of experience with EPA regulations, and I would like to speak to many of those.

I also serve on the Board of Trustees for National Small Business United.

By their very nature, unnecessary Federal regulation and paperwork burdens discriminate against small businesses. Without large staffs of accountants, benefits coordinators, attorneys, or personnel administrators, small businesses are often at a loss to implement or even keep up with the overwhelming paperwork demands of the Federal Government. Big corporations have already built these staffs into their operations and can often absorb a new requirement that could be very costly and expensive for a small business owner.

What Congress was finally able to understand, at least temporarily, when it passed the 1980 Paperwork Reduction and Regulatory Flexibility Acts, was that large and small businesses operate in fundamentally different ways; that Federal regulations which may in isolation seem perfectly responsible, especially for a larger firm, may be completely unworkable for a small firm.

Most Federal officials who develop and promulgate regulations are largely unaware of the many activities and requirements of their fellow Agencies. Information could be combined, and redundancies could be eliminated. In order to accomplish this goal, however, it is absolutely necessary that there be a centralized authority to examine the overall regulatory scheme of the Federal Government.

Of course, our purpose here today is to specifically discuss the Environmental Protection Agency and that Agency's efforts to work more cooperatively and sensibly with the regulated community. Since the Reinventing Government initiative began, I must report that my business has seen areas of considerable improvement, most notably in terms of procedure simplification, policy flexibility, and personnel attitudes. The programs that have been instituted for the sharing of data with California and other States, the memorandum of understanding with other Departments, and the revisions in procedures to allow changes to be made by notification, rather than review, will certainly reduce both the work load and the regulatory delays we face. We congratulate the EPA for making this progress. Nevertheless, much remains to be done.

Let me take some time to give some examples from my own business, and relate them to specific recommendations that came out of the White House Conference on Small Business.

Simplified language. White House Conference Recommendation number 188 says that Congress should "require all Agencies to simplify language and forms required for use by small business." But why such simplification be required by Congress; cannot the Agencies take action themselves? For example, I recently received a draft of a proposed pesticide regulation relating to "Toxicologically Significant Levels of Pesticide Active Ingredients." It took several readings of the entire proposal, 13 pages, to even comprehend whether and how it applied to our business, and its cross-referencing of five other regulations and laws did not help. Simply stating up-front the following would have helped tremendously. "This notice provides a table that establishes the maximum amounts of foreign active ingredients that can be incorporated into a product. Where repackaging is done, both the supplier and repackager are responsible for not exceeding those levels." From then on they can go into the technical discussion. We would have known immediately the implications of the proposal. Separating the factors relating to practical application of rules from their technical discussion would improve compliance. Also, each document should be selfcontained in its instruction.

Paperwork reduction. White House Conference Recommendation number 188 goes on to State that each Agency should have an ongoing review of regulations directed toward a goal of "reducing its total paperwork burden by at least 5 percent each year for the next 5 years." But our company has, for at least the last 15 years submitted a report to the EPA regarding our pesticide sales for each individual product.

Each year, the same physical data has to be resubmitted with the only new data being the amount of production, total sales, and where sold. The USEPA format has three products per page and requires a report of as many as 1,820 pages for the 50 products we have registered, plus those we formulate for others.

On the other hand, the State of California uses a columnar layout for submission of similar data, with products preprinted on the form. Redundant and/or previously supplied information is eliminated, and the form is kept to three pages. Stepping back to review their requirements would almost certainly lead EPA to adopt simi-
lar form. Such paperwork reduction and simplification will reduce both public and private sector costs.

The area of registrations is most frustrating for small business owners, since we must depend on the accountability and timeliness for others. Products are first registered with USEPA, and then with each State where sold. As an example, we attempted to register a product in 1994 on a "me-too" basis and 2 years later we still do not have the product-

Chair Meyers. Don't worry about the light, Mr. Igdaloff. Just conclude as you can but I didn't want you to feel like you had to cut off in the middle of a sentence.
Mr. Igdaloff. All right.
Under FIFRA, Congress required EPA to react within 90 days on a "me-too" registration, and in this particular instance it has been 2 years and we still do not have the carpet powder registered to sell. We feel that one Agency should be set up to study all the properties of chemicals such that the Department of Transportation, the FDA, and all the rest of the regulatory Agencies do not duplicate the administration of the properties of chemical type products.

Thank you for the opportunity to talk.
Chair Meyers. Thank you very much for being with us, Mr. Igdaloff.

Our final witness is Mr. Sal Risalvato. He is the owner of the Riverdale Texaco of Riverdale, New Jersey, and he is testifying on behalf of himself as well as the National Federation of Independent Business and he was also a White House Conference delegate. He has some buttons on and I guess I am going to have to get you a sunflower too.
[Mr. Igdaloff's statement may be found in the appendix.]

## TESTIMONY OF SAL RISALVATO, OWNER, RIVERDALE TEXACO

Mr. Risalvato. I actually bought one of these pins for you Madame Chairman. It is the New Jersey pin for the White House Conference.

Madame Chairman and members of the Committee, thank you very much for asking me to come here today. It is always an adventure anytime I am invited to Washington to tell the story of small business.
I have a few objectives that I would like to accomplish this afternoon. First, I would like my testimony to be entered into the record. I chose not to read it, I would like just to speak to you about what is in it.

The three objectives that I would like to address are: First, is a story of how environmental regulation has already affected my business and has already cost me a lot of money. The second is how environmental regulation will effect my business and will cost me a lot of money. Third is how that environmental regulation, and the expenditures of that money, had kept me from making my business more profitable, expanding my business to include more employees, and adjust for my share of contribution to the overall economy.

In 1987 I purchased a service station in Riverdale, New Jersey. Part of the purchasing decision was the fact that the location had brand new underground storage tanks. Overall, the location was
not in good shape but we made the decision and paid a premium price for this location because we knew that environmental concerns were becoming more prevalent and we needed to address that issue.

We made what we thought at that time was a very intelligent decision by purchasing this location because of the age of the underground storage tanks that came with a 30 year guarantee. Within 2 years, I was forced to spend $\$ 20,000$ on vapor recovery which I sort of knew about ahead of time, so it was not a real big deal. But I had to spend it and I had a certain deadline that I had to achieve that by.

Then new regulations were promulgated by the Environmental Protection Agency that forced me to spend another $\$ 70,000$ in the next 3 years, including removing what I had spent $\$ 20,000$ for 3 years earlier. I am now up to $\$ 95,000$, and had planned on using some moniess that we may have earned or borrowed and some other contractual sources, to expand our business. We still were not, after 5 years, able to expand our business.

That is story number one. That is already done. There isn't anything that I could ask this Committee to do for me or I could ask the Environmental Protection Agency to do for me. That money has been spent. Those regulations have been done. But there is no way, at the time, the Environmental Protection Agency or any other bureaucrats or regulators can make regulations that will have helped me. When a regulation is made, this "one-size-fits-all" approach, there is no way a regulation could have been written that said, "Well, except for Sal in Riverdale because his tanks were new." They obviously cannot do that.

Now we are into our second problem. The Clean Air Act has put all of the States in a situation where they are going to have to come into certain compliance with emissions standards. Fortunately, there was some legislation that was recently passed that is going to take some of that burden off of the States and then again, small businesses.

The 50 percent discount rule that applies to mobile sources-and when I mean mobile, I mean automobile, trucks-to mobile sources of air pollution. The Environmental Protection Agency has taken a very hard stance and what I feel is a very unreasonable stance and even a costly stance, to the States and to small businesses.

For example, in New Jersey we had in 1990, 2,000 tons per day of VOC's, we have talked about them here today, volatile organic compounds. The act and the regulations require that New Jersey, by 1996, reduce that by 15 percent. This means that New Jersey could not have more than 1,700 tons per day of VOC, and must annually thereafter, reduce by 3 percent a year.

It also required that 42 percent of that 15 percent reduction, or in our case, 121 tons per day, come from mobile emissions. So it was specific saying that 42 percent of what you must reduce in your pollutants must come from automobiles and trucks and that sort. When New Jersey tried to put together a system of automobile inspection to accommodate the EPA, the EPA wanted to discount by 50 percent, the credits that we would have received if New Jersey used what is known as test and repair. Test and re-pair-I am a test and repair facility. A customer comes to me for
an automobile inspection and we perform the inspection, test safety and emissions, and when we test those emissions, if there is a problem with it we are permitted to fix it. We are permitted to put a passing sticker on the car.

Well, the EPA has said that-originally, they did not want any private inspection centers at all. Now, our governor has fought very, very hard in the past year and it has been a dog fight. The fight is still not over, in fact, in the papers yesterday, EPA is still criticizing our governor, still criticizing New Jersey, because we are not on-line yet.

One of the big holdups is the fact that they do not want the test and repair facilities. They did finally agree to that but then they put in-I will not take too much longer-they did put in a provision that a private center could not inspect a car that was older than 4 years old. That means that I have to go out and I have to spend maybe $\$ 50,000$ on equipment to remain an inspection center, and I am not going to be able to inspect cars that are older than 4 years old.

It is a lot to ask of a small business person that is going to have to borrow that money; I do not have that money. Not only do I not have that money, but our surveys-the National Federation of Independent Business in our State has done surveys with repair shops to see who would be able to spend that money and under what terms and conditions. It has been an absolute dog fight. I believe that even though the National Highway Systems Design Act was passed and signed, that we are still going to need some extra help from Congress to get the EPA to allow us to eliminate that 4 -year rule.
I mentioned the figure of $\$ 50,000$. If you add that $\$ 50,000$ to the $\$ 95,000$ that I said that I already spent, I could have added on three or four more service bays, an office that I desperately needfor 7 years my office has been housed in an office trailer. I have difficulty with the town fathers. I have twice had to go to the town for a variance and they have given me my final OK, which runs out in 2 years.

I need to procure some capital to expand my business and I am being faced with, right now, having to spend about $\$ 50,000$ and take up one of my entire service bays with this equipment in order to remain in the inspection business which brings me about 50 percent of our service.

These regulations are, again, geared against small business and they need to be addressed. Just quickly, that money, if I were to expand, would employ more people. If I had more time I could explain how but I think a common sense approach is that that capitalization is what small business is starving for, is exactly what is needed to expand business and to create employment.

Thank you.
[Mr. Risalvato's statement may be found in the appendix.]
Chair Meyers. Thank you very much, Mr. Risalvato. I thank all of the witnesses. I think you have been excellent and have given us a pretty good picture.

I have a question or two of Mr. Hansen but I wonder if maybe while the iron is hot here, would you like to react to anything that any of the other witnesses have said before we start asking ques-
tions. I particularly would like a reaction to the comments from New Jersey.

Mr. Hansen. Certainly, Madame Chair. What maybe is most important, I think, is a little bit of framework in terms of environmental laws in this country. Environmental laws are established at the Federal level but most environmental laws are administered by States under-as the laws provide-authorization for those States that seek that delegation and are able to operate those programs.

So first off I want to be able to stress that although EPA certainly is key in the environmental protection field and certainly it is our standards which form the baseline against which most entities operate throughout this country. Our laws do provide that States may, in fact, be no less stringent than what the Federal Government requires, but does allow them to be able to do this differently.

In the case of New Jersey, at least in the points that were made first about the replacement of the tanks, it is my understanding that that was a difference that New Jersey chose to put in place, as to how fast tanks needed to be ungraded as opposed to what EPA requirements were, that they made some changes. We can get back to that if you would like. I will also come back to the vehicle inspection test program.
We believe that many of the comments that you have heard today are about issues that we are also very concerned about and want to do something about. For example, the need for plain English. We are continually striving to be able to make all of our documents read in plain English. Is that very easy to do? No, it is not because we have, as inevitable in a highly technical organization such as ours, people who are trained as engineers or biologists or chemists and they tend to automatically communicate in the technical terms for those fields.

What we have done in order to address such issues, is to involve small businesses in helping us write those very documents as a way to ensure that what we are writing doesn't just make sense to the technical people who are involved, but also to people who need to be able to respond to those documents.

In terms of reporting and other types of requirements, we believe also that we can streamline our reporting requirements. We think we can do them in ways that-the Great Printers Project that you saw up on the wall is really an exercise that can save money, and reduce pollution, but also in that process, help businesses to better understand the requirements they must meet through assistance. We were very happy to be of support to the Great Printer efforts and we continue to see that as very important.

Let me come back to the issue of the vehicle inspection program. Vehicle inspection programs are imposed in those areas of the country that have not been able to meet the National Ambient Air Quality Standards; the basic public health requirements across the country. In the case of areas that are exceeding those requirements relatively significantly such as New Jersey, there are requirements that they must make certain progress to be able to achieve those standards. That's the so-called 15 percent requirement.
One of the things that we have found as we have analyzed the emissions from automobiles as well as from industrial sources, is
that automobiles, although not any one individual car, produce lots of emissions, in total producing substantial amounts of emissions that the reductions that come from automobiles are somewhere around $\$ 500$ per ton of emissions. In the industrial sector, that equivalent emission reduction can be somewhere in the $\$ 5,000-$ $\$ 10,000$ per ton reduction. Clearly a cost effective place to move ahead.

I think the point that you heard earlier is, "But are we in fact, imposing a requirement that is disproportionately falling upon small business?" From our perspective-apparently it is, at least in part, that the rule and regulation that's there in the first placewould we like to go back to Congresswoman Kelly before-

Ms. Kelly. I'm sorry. I didn't want to-
Mr. Hansen. I only wanted to respond to your questions. I will stop easily.
Ms. Kelly. I'm sorry. I-
Mr. Hansen. No, that's fine.
Ms. Kelly. This is one of those days when I have mark-ups and three hearings. I'm moving very quickly. I simply have a coup'e of questions that I really would like to ask you and I would have been happy to submit them for the record by writing.

I want to know, you stated-the EPA stated that it wants to reduce by $20,000,000$ hours, the existing paperwork burden. I know that you have identified 1,500 pages that you have targeted in the Federal Code of Regulations. How many actual regulations has this translated into that you have actually eliminated?

Mr. Hansen. We are addressing-most of our rules and regulations are in fact, across a series of different program areas. What we have identified are in the 1,100 pages that have been so far eliminated-I think the number is about 1,157 if I am remembering correctly. There are-I am not going to be able to tell you the number of full regulations that have been eliminated. Generally speaking those would be parts of existing regulations rather than stand alone regulations.

Much more importantly from our perspective, because that represents somewhere around 10 or 11 percent of our total pages within the Code of Federal Regulations. Much more significantly is that we have identified well over 50 percent of our rules and regulations that we think need to be reinvented. That is that the basic concept of what they are trying to achieve is still very important, but that we can do it in a less burdensome, less intrusive sort of fashion, and that those efforts are ones that will be ongoing for a number of years as we work through the changes.

We expect, as I have indicated already within our reduction of paperwork, that we are achieving or have already achieve to date, about $10,000,000$ hours worth of reductions. We expect by the end of this year it will have proposed an additional $10,000,000$ hours worth of reduction and we will be finalizing those throughout the next year.

Ms. Kelly. You are looking at redundancies as well. I'm thinking about Mr. Risalvato, I hope I am pronouncing that right, and Mr. Hines who have redundancies with some of the EPA regulations that they bump into.

Mr. Hansen. Madame Chair, Congresswoman Kelly, the answer is absolutely, but we want to go much beyond just where redundancies are. Those are not easy, but relatively easier to be able to find solutions to. That is we can just find where we are redundant and move ahead on either eliminating it or somehow coordinating it so it does not cause problems. The real reinvention is where the hard work is and where we are committed to making even more progress.

Ms. Kelly. The only other question that have is the EPA says that you perform cost benefit analyses on all the major regulations, and it does a cost analysis on regulations that have a minimal impact. I think this needs to be done, but can you tell me how many analyses of proposed rules have been conducted already by the EPA concerning their impact, specifically on we small business people?

Mr. Hansen. Madame Chair, Congresswoman Kelly, I would be happy to be able to supply the exact number for the record, however in our analyses of any rule or regulation, we provide analysis under the Reg Flexibility Act as to whether there is any impact on small business and analyze alternative ways to address that.

In addition, we always provide a cost benefit analysis on each of our rules and regulations that are significant. What you are asking in part is has there been any time in our history where we have not done that. Certainly with the Rate Flex Act coming into force on January 1, 1981, that did not apply before that date, but we have always done, to a degree to the best of my knowledge, some level of cost effectiveness.

Chair Meyers. But since that date have you stepped up your efforts to address this?

Mr. Hansen. Absolutely. We would consider that it is some of the most extensive cost benefit analysis and impact analysis done anywhere throughout Government. Now, I do not mean to minimize. Our rules and requirements oftentimes are exceedingly controversial and there are very strong differences of opinion. But the answer is yes, we have done extensive cost benefit analysis on all of our major rules.

Chair Meyers. Thank you, Ms. Kelly. I appreciate you being here today.

If we could go back to you, Mr. Hansen, I want to ask everybody at the table to jump in because I do not want to be the only one talking up here, but I would like to ask you to react to Mr. Risalvato more extensively and also I think Mr. Hines raised a question concerning labeling and products that were already approved. They were approved for mixture, but for some reason he was having a hard time getting a greater concentration or-you can explain the problem or maybe you already understood it. But I would like to have you react specifically to some for the things we have heard.

Mr. Hansen. Let me do this as quickly as I can then allow us to get to the dialogue.
First off, in terms of the vehicle inspection tests, what we and the State of New Jersey have agreed to essentially is a process by which automobiles will be tested at a centralized State program test center. If they are determined to fail that, they will then go and be repaired at a test and repair facility or at other automotive
service centers. That service center, if they have the capacity, would then in fact be able to test that vehicle to determine whether or not it now meets the requirements.

Chair Meyers. What about specifically the concern that he raised about the fact that the equipment would cost him $\$ 50,000$, he can not inspect anything than 4 years. Is that a State, is that a Federal requirement?
Mr. Hansen. In terms of the requirement for the equipment, I can speak to that. The 4 -year requirement, I am just not familiar with but would be happy to be able to supply any answer to the record.
In terms of the equipment, what essentially is at issue is when new automobiles are manufactured they are given a very extensive test to determine their overall performance. That is high speed, low speed, accelerating, decelerating patterns. The test is for pollution control. The test that then is conducted for inspection and maintenance programs, such as what we are talking about here, is meant to, very quickly, replicate at least in part, what that extensive 24 hour test did to much more accurately reflecting as to what the emissions will be from a particular vehicle.

Historically, that test has been an idle test-that is a test of emission level at idle and at $2,500 \mathrm{rpm}$. What we have found is that automobiles when they are particularly underpowered, when they are accelerating or decelerating, will often times perform much differently in terms of emission levels. What that test would show as a result-
Chair Meyers. So the $\$ 50,000$ equipment is so that he can test at idle and at $2,500 \mathrm{rpm}$.

Mr. Hansen. Actually, different speeds at both-my guess is that that's a dynamometers that is being required-and it would, in fact, allow for testing to be able to show under accelerating or decelerating, not just at idle and $2,500 \mathrm{rpm}$. Thereby reflecting more accurately whether that vehicle itself is emitting above what the standards would be.
That equipment-I do not mean to minimize, is not cheap. That is the point that you have heard. However, what is at issue is that the citizens of New Jersey are breathing unhealthy air as a result of the excess emissions, not only from automobiles, but from other sources, but certainly here in the case of automobiles. What is being dealt with is how can you best remove those emissions.

We have found that as we work with New Jersey that although we certainly did originally feel that a centralized system was the only way to be able to approach this, that by creatively looking at alternatives, New Jersey came forward with an approach that we felt we could approve. That is to what is called a high berth. The test would be at the central State system. If they fail they would go to a test and repair, and be certified that they actually meet the standard.
Two years later when they came in for their next test, if they failed again they would go and get repaired but at that time they would have to come back to the centralized system to ensure that we were not in fact, having a pattern of cars being repaired, or said to be repaired, but not actually meeting the standard.

If in fact, it came back after that test and repair the second time 2 years later and were in fact, able to be certified as meeting the test, they would just go on as if nothing had happened.

Chair Meyers. Do you have your question answered or responded to some?

Mr. Risalvato. No, because I'd like the Committee to understand just a few other things about this. For the State to implement their portion it is going to cost them $\$ 300$ million dollars. The deputy just said 2 years. The present system, and I believe New Jersey has the very best inspection system across the Nation in terms of emissions and safety.

The inspection we do today, if you come into my location and I certify your admissions today and next week you start polluting the air, we catch you in 1 year. Under the new system, because this new test takes a significantly longer amount of time, the State lanes are going to be backed up tremendously and on top of that, because the private centers like myself, are going to be faced with this expenditure, they expect there is going to be far less private small businesses doing this.

So if they were to take the longer period of time plus the less private centers that the motoring public would have the choice to go to, that people would be waiting an enormous amount of time of these inspection lines. So what they have decided to do is do it every 2 years.

So now, under the new system, if you come in and you are certified and next week you start polluting the air, you go 2 years polluting the air, not 1 . So that is something right there that is not a common sense approach. The specific thing that I had difficulty with is this four year rule and the fact that they make this delineation between the centralized and the test and repair.

They are using a computer model. When I talked about the 121 tons of reduction, meaning the 42 percent of the 15 percent reduction, should New Jersey surpass that 121 tons, the EPA computer model says if they are using test and repair we are going to discount it by 50 percent. So in other words, New Jersey will only get credit for 60 tons of reduction rather than a actual 121 tons.

This is by computer. It is strictly being rejected because of a computer model. Now, it just is not "common sense." The deputy used the word "common sense" a number of times. I just gave you two instances where there is not common sense being used.

Chair Meyers. I am going to let you react to that, Fred, and then I am going to have to go vote. I'll be back in 5 minutes so we will just take a quick break. Can you react to that in the next minute or so, so I do not miss this vote?

Mr. Hansen. I will do my best.
The issue on the testing in a 2 -year period and how that process works. Let me be clear on one thing, we have seen through statistical analysis, that across this country test and repair facilities have historically not produced the same level of reductions as a centralized system. They are not as consistent sometimes, and my guess is, in very infrequently, and certainly hopefully in our case very infrequently, that there would be fraud.
The analysis had shown that up to 50 percent of the test and repair facilities were inaccurate. We have found recently that there
have been some States that have been able to design special programs such as mechanic training and other approaches to increase their accuracy beyond 50 percent. We are recognizing that.
The State of Utah has come forward just very recently with a new approach. California has been doing a lot of experimenting with what is called remote sensing. There are a series of other approaches that we think provide both common sense and flexibility, but also ensure that what we get is the air quality benefits that obviously are what this law is all about.

Chair Meyers. I need to go and vote so we will take a 5 minute break.
[Recess.]
Chair Meyers. I am going to ask kind of a general question and maybe all of you can react to it briefly. This comes from something Mr. Murphey mentioned and I have heard about it once before in a situation very similar to the one you are talking about.

You talked about fear. Your job is to provide free help to small business and their fear of EPA. They do not want to end up on a list because they are afraid if their name gets on a list then somebody will pursue them, "Oh, they went to a seminar. They must have a problem."

Tell me a little bit more about that. Is it general things with small businesses? Then, Mr. Hansen, I would be interested in your comments on the issue that Mr. Murphey raises and how you deal with it. Let us start with Mr. Hines.
Mr. Hines. In my industry, the small business owners are working desperately to reduce pesticide inputs in the environment, find better ways to do things. We are doing that through technology. The general impression is that EPA is out to destroy our industry. They do not want to compromise. They do not want to help us find better ways. The general fear is that they do not want anything to do with the EPA because the EPA and the people that work for it don't want any pesticides, they do not want to figure out how to do a job better. They just want to destroy our industry.

That is a common fear among small business people. They are afraid of them. They do not want to say anything. The reason I came up here is we have got a better way to build mousetrap with stuff that already exists. In talking with the people here, I asked them, "Well, if you have already approved the label-these products are approved in various formulations. Why can't we combine them?" "We have no idea. We have never heard anything like that."

But when you get down on my end and start trying to work your way up the ladder, you run into all kinds of problems. "Well, you cannot do that because of this." You do not get any help and it is frustrating. I have data that shows if we can use Gallery-and I have other companies that we are working with-if we can use it we can reduce post emergent herbicides up to 80 percent.

Chair Meyers. Can I ask you Mr. Hansen, if somebody like Mr. Hines, has a concern like the one he has described, how does he reach your ears or Carol Browner's ears? Is there a regional or district offices? Is that the proper route? Does he write a letter? If he does, how does he get away from the concern that maybe his name is going to get on a list too?

Mr. Hansen. Madam Chair, I think there are a number of ways. Certainly, he could write either directly to me or to the Administrator, Carol Browner. We have established specifically, however, an Ombudsman within the Office of Pesticides to address registration issues, and that probably is the best point.

Chair Meyers. Is she here today?
Mr. Hansen. No, she is not. I wanted to be able to bring only a few people. I did not have someone from our pesticide office, but I would be able to put Mr. Hines in contact with that person and to be able to work through whatever that issue is.
I might also just add, and I take nothing away from what Mr. Hines said, is that I cannot address the issue on the pesticide, Gallery. Usually there are more complicated issues that are involved, whether it is a higher concentration, what the risks are that are associated with it. Those would be the types of things we would look at.

If they are, in fact, a straightforward-just a simple problem because there is one label that has been structured one way-we have tried to be able to streamline those processes so we do not have the kind of frustration that has been described. But I cannot speak to what category this problem fits into. Is it more than just bad communication, or is it really a difference of opinion on a scientific or technical issue.

Chair Meyers. I would like you, if you could, to get me the names of the ombudsmen that you have. Is there more than one in the Agency-do you have one in different areas-so they have a face to go with the name?

Mr. Hansen. Karen Brown, who is here in the audience, is our overall small business ombudsman for the Agency. The ombudsman that I was referring to in the pesticides program is not just for small businesses. It is for anybody who is having registration difficulties and wants to be able to have a single point of contact.

Karen, do you remember that person's name?
Ms. Brown. No.
Mr. Hansen. We will get that for the record.
Chair Meyers. That person is for pesticides?
Mr. Hansen. Yes.
Chair Meyers. They are in the central office. Do you have somebody for chemicals? Do you have somebody for farm chemicals? How many ombudsmen do you have?

Mr. Hansen. Karen, can you address that?
Ms. Brown. We have a regular ombudsman, a pesticide ombudsman, and a small business ombudsman.

Chair Meyers. All right. I think what we would like to do is have the names of those three and then maybe through our small business networks we can get those names out. If somebody has specific problems, it is very hard to bring them to a hearing like this. But if we have the names of someone we can get in touch with, maybe we can establish a relationship without fear.
[See appendix for information subsequently supplied by Mr. Hansen.]

Yes?
Mr. Igdaloff. The biggest problem in the whole pesticides area is the duplication of information that has to be submitted. We have
to submit that data and get a product registered with the Environmental Protection Agency. After it is approved by them, then we have to register that product with each of the 50 States if we want to sell that product in 50 States.

To register a product, there are two areas of fees that we pay. We initially pay the EPA the $\$ 40,000$ for the privilege of offering our products for sale. We pay the States somewhere between $\$ 1,520,000$ additionally before we ever sell a pound of product. For the last 7 years we have paid over $\$ 300,000$ for re-registration of pesticides. Of our 50 products, we have gotten 3 back.

Though we really do not object to paying money if we feel we are getting value, we have not been able to find out what has happened to the $\$ 15$ million dollars that they were supposed to spend each year on pesticide re-registration.

There is a provision in the 1988 law the there was a moratorium on fees for pesticide registrations, or if you want to apply for registration that cost us $\$ 4,000$ even to make an application. So what has happened is the fee structure in the pesticide regulation area is going to put the small formulator out of business.

When I started in business, Standard Oil of California decided they wanted all the lawn and garden business. They went out and spent $\$ 2$ million. We would like to see consideration be given to a structure that, one: The Federal Government preempts the States in pesticide regulations because after I get California EPA regulation, California says, "I want a copy of all the data you sent to EPA." That would be the first thing.

The second thing that we would like to see is a inter-governmental agency that could start to coordinate the activities of all the regulatory people associated with chemical products.
A product, if it is called a pesticide, we have to furnish $\$ 100,000$ worth of test data. If we take that same chemical and put it into a cleaner, you can go sell it wherever you want to.

We have a product using magnesium chloride which they use as a road binder all over the western States and it took us 16 years to get a registration changed from California to EPA on a natural material.

Chair Meyers. What about revealing any proprietary information when you do all this paperwork of is it pretty well-

Mr. Igdaloff. They have provisions in their paperwork routine where we have the option of declaring that this information is confidential or it is not confidential.

Chair Meyers. Thank you.
Mr. Murphey, since I started this whole thing out by referring to you, would you like to make comments on that?

Mr. Murphey. Yes, I would like to address one aspect of the fear issue and I think it relates to the fact that a 25 year tradition of being the environmental enforcer is not something that can be changed overnight into an environmental assistance role. In fact, during the recess, Mr. Hansen and I were talking about the fact that there is a corporate culture change that has to take place. It has to be more than just the top level administrators announcing that now the Agency is going to focus on assistance activities as a priority, and not emphasize so much enforcement, and not have enforcement be the measure of success for the Agency.

For a number of years that really was the case. The EPA would come up to Capitol Hill and would report to the Congress that it had more enforcement actions this year than it had the previous year and had assessed more penalties. That was viewed as success.

As a former State environmental agency administrator, it always seemed backwards to me. It seemed to be an indication that there was a failure in the system when enforcement action was necessary. The better measure of success seems to be using alternate methods of achieving compliance so that we do not get caught in the trap of confusing the end with the means we are using to improve the environment, and let us not get so wrapped up in the means that we are trying to achieve that. In that vein, I applaud EPA's initiation of the compliance assistance centers. They are certainly a valuable support system. However, at the same time I would say that the fact that the Agency chose to staff and operate those programs out of an office whose historic mission was enforcement sent a very mixed message to the regulated community, because those programs were housed in what had previously been the Office of Enforcement and now is the Office of Enforcement and Compliance Assurance.
I think it makes a situation that certainly confuses the regulated community. They wonder are we really willing to come forward and let our hair down and say, "This is what our problems are," to the office whose primary historic mission was enforcement. So I think strategic decisions about where you house some programs and whether you use staff that has historically been involved in enforcement raised some questions in the mind of the regulated community.

Chair Meyers. Let me ask the small business people,-do you view the EPA as only an enforcement Agency or personally as a technical assistance Agency or a combination of both? What is your overall impression?

Mr. Risalvato. My personal overall impression is as enforcement. I would like to bring that message forward, not just for myself, but I am speaking on behalf of 600,000 NFIB members. I get around the State of New Jersey quite a bit and probably attend two or three small business meetings a week with different small business organizations, speaking with other small business owners in businesses other than mine. I can tell you that you can group OSHA, EPA, and the IRS in the same category and they are viewed the same.

Chair Meyers. Thank you, Sal. Harold Igdaloff.
Mr. Igdaloff. I do not think there is a particular area where we can argue with objectivity. Where I see the system failing is in the methodology. I think they should develop internally or externally, some type of a measure of what the objectivity is, what is the goal, and how do we get there and then have some method of measuring that objectivity over a period of time similar to your scorecard proposal.

I think that we cannot do everything, so I would suggest that we make 10 regulations in the five areas that they feel are the most important. Let the Agency decide, both in this area and the reg flex area-let them pick those that are the ones that they feel are the most important. Let them submit them with their proposals on how
they specifically propose to reduce the regulatory activity and improve the process, and then let us measure them and see how they are doing.

Chair Meyers. Mr. Hines.
Mr. Hines. From our perspective in the small lawncare business, the general impression is that they do not want to help us, they want get rid of us. My point of view would be through regulations, through increasing costs-in many cases what seems to be the common sense approach, is bogus science, things of that nature. It does not seem like the true story is getting out about our industry. We are very concerned about the environment or we were not we would not be in the industry we are in.

However, the tools are there, we want to work with them. We have done some very creative things with things like that. The general view of the people in our industry is they are not there as a help, they are here to get rid of us.
Chair Meyers. I thought you made a point that was well taken when you said that a lot of times the lawncare industry uses pesticides or herbicides or whatever, as minimally as they can, and the homeowner-I am including myself now, we usually wait until we have a disaster and then put three times too much of something on our lawn. So I do think that in some cases the lawncare people end up using fewer and milder chemicals than that homeowner might themselves.
Mr. Hines. The point on that part, and I think the issue is we are trained and licensed. It is a confusing situation where a homeowner will go out and go, "If 1 ounce is great, 10 will be wonderful." We are trained to do that and I think that there is a professionalism where-we would like to work with the EPA, it is just that everyone is scared.

Chair Meyers. Mr. Igdaloff.
Mr. Igdaloff. Every one of our labels says it is a violation of Federal law to use this product other than as specified on the label. I feel that there has been practically no real enforcement of that on the consumer. I think what has to be done is-I think the EPA's job would better spent taking their energy in educating the consumers in terms of potential harm. A lot more people than the 2 or 3 percent of the little formulators that may have missed line 3 of regulation 17 in terms of doing the public good.

Chair Meyers. OK.
Ms. Andress, it strikes me that one clear lesson from the Printers Project is that a lot of money can be saved, and probably a lot of time, without sacrificing environmental protection by consolidating reporting requirements and focusing on streamlining it. It sounds like there are real payoffs for your work and I congratulate you on your work.

Do any of the stakeholders at any time in the process question whether the information being provided is actually needed and used? Have you been able to totally eliminate any information requirements which have been determined unnecessary?

Ms. ANDress. That is actually something that we are working on now. We have mostly focused on how the reporting is done. In each of the States we have teams of environmental groups, labor interests, industry and State regulators to try to address the "what"
from all the stakeholders perspectives, not just the printers and the regulators. The environmental community feels that there is better information that we can get, not necessarily more, just different, that would help us better understand environmental impacts as well.

Chair Meyers. I appreciate all of your attendance here today and while we have not had the best Committee attendance that we have had all year, I want you to know that in the audience there are staff people from our Committee members as well. Your information has not gone unheeded. I appreciate very much your being here.

Unless there are further comments
Mr. Hansen. I would like to keep the record open
Chair Meyers. I would like to keep the record open for 2 weeks, Mr. Hansen. There are some Members who have asked for the opportunity to ask questions. I was not aware of that. We can have then answered then on the record.

Mr. Hansen. Certainly.
Chair Meyers. The meeting is adjourned.
[Whereupon, at 4 p.m., the Committee was adjourned, subject to the call of the chair.]

## APPENDIX

STATEMENT OF THE HONORABLE DONALD A. MANZULLO BEFORE THE HOUSE SMALL BUSINESS COMMITTEE ON EPA'S REGULATORY AND PAPERWORK BURDEN March 7, 1996

2:00PM ROOM 2359 Rayburn

Madam Chair, I commend your efforts to dig beneath the surface of clinton Administration promises made to help reduce the regulatory and paperwork burden facing small business.

Last year, we heard many good promises from Vice President Gore's reinvention initiative and Environmental Protection Administration (EPA) Administrator Carole Browner about reducing paperwork burdens by 25 percent. Yet, just like liberals who, when debating budget issues, call an increase a cut, various bureaucracies, including the EPA, change the goalpost so they can claim a cut in regulatory and paperwork burden even though there is an overall increase.

This is not a new problem. I obtained a copy of an old 1984 General Accounting Office (GAO) report where they chastised the Office of Management and Budget (OMB) for overinflating the impact on business an estimated 235 million burden hours out of a total of 385 million hours reduction claimed. That's a 60 percent difference!

It appears that the pattern is repeating itself once again. The GAO has informed the committee staff that, in certain select cases, burden baselines were conveniently adjusted to adhere to the 25 percent reduction goal. In one example, the EPA claims that 500,000 burden hours were cut in deleting some hazardous waste manifest shipping document requirements. Yet, on January 1, 1995, the EPA estimated that the entire burden of this regulation was only 435,000 hours. How can that be?

Sometime last year, after the 25 percent reduction promise, EPA conveniently reestimated the burden of this regulation, jumping to 3.2 million hours. This is not cutting paperwork burdens. The small business person beyond the Beltway does not understand these legal gymnastics and will not see any real reduction in regulatory burden in this case. This is simply a bureaucratic exercise designed to make certain high ranking officials look good.

Let's have some real regulatory reform, not these sham shell games designed to protect someone's political hide. The small businesses that I have talked to have seen some progress but more needs to be done, especially in making regulations more simple to understand. An environmental engineer from Rockford, Illinois suggested that one way to reduce paperwork burdens is to have both the state and federal environmental enforcement agencies require businesses to fill out the same forms and use the same information garnered from this data.

For example, the USEPA requires each July a voluminous toxic release report on emissions. Yet, the Illinois EPA requires essentially the same information but filled out differently.

> Another small business person requested more training sessions and centers similar to what the Occupational Safety and Health Administration (OSHA) has in Des Plaines, Illinois.

Finally, all business persons have essentially pleaded with me that all regulations, which only apply to business, should be distilled in a centralized fashion in understandable English. Business people do not need to waste valuable time by sifting through the Federal Register looking at environmental regulations that apply to government or non-business entities.

Madam Chair, I would also urge that not only should we have a comprehensive look at all current regulations but Congress should start repealing many of these burdensome laws, like I did with the Employee Commute Option (ECO). This law, essentially, forced carpooling on the business community by the federal government. I was pleased to work with a bipartisan majority in Congress to repeal this ineffective law, which was signed by President Clinton last December.

Many of these paperwork reduction goals sound good on paper, but only when we start repealing or modifying existing law can we really begin to take a bite out of the regulatory and paperwork burden facing small business. Thank you, Madam Chair.

Jan Meyers<br>Chair, House Small Business Committee

Opening Statement for
Oversight Hearing on

# EPA's Progress in Reducing Unnecessary Regulatory and Paperwork Burdens Upon Small Business Businesses 

March 7, 1996

Welcome. This afternoon the Committee will focus on the Environmental Protection Agency's progress in reducing unnecessary regulatory and paperwork burdens upon small business.

This is the fourth in a series of oversight hearings our Committee is conducting on both Congressional and Administration initiatives to reduce those burdens. We have been evaluating what agencies are doing in meeting the President's March 4 directive to agency heads to read every page of their regulations and make regulatory reform a priority, in fulfilling the recommendations of last June's White House Conference on Small Business, and in accomplishing the burden reduction goals of the 1995 Paperwork Reduction Act. Our intent is to develop a Report Card on these activities later this year.

On each occasion we have impaneled a distinguished Executive branch official with representatives of small business. The Administration official has given a progress report, and the small business participants have reacted to whether they are sensing the changes and what needs to be done. I believe these panel interactions with small business, the Committee, and the

Administration have been lively and constructive. We have focused on common sense and common ground.

Our three previous hearings included Joe Dear, the head of OSHA; Peggy Richardson, the Commissioner of the IRS; and Sally Katzen, the Administrator of the White House Office of Information and Regulatory Affairs. Today is EPA's turn at the table.

I want to thank Fred Hansen, the Deputy Administrator of EPA for his willingness to participate in this forum. I understand you attended the White House Conference with Carol Browner, so you know what it is like.

I also want to thank our small business witnesses, two of whom were Conference delegates. They have come from all over the country and I very much appreciate the effort. We look forward to your participation.

Our hearing is very timely. Two days ago I held a press conference in this hearing room with other Members and seventeen small business organizations to endorse the "Small Business Growth and Administrative Accountability Act", legislation which the House will vote on in the near future.

The Administration has threatened a veto on the bill, based on its objections to Title II, which concerns periodic administrative review of regulations. I believe everyone is $\mathrm{O} . \mathrm{K}$ on Title I's purpose to provide judicial review of small business "reg flex determinations", and on Title III's Congressional review procedures which will enable Congress to exercise accountability and vote to approve or disapprove major regulations. Title II is the sticking point.

I endorsed Title II as well as the other two titles for three reasons: I believe in reviewing regulations periodically; Title II is
very responsive to specific White House Conference recommendations which the President personally requested; and I believe the President has already largely required the agencies to do in his March 4 directive what Title II would formally require by law.

I do intend to ask Mr. Hansen to respond to how what we are proposing the agencies do in the bill is more than what EPA has undertaken as a result of the President's directive.

At our press conference Tuesday I said that nothing has happened as a result of all the President's talk at the White House Conference on Small Business where he highlighted his March 4 directive. Maybe that was a bit harsh, as I don't know that I would give an "F" for a grade. However, I sense we are far, far, from an " A ". And I believe Congressional endorsement by law is needed and helpful.

At a press conference Monday, Carol Browner stated the "principle of moderation is missing" in the bill, and that it puts "polluters first".

I know the small business community who recommended these steps. We are going to talk with a few of their representatives today. No one is interested in "rolling back environmental protection". We all are interested in eliminating barriers and enabling small businesses to grow and create new and more jobs.

I believe our discussion today should contribute to the overall objective of regulatory relief for small business. White House conference delegates are scheduled to revisit what has happened to their work sometime this summer. I believe with continued work there can be something to cheer about.

Opening Statement<br>Honorable John J. LaFalce<br>March 7, 1996<br>Hearing on EPA's Regulatory and Paperwork Reduction Efforts

Thank you, Madam Chairman, for calling this hearing. Easing the regulatory burden on small business has been a priority of President Clinton's administration and I appreciate the opportunity to hear from another federal agency on their efforts to eliminate obsolete regulations and clarify, scale back or otherwise update a host of other regulations.

I also appreciate your affording small business representatives a forum to conduct a dialogue with those responsible for balancing the economic concerns of the nation's businesses with the public health and environmental concerns of the nation's people.

Lastly, I welcome our witness from the Environmental Defense Fund, Ms. Carol Andress. who has had experience and success in effecting this balancing act, particularly in the printing industry.

My introduction to environmental degradation was dramatic and complex: not too long into my Congressional service, the Love Canal disaster was discovered in my district. The EPA was in existence at the time but not too many years old, and there was no mechanism in place for dealing with a man-made environmental problem of this magnitude and nature. In response to the situation, I authored the first version of what was to become the Superfund legislation. Under that program, the Love Canal hazardous toxic waste site has been cleaned up and, just last December, the polluter was ordered by the courts to pay the government for the cost of the clean up.

As a result of Love Canal, I am, it is safe to say, fully aware of and sensitive to the potentially disastrous consequences -- be they ones affecting human health, natural resources, or
economic loss -- of unchecked polluting. This does not mean that I have never met a regulation I did not like. It means that we must consider not only the costs involved in complying with regulations designed to protect the environment, but also the costs of not protecting the environment.

Many livelihoods are dependent on preserving the environment: agriculture, forestry, tourism, and recreational industries involving any number of sports and hobbies, are but a few. Loss of the environment and natural resources on which these industries and jobs depend would have immediate economic costs in jobs and government revenue. Public health risks are another cost that accompany a poor environment and that of course also involve economic losses such as lower productivity because of sick days and increased medical costs for individuals and companies.

What are the business and economic arguments for loosening environmental regulations? In an article entitled "Jobs, Competitiveness, and Environmental Regulation," which I would like to submit for the record, author Robert Repetto of the World Resources Institute counters the argument that environmental regulation hurts productivity or competitiveness. He cites one study that claims that as environmental standards tighten around the world, firms that are technically ready to compete will have an advantage. He also notes that in the business world "the real issue is not 'environment vs. jobs.'" "Each year, many companies downsize in response to declining demand or technological change, and others expand -- employment shifts that dwarf those even remotely attributable to environmental protection." He goes on to write that people have repeatedly stated that they want "relatively unpolluted air and water, safer and healthier neighborhoods and workplaces, and undegraded natural resources...The Challenge is not to weaken environmental regulation but to improve it."

Madam Chairman, that is what the government has been doing rather diligently. Between the clear instructions from the President to all regulatory agencies, the passage of the Paperwork Reduction Act, and the legislative signals being sent by the Congress, no federal regulatory agency can have missed the message that its regulatory and paperwork requirements must be reduced and compliance made easier and less punitive. EPA's steps in this direction that we will hear about today are real. It would be nice if the President's regulatory overhaul were completed and not ongoing, but this process takes time and resources -- though they are time and resources well spent. As EPA will testify, regulatory reinvention has spurred initiatives to aid small business compliance, reduce the small business burden at the outset in new regulations, and, in general, raise the awareness of rule writers about the effects of their regulations on the business community. The exercise will have longlasting and positive effects because, as Mr. Hansen will testify, it is not window-dressing, but institutional and cultural change.

I look forward to hearing the panel's testimony. Thank you, Madam Chairman.

# Jobs, Competitiveness, and Environmental Regulation 

by Robert Repetto

## The American economy has per-

 formed reasonably well in recent years. Corporate profits and the stock market are near all-time highs; unemployment is low and productivity is growing; federal deficits have declined, and economic growth has been relatively strong. Nonetheless, the Republican Congress has begun an assault on environmental regulation on the grounds that it is killing the economy. If that is so, where is the blood?It is true that the United States spends a greater share of its total output than any other country-over 2 percent-on environmental protection. Many businessmen, labor unionists, politicians, and ordinary citizens fear that America cannot afford strong environmental protection, that regulatory burdens are dragging down productivity and undermining our competitive position in the world economy.

The counterargument, first set forth by Michael Porter in the Harvard Business Review in 1990, asserts that strict environmental regulations may boost a nation's competitiveness by stimulating firms to develop new, cleaner, more efficient products and manufacturing processes. As environmental standards tighten worldwide, Porter claims, technical innovations will give firms that have responded creatively to regulation a competitive advantage over sluggish rivals. Some of these proactive firms should do well in the "green technology" market, already worth almost $\$ 200$ billion a year in
industrialized countries and expected to mushroom in industrializing countries.

A parallel debate centers on employment. Businessmen often argue that stricter standards will force them to close down factories or move them overseas. Labor unionists fear that jobs will be lost if regulations force up production costs or restrict supply. The counterargument is that environmental protection also creates jobs: Limiting timber harvests in national forests, for example, may eliminate logging jobs but will save or create jobs in recreation industries and in footloose, hightech industries attracted to a high-quality environment.

It seems only logical that if U.S firms must spend more than their foreign rivals on environmental protection and these costs are not matched by market benefits, then profirability or market share will suffer, and so output and employment will fall. However, this logic is incomplete. The competitive effects of regulation should not be judged at the level of particular firms or industries.

If one firm fails to mect an environmental standard efficiently, a more efficient firm within the industry may gain market sharc. Moreover, m.ny compliance costs are eventually passed along throughout the cconony. So too are the costs of industrial pollution, when ill health lowers productivity and raises medical costs, or when polluted air and water damage agriculture, forestry, fishing, and recreation industries. Consequently, the effects of environmenral regulation must be evaluated at the level of the economy as a whole. Unfortunately, since the models and methodologies now used to do that look only at the costs of curbing pollution and ignore the costs of not doing so, they are biased to conclude that regulations burden the economy.

For example, economists who have estimated the effecrs of environmental regulation on productivity growth ignore the costs of pollution, a kind of unwanted joint product. If, say, an electric utility switches to lowsulphur coal in response to the Clean Air Act, its estimated productivity declines because low-sulphur coal costs more per Bru and generates no more electricity: But this conclusion ignores reductions in the real costs of respiratory disease, soiling, and materials damages that result from sulphur emissions control. Productivity measurements that include regulation's benefits as well as costs show that environmental regulations may actually increase productivity growth.

Many economists have looked for evidence that environmental regulation has diminished international competitiveness, but little has been found. Consider industries with relatively high pollution-control costs, such as pulp and paper, petroleum products, organic and inorganic chemicals, coal mining, fertilizer, wood veneers and plywood, cement, ferrous and nonferrous metals, and metal manufactures. If any industries have been disadvantaged by strict pollution standards, it should have been these. Yet, a World Bank study that reviewed world trade trends in these industries from 1970 to 1990 (the period in which our environmental regulations were enacted), concluded that "contrary to common perceptions, higher environmental standards in developed countries have not tended to lower their international competitiveness. There has been little systematic relationship between higher environmental standards and competitiveness in environmentally sensitive goods (those that incurred the highest pollution abatement and control costs....)."

In fact, the United States and other industrial countries with tight standards have had more export success in these industries than in manufacturing as a whole, even as compliance costs have risen. The U.S. overall share in world exports has declined along with our share in world output, and our share in manufactured exports has declined faster; but within manufacuring, the U.S. share of exports in sectors heavily affected by environmental regulations has performed better than the average. Where
we have lost comparative advantage is in labor-intensive industries. Germany, which in many respects has tighter environmental standards than ours, actually increased its export share in environmentally sensitive goods while losing market share in manufactures as a whole. Japan, whose industry is typically less polluting than ours, also held its own in such goods. Factors other than environmental control costs have determined export success.

Even a cursory look at data on investment flows disproves the contention that multinational companics are relocating environmentally sensitive industries to countries with weak regulations. Direct foreign investment in developing countries has increased sharply, after collapsing during the debt crisis of the 1980s, but little of this investment is in "dirty" industries. The advanced countries that export their "dirty" industries seem to be sending them mainly to each other. The investments in developing products are disproportionately in consumer products, services, and labor-intensive manufacturing industries. The case that environmental regulation has injured our international comperitiveness does not hold up.

In any case, international "competitiveness"-the ability to outsell foreign producers-is a very incomplete measure of commercial success. Profitability is a much better measure. It encompasses domestic as well as international success and reflects production costs along with sales volume. In a market economy, profitability is literally "the bottom line"; it captures all the aspects of a successful enterprise, whereas exports measure only one. It makes sense to recast the "competitiveness" issue like this: In any given industry, do firms with better environmental performance than their rivals tend to be more profitable?

My colleagues and I at the World Resources Institute recently asked this question in a study of thousands of industrial firms. Performance was measured in emissions per unit of output-a reasonable measure of efficiency if industrial processes are viewed as the transformation of materials and energy from crude into usable forms. Since everything that enters an industrial process comes out again in some form, measuring emissions this way reflects the ratio of useful "good" outputs to useless "bad" ones. From this perspective, it is reasonable that firms that transform more of the energy and materials they use into salable forms might be more profitable. It was noteworthy to find that environmental performance varies remarkably, even in such narrowly defined industries as makers of printed circuitboards or ready-mix concrete.

Under the standard hypothesis-that firms must sacrifice some profits if they reduce emissions below the point where waste recovery pays for itself-environmental performance and profitability should be inversely related. The competing "Porter Hypothesis"-that when regulations motivate firms to solve environmental problems, they typically discover cost-saving opportunities to
improse pronesses, reduce wastes, or redesign productssuggests th.t protitability and environmental performance should be positively correlated. (Economists doubt this becaue market compertion presumahly eliminates any such "tree lunches.")

The empirical ests of these competing hypotheses make use of a relatively new database generated by the U.S. Census Bureau Center for Economic Studies: the Longitudinal Research Database (LRD). This database merges records on individual industrial establishinents from censuses and annual surveys of manufactures, establishment by establishment, with information from other sources, including EPA databases on emissions by manufacturing facilities. For the 1987 census year, the LRD has been combined with EPA's Toxic Release Inventory, which provides information on the releases and discharges of over 300 toxic substances; the National Emissions Data System, which gives information on the discharge of effluents such as Biological Oxygen Demand (BOD) and suspended solids into surface waters, and the Aerometric Information Retrieval System, which documents the atmospheric release of particulates and other. pollutants regulated under the Clean Air Act. The result is a database encompassing thousands of manufacturing establishments and containing detailed information on emissions, production costs, sales, and revenues. This database made it possible to investigate whether establishments with superior environmental performance were more or less profitable than their competitors.

Specialized industrial sectors that produce a relatively narrow range of homogeneous products were selected for study, in order to avoid comparing establishments making very different goods by dissimilar processes. Profitability was measured both by the facility's gross operating margin and by the net return on the end-of-year book value of fuxed capital. The study's results, covering dozens of industries, showed only weak correlations between firms' environmental performance and their profitability, and no tendency for environmentally superior firms to be less profitable.

The accompanying figures lay out the study's findings graphically. In each graph, the two measures of profitability are represented on the axes, gross margin on the horizontal and net return on the vertical axis. Each point represents the correlation coefficient between environmental performance (emissions per unit of shipments)
and the two measures of profitability: Thus, if "dirtier" environmental performance in a particular industry is positively correlated with borb measures of profitability. the industry will be represented by a point in the upper right quadrant of the graph. The further away from the origin of the graph in both dimensions, the closer the correlations. If the industry's environmental performance is negatively correlated with both measures of profitability, it will be represented by a point in the lower left quadrant. If the correlation with gross margin is positive, but that with net return on capital is negative, the point will fall in the lower right; if the correlations are reversed, the point will be in the upper left. It should be emphasized that each "point" in a graph summarizes the association berween environmental and market performance across many different establishments within an industrial sector.

The same general conclusions are borne out by correlations between profitability and toxic emissions (figure 1), waterborne emissions (figure 2), and airborne particulate emissions (figure 3). The data reveal no tendency for profitability to be positively correlated with emissions intensity. It is as least equally likely for plants with superior environmental performance to be more profitable. Overall, the associations are weak: Other factors are determining the economic performance of individual manufacturing establishments.
"Yes," skeptics will say, "but these other factors mask the true effects of regulation on profits, so simple correlations do not reveal much." Plants with superior performance are often the newest ones. Older plants are probably dirtier and more expensive to operate because their technologies are outmoded, because they are hard to retrofit with efficient pollu-tion-control equipment, and because they require a lot of maintenance to prevent leaks and emissions. Larger plants probably achieve economies of scale, both in producing outputs and in handling effluents. Differences like these, which may affect both profitability and pollution intensity, could create spurious correlations between economic and environmental performance or mask whatever real ones may exist. But the analysis controlled for each plant's age, production scale, and recent investments in plant and equipment. Still, plants with superior environmental performance are not less profitable. Across the thousands of plants studied, those with lower emissions per unit of output
are at least equally likely, and perhaps somewhat more likely, to achieve higher profits.

Therctore, regulations need not be weakened out of fear of damaging industries' market performance. Investors should not expect lower returns from firms with superior environmental performance or from environmentally screened portfolios that avoid the worst-performing firms. Internationally, there is no need to enact countervailing tariffs, antidumping duties, or other trade penalties directed at imports from countries with weak environmental standards if the resulting damages are confined within their borders.

These findings should prompt a reexamination of conventional thinking about jobs and the environment. Some maintain that regulations destroy jobs in regulated industries, while others retort that regulations increase employment in environmentally benign industries. Of course, both are right, narrowly speaking. Virtually any expenditure, however foolish or unproductive, will create jobs. The Corps of Engineers generated employment when draining our nation's wetlands, and it will do so again when undoing the damage. That's close to digging holes in the ground and filling them up again, but it creates jobs. The real issue is the social (or market) value of whatever those jobs produce.

Shifting resources always destroys some jobs and creates others. To understand this, think about how people spend their own money to improve their environments. If they buy home water filters, jobs will be created in the waterfilter industry. Nobody worries about destroying jobs. Of course, people who buy water filters have less to spend on something else-say, movie tickets-and so employment will fall in the movie industry. Who knows (or cares) whether employment per dollar of sales is greater in the movie or the water-filter industry? People assume that they can buy what they want and markets-including labor markets-will adjust.

Now suppose that people sensibly conclude that one giant water filter for the entire community would be more efficient, and they vote to tax themselves to pay for

a wate-texatment plant. Agan, emplowment rises in the giant water-filter industry, but, since people have to cut down on other spending to pay the added taves, employment goes down somewhere else. How it balances out is anybody's guess.
But, what if the government requires the town's factory to install the water filter on its exhaust pipe before it dumps its wastewater in the community's water supply? When the factory raises its prices to cover the costs of the filter, some factory workers may lose their jobs, but still employment goes up in the filter industry. On balance, industrial employment might rise or fall, but the real question is whether the community thinks clean water is worth the cost.

Spending more on pollution control will affect the pattern of employment but is unlikely to reduce overall employment. Environmental spending purchases goods and services from a wide variety of industries, from construction to instrumentation, and the direct labor content is comparable to that of U.S. industry as a whole. Consequently, one would not expect an increase in environmental expenditures, even at the expense of manufacturing output, to have much impact on aggregate employment.

This conclusion is probably too pessimistic. Petroleum refining, chemicals manufacturing, pulp and paper, and primary metals-the industries in which pollution-abatement costs are a relatively large fraction of output value-are all among the industries with the fewest employees per million dollars in shipments. These sectors are less labor-intensive than manufacturing in general and less labor-intensive than the pollution-control industry. It follows that increasing expenditures on pollution control would probably not reduce total employment in the short run. In the long run, any second-order effects would be undetectable among the more powerful macroeconomic and cyclical forces that drive unemployment up and down.

The real issuc is not "environment ws. jobs." hut what we want our economy to produce. If we want it to produce a cleaner environment along with other goods and services, the industries that contribute to that end will have higher output and employment, and those that damage the environment will have less. What we wane the economy to produce is continually changing, and industries expand and contract ro keep pace. When personal computer sales boomed, typewriter sales declined, but no politician or lobbyist has said, "Our economy cannot afford to have personal computers because it will destroy jobs in the typewriter industry." But they rourinely claim that we cannot afford clean air because it will destroy jobs in coal-mining or some other industry.

In a market economy, employment opportunities expand and contract constantly, and the labor force adapts. In the private sector, people are not entitled to particular jobs. Each year, many companies downsize in response to declining demand or technological change, and others expand-employment shifts that dwarf those even remotely attributable to environmental protection. The government's role is not to guarantee particular jobs but to ease workers' transition from declining to expanding industries through unemployment compensation and retraining programs, by macroeconomic policies that maintain high aggregate employment, and through measures that moderate abrupt economic shocks. Americans overwhelmingly agree that the economy should produce a clean environment; spurious fears that this means higher unemployment should not stand in the way.

People want relatively unpolluted air and water, safer and healthier neighborhoods and workplaces, and undegraded natural resources. They have demonstrated over and over again that they are willing to pay for them, and they have indicated that they expecr their elected representatives to enact and enforce strong environmental standards. Therefore, the real issue with environmental spending, as with all spending, is not jobs or "competitiveness," but whether we are getting good value for our money. Are the resources devoted to environmental protection buying significant improvements in environmental quality, or are they being frittered away with little to show? Much can be done to make environmental protection more efficient without undermining its effectiveness or purpose. The challenge is not to weaken environmental regulation but to improve it.

Robert Repetto is vice president of the World Resources Institule in
Washington, D.C.

## COMMITTEE ON SMALL BUSINESS UNITED STATES HOUSE OF REPRESENTATIVES

# OVERSIGHT HEARING REGARDING THE EPA'S PROGRESS IN REDUCING UNNECESSARY REGULATORY AND PAPERWORK BURDENS UPON SMALL BUSINESS 

March 7, 1996
Testimony of Congressman Glenn Poshard

Madame Chairman, I would like to thank you for convening this third in a series of hearings on how various federal agencies are reducing their regulatory and paperwork burden. The previous two sessions were extremely productive and informative and I am sure today's will be no exception.

The dilemma before this Committee is an old one. How can we promote environmental integrity without subjecting the small businesses of America to crippling regulations? I believe that the Environmental Protection Agency (EPA) has put forth a credible and well intentioned effort to reduce regulation, and I applaud their hard work. However, persistent cries from the small business community that further relief is needed must not go unheard. Issues such as how to make the EPA more approachable for small businesses need our attention. Today represents a great opportunity to continue this dialogue.

Madame Chairman, thank you again for your leadership on regulation and paperwork reform. I am looking forward to the testimony of our distinguished panel, and I thank them for making time in their busy schedules to be with us today. I am anxious to learn more about the EPA's progress and the experiences of the representatives from the small business community.

## Testimony of

# Carol Andress, Economic Development Specialist Environmental Defense Fund 

Before the Committee on Small Business

On Reducing Environmental Regulatory Burdens on Small Business

March 7, 1996

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My name is Carol Andress, and I am an Economic Development Specialist with the Environmental Defense Fund in EDF's Washington D.C. office. EDF is.a leading, national, NYbased nonprofit organization representing more than 300,000 members. EDF links science, economics, and law to create innovative, economically viable solutions to today's environmental problems.

I am here to speak about the Great Printers Project, a joint initiative of EDF, the Council of Great Lakes Governors, and the Printing Industries of America. EDF began the Great Printers Project three years ago to demonstrate that the best way to promote pollution prevention is through environmental policy that treats a business like a business.

There are many valuable lessons from this project, but the one perhaps most relevant to today's hearing is that in partnership with the industry and regulators, we found ways of addressing printers concerns about regulatory burden while also enhancing the environment. We believe this work will enhance environmental protection by making it easier for printers to adopt effective methods to prevent pollution and thereby eliminate or greatly reduce the need for costly and limited types of waste control and cleanup.

While our work has focused on lithographic printing, the lessons and recommendations are relevant to other small businesses and can help pave the way for similar work with other industry sectors. The printing industry is dominated by small businesses, with over 80 percent of the printing companies employing less than 20 employees. While an individual print shop is not a major source of pollution, the impact on the environment of all printing operations together is substantial.

To illustrate what we believe to be a win-win situation, EDF sponsored development of software, known as the Printers Environmental Compliance Assistant (PECA) using printers in Wisconsin as a case study. This software shows that it is possible to hamess modern technology to:
(I) Consolidate various media-specific reporting requirements. In this case, the software combines air and hazardous waste reporting forms since many small printers trigger both;
(2) Make complicated regulations user-friendly. PECA is designed to communicate requirements in ways that are understandable to an intelligent businessperson who is not an expert on environmental matters;
(3) Encourage pollution prevention. By linking regulatory requirements with information on alternatives that can reduce pollution we hope to take advantage of a opportunity to foster preventive approaehes, and
(4) Educate the businessperson about the environmental and human health impacts of their operations.

US EPA, through the Pollution Prevention Policy Staff, has provided important support to the State of Wisconsin to refine and operationalize PECA. We are working with other Great Lakes States to learn from the lessons in Wisconsin and adopt similar reforms. Already, even minor changes have made a difference to Wisconsin printers. For example, in December 1995, Wisconsin DNR sent businesses a computer disk that included hazardous waste reporting forms. One large printer in southeast Wisconsin stated that just this simple change saved him a month of paperwork. We expect greater efficiencies to result from further consolidation and simplification.

## Background on the Great Printers Project

The Great Printers Project is the first project in the nation to seek to create a business environment conducive to pollution prevention for an entire industry sector, and it helped inspire the U.S. Environmental Protection Agency's Common Sense Initiative. The goals of the project are to:

- Make pollution prevention a standard practice of the lithographic printing industry in the Great Lakes States; and
- Demonstrate how various stakeholders can work together on the shared goals of environmental protection and economic strength.

The project works through a team made up of Great Lakes regulatory and economic development agencles, the U.S. Environmental Protection Agency, state and federal technical assistance providers, printers, suppliers, and customers, and members of labor and environmental groups. This team developed a set of consensus recommendations, which were signed in July 1994 by all eight Great Lakes Governors, EPA Administrator Browner, and representatives of the printing industry, supply companies, labor unions, and environmental groups. These recommendations call for changes not only by printers, but also by all who supply them with materials, purchase their products, and regulate their operations. Because this hearing is on regulatory burdens on small businesses, my testimony will focus on the regulatory reporting reforms advocated by the project team and now being implemented in four Great Lakes states.

## Creating a Pollution Prevention Friendlv Regulatorv Framework

Printers, like many small businesses, confront an array of environmental requirements, each usually developed to address one individual environmental medium -- air, water, or waste -at a time. Facing separate air, water, and waste regulations, these businesses often treat these requirements as individual end-of-pipe problems, and sink considerable time, capital, and employee training into separate air, water, and waste strategies. Presented with all the requirements simultaneously, however, the company might find it more cost-effective to solve more than one problem at a time, by reducing pollution at the source.

Moreover, a printer may be required to report the same information using different forms, with different nomenclature, at different times of the year, to the same agency. The printer may have to apply for environmental permits to separate and isolated divisions of the same regulatory agency. Interviews with printing companies in Wisconsin indicate they commonly spend 150 hours for every major reporting requirement triggered. Businesses, especially small companies unable to hire an environmental specialist, can spend excessive time deciphering instructions, searching to see if requirements apply, and filling out forms. Because the time and resources a small business can invest in compliance are severely limited, agencies must be careful not to waste them. Redundancy and arcane language in regulations can have a detrimental effect on a printer's ability to protect the environment.

Toward that end, the Great Printers Project has worked with USEPA and its state partners to present printers with reporting and permitting requirements stated in a way that minimize redundancy and confusion, and can be understood by an intelligent businessperson who is not an expert in environmental matters. In particular, the Great Printers Project team advocates the following:

Conveying environmental goals. The environmental information system should begin by conveying goals and requirements in plain English in several different formats, using any medium (printed materials, videos, software, conferences, etc.) a printer might find useful. (See box below for sample language for illustration purposes only.)

## A Printer's Environmental Responsibilities and Goals [Sample Language]

Printing, like all human activities, has an impact on the environment. Your print shop should meet certain minimum standards of environmental protection, and even as your business prospers you should continually reduce your print shop's impact on the environment. Improvements in printing technology and the "greening" of customer demands mean that business growth does not have to be linked to pollution growth. In fact, cutting environmental waste may make you more competitive.

Government research shows several important ways printing can have an impact on the environment, all of which have been reduced dramatically over the past few years and which should continue to be reduced. These are [for illustration only]:
the evaporation of solvents that react with sunlight to make smog, which can impair breathing;
the discharge of wastes to sewers or storm drains, which - when sewage systems are not equipped to handle them - can present a hazard to sewage system workers, pass into our waterways, make sludge from sewage treatment plants more difficult to dispose of, or evaporate from sewage system, contributing to smog;
the creation of hazardous waste, which must then be either disposed of in landfills or treated, both of which are meeting increasing public resentment:
the use of energy, with all the pollution associated with its production:
[etc.]
Even though the contribution of any one printer to these environmental problems may be small, the collective effect of all human activities, including printing, is substantial. The only way we can continue to improve our quality of life without destroying our world with pollution is to reduce the impact of all of our activities, large and small.

Conveying Environmental Requirements: Environmental information -- whether it be conveyed by a consultant, a computer, or a comic book -- should have the following five characteristics to make it most useful to the small printer.

First, the information system should be organized by the type of printing cperation addressed, rather than by environmental statute. Most environmental manuals explain regulations statute-by-statute. The average printer would find it far easier to understand his or her environmental requirements if they were explained by operation in the print shop -- for example, with successive sections dealing with the pre-press, blanket wash, fountain solution, etc. To the extent that current statutes and regulations make this unwieldy, they should be modified. Though the burden of understanding the laws lies with the printer, the government has the responsibility to communicate the information to the printer in a generally comprehensible manner. Moreover, the burden of resolving conflicts between the Resource Conservation and Recovery Act, the Clean Air Act, and the Clean Water Act at a print shop should lie with the govemment.

Second, the information system should enable the printer to use decision trees to get directly to the relevant information, as in the following illustration:

## Part of a Sample Decision Tree on Blanket Wash

The information system asks:

1. Do you use a blanket wash?

If no, go to question X ;
2. If yes, how many gallons do you use each year?
3. How many pounds of volatile organic compounds are in each gallon of the blanket wash you use? (Hint: your supplier should be able to answer this.)

According to our calculations, because you exceed X amount, you may be required to have a permit from the [state regulatory agency].
4. Would you like assistance in applying for the permit?

Third, the information system should offer technical assistance, leading directly from the regulatory assistance, that helps the printer meet or exceed compliance, as in the following illustration:

## Part of a Sample Decision Tree Providing Technical Assistance Menu Options

The information system asks:
How many pounds of solvent are in each gallon of the blanket wash you use?
(Hint: your supplier should be able to answer this.)
The answer to this question would be used by the information system to complete the printer's regulatory profile and provide the printer with additional regulatory assistance. If the answer is more than X pounds, the information system would respond with:

There are some blanket washes on the market that contain less solvent and are more environmentally friendly. Would you like a list of them, including vendors and technical references on their performance?

Fourth, on completion, the information system should print out and transmit electronically (if possible) any report or application required by a state agency or USEPA. This multi-media report or application should fulfill the printer's reporting and permit application obligations. Based on the application, an agency could provide the printer with a single multi-media permit to operate.

Fifth, after completion, the information system should print out a report on the findings of its compliance audit, containing preliminary recommendations for becoming cleaner and more efficient where feasible.

## Challenges

In advocating these reforms, the Great Printers Project recognizes that some of the biggest challenges in assembling and maintaining such a network and information system will be:

- reaching the greatest number of small printers, in a form trusted by printers, and providing an objective source of information;
- resolving conflicts within laws or regulations. Fcr example, different laws specify different deadlines and ways of reporting that will need to be addessed; and
- designing the system so that it can adapt to different state and local regulatory requirements and be continually updated.

These issues notwithstanding, in the Great Printers Project, we found that it is possible to take unintelligible and complicated regulations and create a simplified, user-friendly system. Indeed, if properly designed, such a regulatory system can be an educational tool, helping businesses continually improve their environmental performance and reduce operating costs.

# Testimony of Fred Hansen, Deputy Administrator <br> United States Environmental Protection Agency <br> Before the Committee on Small Business <br> United States Honse of Representatives <br> March 7, 1996 

Madam Chairman, Congressman LaFalce, and members of the Committee on Small Business, I am pleased to be here today tell you about EPA's efforts to reinvent environmental regulation and to assist small businesses. This is a time of enormous change at EPA. Under the leadership of President Clinton and Administrator Browner, EPA is reinventing the way it protects public health and the environment for all Americans. EPA is working as a partner with business, state and local government and all citizens to find environmental solutions that cost less but get better environmental results. In 1995, the White House sponsored and EPA took part in a Conference on Small Business. The recommendations coming out of the Conference have been particularly helpful in guiding our reinvention priorities. An important part of the changes going on at EPA address the concerns and needs of small business. I would like to talk about those changes today.

First let me say that EPA in this Administration is committed to addressing the concerns of small business while maintaining strong protection for public health and the environment. Over the last year I have traveled throughout the country and discussed public health and environmental concerns with many small business people. It is clear that most small business owners share the concerns of all Americans about protecting public health and environmental quality. Small business owners want safe and clean communities in which to live and work and raise their children and they want our precious natural resources to be preserved for future generations. Although environmental protection does not come without cost, small business owners I have spoken with would not support a roll back of environmental standards any more than would most citizens.

## An Overview of EPA's New Approach for Working With Small Business

Reinventing how EPA deals with small business involves three kinds of activities. First, EPA seeks to reduce the burden that environmental programs place on small business while guaranteeing the protections to public health and the environment that EPA envisions and the regulations require. The challenge is to lessen the burden but not the protections they bring. In our twenty-five years of experience in providing public health and environmental protection we have learned that some of our regulations are unnecessarily burdensome and we have learned more efficient ways of achieving environmental results. We are putting those lessons to use.

Second, we recognize that most Americans, including small business people, are good citizens who want to comply with environmental requirements. The truth is that the requirements are complicated and especially difficult for smaller businesses to understand. In the past EPA enforced the requirements but left it to regulated entities to look elsewhere for assistance in meeting requirements. While that works reasonably well for larger companies with legal and technical experts devoted to environmental compliance, it leaves small businesses in need of help. One of the first changes that Administrator Browner made at EPA was to reorganize the Office of Enforcement to add a strong compliance assistance function. EPA now realizes that we have a role in assisting businesses, and especially small businesses, in complying with requirements. EPA's goal is public health and environmental protection through compliance.

And third, EPA is reaching out to small business to a far greater extent than at any other time in our history. Today we do not write regulations or make policy that affect small businesses without first talking to small business people and without carefully evaluating the economic impacts of those actions. We want to make sure that any burden we impose is justified by better protection to human health and the environment. We are making special efforts to include small businesses in new programs and initiatives from which they might benefit. I would like to talk about each of these three points in greater detail.

Please keep in mind that most of EPA's programs are delegated to States. In fact, the vast majority of environmental programs are operated by state governments. Thus, EPA usually does not touch small business directly except by setting national standards which become part of state programs. When EPA reduces the burden imposed by its regulations or establishes enforcement policies to give small business flexibility, we are providing a model. While we can not require states to follow our lead in removing burdens or providing compliance assistance, we do provide leadership and influence.

## Reducing Burdens on Small Busíness

Under Administrator Browner, EPA has undertaken the most far reaching effort ever to review all EPA regulations and specifically to identify opportunities to eliminate record keeping and reporting requirements. Last March, Administrator Browner directed the Agency to reduce the burden associated with environmental reporting and set a target of 20 million hours to be eliminated. This achieves burden reduction more quickly than required in the Paperwork Reduction Act and the recommendations of the White House Conference on Small Business. EPA identified burdens that could be reduced, as part of a line-by-line review of regulations, conducted pursuant to the President's March 4, 1995, memorandum on regulatory reinvention. EPA staff identified 17 million hours of reporting and record keeping burden to be eliminated, and EPA programs are in the process of identifying the additional burden reduction necessary to meet the target. By the end of this month, EPA will have eliminated ten million hours and will be halfway toward meeting the Administrator's goal. Before the end of this year we intend to propose elimination of an additional ten million hours of burden reduction.

We have been able to make these changes without sacrificing our ability to protect public health and environmental quality. Information reported by businesses is an important tool to enable us to set standards and controls and ensure compliance with environmental standards. However, years of experience in collecting and using this information have taught us that in many cases we can still carry out these important functions with less frequent reporting and monitoring,
shorter retention time for records and elimination of some reporting requirements altogether from facilities that have a minimal impact on the environment. In other words, we have a better understanding of what is truly essential and what is not.

Small business will benefit from EPA's burden reduction. For example, last year EPA published the Universal Waste Rule, which provides a streamlined regulatory structure for the collection, transportation and accumulation of common hazardous wastes such as batteries, certain pesticides and mercury-containing thermostats. This rule makes it much easier for businesses to manage wastes that are being collected for recycling, and reduces the costs of compliance. It will significantly ease the burden on retail stores and other small businesses that generate and collect these wastes.

In March, EPA will reduce existing monitoring and reporting for facilities that discharge pollutants to the nation's surface waters based on a record of excellent compliance and a demonstrated ability to reduce specific pollutants beyond existing requirements. This is potentially very significant to small business because approximately three-quarters of these facilities are small businesses. We estimate that this change to discharge monitoring reports, EPA's largest single reporting requirement in terms of burden hours, will allow the average facility to eliminate over $25 \%$ of the burden associated with these requirements.

EPA reduced the burden for small businesses required to report to the Toxics Release Inventory (an inventory available to the public, on releases of toxic substances) by developing an alternate reporting threshold. This year, for the first time, companies with low annual emissions who choose to certify that they meet this threshold will not have to submit reports to the Inventory.

In an other example, EPA is revising existing regulations to cut in half the reporting frequency - from quarterly to semi-annually - for industrial facilities subject to Clean Air Act reporting requirements. Small businesses, such as chrome plating operations, which are subject
to the requirements are benefiting from this change.

Eliminating burden does not always entail eliminating requirements. EPA also is eliminating burden by allowing electronic reporting. Several programs have successfully piloted electronic reporting. One program, our reformulated gasoline program, has fully operational electronic reporting. Beginning this spring, we will expand the use of electronic reporting to discharge monitoring reports. This action will save the regulated community around 200,000 hours.

Beyond these efforts to reduce existing burden, EPA is firmly committed to avoiding unnecessary new information requirements. Over the last year EPA avoided imposing unnecessary burdens in several new rules. In the long run, institutional and cultural change at EPA is taking hold as we move forward with procedures and projects that will ensure that paperwork burden will be minimized. These include procedures that go beyond the requirements in the Regulatory Flexibility Act to analyze impacts on small business and examine alternatives. Recent regulations show real differences in how we treat small businesses including expanded flexibility for small businesses in the national refrigerant recycling rule. EPA also has begun some long term reinvention projects such as the development of a "one-stop reporting" system to consolidate and simplify all environmental reporting.

## Helping Small Business Comply with Environmental Regulations

Compliance assistance is the second major focus of EPA's reinvention efforts to benefit small business. EPA has taken a significant step toward helping small businesses comply with complex environmental requirements. To this end, EPA is funding Small Business Compliance Assistance Centers. The Agency has established centers for four business sectors so far: automotive service shops, printing plants, metal finishing operations and small farms. These centers, as they become fully operational in the coming months, will provide information on environmental regulations including plain English explanations of environmental requirements,
information on how to comply and advice on how to lower compliance costs. The centers will also provide technical advice on pollution prevention and seek to put small businesses in contact with each other so that they can learn from each other. When uncertainties about EPA's budget are resolved, we hope to establish at least two more Compliance Assistance Centers.

Last June at the White House Conference on Small Business, the Administrator announced an interim policy, that became effective immediately, on compliance incentives for small business. Under the policy EPA waives penalties for a small business for non-criminal, firsttime violations of environmental requirements detected in a Federal or state compliance assistance program provided the violation is corrected and there was no serious harm (or likelihood of imminent and substantial endangerment) to public health or the environment. We expect to issue a final policy within the next few weeks that will increase the availability of the policy's benefits to small business.

At the same time, EPA is continuing to direct its enforcement program to target the most significant public health and environmental risks. We are using enforcement measures of success that indicate risk reduced, including measures such as compliance rates and the type and amount of pollution reduced or avoided as a result of enforcement. By using these measures we hope to target enforcement action at the most serious risks, and judge our success, not on the number of cases filed or the amount of penalties collected, but rather on achievement of actual environmental results.

## Reaching Out To Small Business

Finally EPA welcomes and encourages the views of small business. We are listening to small businesses, actively seeking out the participation of small business more than ever before. The days are over when EPA staff sat in Washington and wrote rules without seeking the input of the regulated community until a draft rule was published in the Federal Register. We hold focus groups, convene meetings, and regularly participate in meetings held by outside groups to get
input early in the regulatory development process. We are making all of our proposed rules available on the Internet. EPA's Home Page provides comprehensive information about what is going on at EPA in an easy to access and understand format. The participation of small business in the development of EPA's regulations and policies is essential. It, however, is not easy for us to do this effectively. The small business community is large and diverse. Involving small business is a challenge but we are making the extra effort to assure small business access to the process.

We also want small business to participate in some of the new and exciting projects that EPA is undertaking as part of reinvention. Reinvention at EPA includes bold experiments that have received considerable attention in the media. The center piece of these, the Common Sense Initiative, provides an opportunity for industries, together with other stakeholders, to look across all the ways that EPA interacts with the industry to find new opportunities for environmental protection that is cleaner, cheaper and smarter. Of the six industry sectors that are part of the Common Sense Initiative, two sectors, metal finishing and printing, are dominated by small business.

Finally, let me end with one of our most important efforts to help small business. EPA's Small Business Ombudsman has, for the last ten years, provided a convenient first stop for small businesses to have their concerns addressed. The Small Business Ombudsman received over 20,000 inquiries from small businesses last year. These are requests for information about regulatory requirements, EPA publications and attention to individual problems or grievances. The Ombudsman helps EPA staff gain insights and perspectives and helps solicit input of small business. She also acts as an advocate for small business within the Agency by participating in all major regulatory decisions affecting small business.

## EPA's Commitment to Change

## Administrator Carol Browner and I are proud of EPA's progress in reinventing

environmental regulations. We think our efforts have assisted small business while protecting public health and the environment for all Americans. We have many activities underway that represent significant change in the way EPA affects small business. Change of this magnitude does not happen overnight. It will require constant attention and long-term follow through. But we are committed to sustained change built on partnership toward a goal we all share: public health and environmental protection at reasonable cost.

Changes such as those I have described today are not easy. It takes resources to rewrite regulations so that they are responsive to small business concems, to analyze impacts, to help business comply, and to give small business a meaningful role in Agency decision making. We think that these changes are terribly important.

Small business owners must join us in breaking the old adversarial patterns of behavior. They can help us by working with us in this effort. The White House Conference on Small Business has provided useful advice on the needs and concerns of small business. But we need to continue to find ways to work more effectively with small business. I have outlined for you EPA's activities in the areas of burden reduction, compliance assistance, and improved communication. We welcome constructive feedback from small business on the effectiveness of these efforts and on how we can better involve small business in EPA decisions. We also welcome opportunities such as these to engage in dialogue with Congress and small business on how to better meet the needs of small business

I would be happy to answer any questions.

# STATEMENT <br> on <br> THE EPA'S PROGRESS IN REDUCING UNNECESSARY REGULATORY AND PAPERWORK BURDENS UPON SMALL BUSINESS before the HOUSE COMMITTEE ON SMALL BUSINESS <br> by ANDY HINES 

March 7, 1996

Chairwoman Meyers and members of the committee, thank you for inviting me to present the experiences of Emerald Green LawnCare in regards to EPA regulations concerning pesticide labeling. I am Andy Hines, Vice President of the Athens, Georgia division of Emerald Green LawnCare. Our company is a member of the U.S. Chamber of Commerce Federation of more than 215,000 businesses, 3,000 local and state chambers of commerce, 1,200 trade and professional associations, and 76 American Chambers of Commerce abroad. I am also a member of the Chamber's Small Business Council.

While most of my remarks will be directed to my personal experiences, I am confident that the problems are typical of what many small businesses experience when they have to deal with the "one size fits all" mentality that characterizes too many regulatory agencies. I know that the U.S. Chamber has been active in the effort to assure that the whole process makes sense and has worked hard for reforms, such as regulatory flexibility. I hope my story helps illustrate why continued changes are necessary.

In 1989, my wife and I moved to Athens, Georgia from Tulsa, Oklahoma to help the owner of Shrub \& Turf straighten out his business. Our company came to serve approximately 1000 customers in the Athens area, and by 1995 , gross sales were at $\$ 100,000$. Last year, Emerald Green, based out of Indianapolis, proposed a merger with Shrub \& Turf based on creative initiatives and the superior performance of Shrub \& Turf as a small business. As a result of this completed merger, our goal for projected growth over the next two years is to
obtain gross sales of $\$ 1,000,000$ in FY 1997. We have also increased our workforce from six employees to eleven employees.

Awhile back, my company devised a creative new herbicide product called Gallery. Due to red tape and confusing regulations regarding pesticide labeling, we have been unable to take advantage of existing technology to reduce pesticide usage. Costs will be higher and growth will be limited as resources are diverted to spraying post emergent weed control for Broadleaf weeds, such as dandelions and buckhom. My purpose today is to illustrate to this panel the problems involved with Gallery, and to propose a very easy solution. Again, my experiences help explain why small businesses are so frustrated by regulatory insensitivity and lack of common sense.

## Background

The number one complaint in the lawncare industry is weeds. Customers do not want weeds, and $80-90 \%$ of all cancellations can be traced to failed weed control applications. Reducing the number of weed control service calls, as well as reducing the number of cancelled customers due to weeds is high priority for LawnCare ownership and management. The industry standard for controlling weeds is to use post emergent applications of herbicides. While our industry has always treated crabgrass as a preventable problem (because pre emergent herbicides for grassy weeds have always been available), Broadleaf weeds have always been sprayed with post emergent applications.

In 1989, this all changed with the introduction of Gallery herbicide. Gallery's unique contribution to our industry is that it is the only product that PREVENTS Broadleaf and other such troublesome weeds. Immediately, we began to see the benefits of this product and devised a technique for incorporating its usage into our services. The results have been dramatic. By preventing weeds, we have some customers that have not had a post emergent weed management application in four years.

## Requlatory Problems

I have been attempting to combine Gallery and TEAM, a crabgrass control product, in fertilizer to take advantage of Gallery's ability to prevent Broadleaf weeds. Only one label exists with this combination of products, but this label was created BEFORE Gallery's unique
properties to prevent weeds were understood. The label's ratio of Gallery to TEAM is acceptable, but the label analysis of both products need to be higher. Labels with proper analysis do exist for both products individually, but not in combination with each other. To make use of this fertilizer product, we need a label that combines tnese two existing single labels.

To add this new label, the company needs to go through an entire process of retesting. This can take anywhere from one to two years for the new labels to get to the field, and will cost Emerald Green about $\$ 60,000$. This is particularly frustrating because it is so needless.

## Request for EPA

I am requesting EPA to allow these new labels to go forward immediately. I have other companies willing to purchase the product and fertilizer companies willing to sell the product if the red tape surrounding this label can be overcome. Reasons to move forward with this label include:

- Both labels for the requested combination product ALREADY exist (.38\% Gallery and $1.15 \%$ TEAM);
- both products are already in combination at the requested ratios with the $.8 \%$ TEAM and $.29 \%$ Gallery label;
- custom label laws already allow these products to be combined in the desired combination for golf courses, but not lawncare companies;
- and, not allowing this label will cause MORE pesticides to be used, not less.


## Benefits of Granting New Label

The benefits of granting the new label are:

- Gallery would be more widely available in a form acceptable to a wider range of LawnCare operators;
- without the use of Gallery, the number of reduced post emergent herbicide programs being implemented would be increased;
- and, total costs for our industry can be lowered and environment inputs reduced will be realized.

It is frustrating that despite the fact we have devised a better, more cost effective and environmentally conscious way to combine these lawn care products, EPA paperwork and labeling requirements prevent us from going forward. In this case, regulations are working against the presumed desire to improve the environment.

Thank you again for the opportunity to testify before you on behalf of the U.S. Chamber of Commerce. I would be happy to respond to any questions you may have.
Existing Gallery Label Problems

| Existing Label | can it be combined on fertilizer? | Does it have the right ratio TEAM/GAllery? |
| :---: | :---: | :---: |
| Gallery . 388 | Yes, but not wi.th TEMM. | This label will provide the right rate of Gallery |
| TEAM 1.158 | Yes, but not with Gallery. | This label will provide the right rate of team with Gallery |
| $\begin{aligned} & \text { Gallery } \cdot 298 \\ & \& \text { TEAM } 8 \mathrm{~B} \end{aligned}$ | This is the only existing combination product of TEAM and Gallery | This label is only good in fax northern climates. It can't be used in the south. There is not enough TEAM for southern crabgrass control. |
| $\begin{gathered} \text { Gallery } .38 \% \\ \text { \& TFAM } 1.15 \% \end{gathered}$ | This is the desired product label. | This one product label could be used anywhere in the country and would provide both products in the right ratio's for ally turf area in the country. |

Testimony From Andy Rines
Emerald Green LawnCare
Athens Georgia


1155 15Th Street, N. W.
SUTEE 710
WASHINGTON, D.C. 20005
Statement of
202-293-8830
FAX: 202-872-8543

Harold Igdaloff<br>Sungro Chemicals, Inc.<br>Los Angeles, CA

## Regarding <br> EPA Regulations on Small Business

Before the<br>House Small Business Committee

March 7, 1996

Madame Chairman and Members of the Committee:

Thank you for the opportunity to share our views regarding the need for, and the progress of efforts at, reducing the regulatory burden on small businesses, especially as it relates to the Environmental Protection Agency. I am Harold Igdaloff, President of Sungro Chemicals, Inc. in Los Angeles California. Sungro Chemicals is a formulator of pesticide products. We have over fifty products registered with the Environmental Protection Agency, so we have a great deal of experience with EPA regulations, and I would like to speak to many of those.

I also serve on the Board of Trustees for National Small Business United, which has long been a proponent of the need for a reduced regulatory burden on small businesses. Chairman Meyers, you have been particularly helpful in moving forward the Paperwork Reduction Act (now law) and a strengthened Regulatory Flexibility Act (soon to be law, we hope). But using these important tools will ultimately be up to the executive branch. This series of hearings, begun last July, provides a very useful forum for tracking the progress the regulators are making in lessening the regulatory burden.

National Small Business United (NSBU) represents over 65,000 small businesses in all fifty states. Our association works with elected and administrative officials in Washington to improve the economic climate for small business growth and expansion. We have always worked on a bipartisan and pro-active basis. In addition to individual small business owners, the membership of our association includes local, state, and regional small business associations across the country.

In addition to my affiliation with NSBU, I was very active in the 1995 White House Conference on Small Business. That conference made significant progress in recommending specific steps that could be taken by the federal government to clear away the unneeded regulatory underbrush.

The Small Business Regulatory Burden

Every year, NSBU conducts a survey of the small business community to assess its attitudes, concerns, and needs. We always ask business owners to identify the "most significant challenges" to their business' growth and survival. Some issues come and go from the top ranks, but "regulatory burdens" is consistently one of the top three challenges. There is a serious message here which must be addressed. Congress has struggled over the last year to cobble together a package to reform the regulatory process. Together, reform of the Regulatory Flexibility Act, the Paperwork Reduction Act, CBO analysis of private sector mandates, a regulatory budget, and appropriate risk assessment, can form a regulatory "safety net". The unfunded mandates bill is now law, and so is the Paperwork Reduction Act. By all signs the strengthening of the Regulatory Flexibility Act will be next on that list. This is significant progress, but we should also continue to press for the remaining elements of a regulatory reform package.

By their very nature, unnecessary federal regulation and paperwork burdens discriminate against small businesses. Without large staffs of accountants, benefits coordinators, attorneys, or personnel administrators, small businesses are often at a loss to implement or even keep up with the overwhelming paperwork demands of the federal government. Big corporations have already built these staffs into their operations and can often absorb a new requirement that could be very costly and expensive for a small business owner.

What Congress was finally able to understand--at least temporanily-when it passed the 1980 Paperwork Reduction and Regulatory Flexibility Acts, was that large and small businesses operate in fundamentally different ways; that federal regulations which may in isolation seem perfectly reasonable, especially for a larger firm, may be completely unworkable for a small company. Many small business owners deal with federal requirements personally (when they are even aware of them), and this represents time that cannot be spent on marketing, servicing customers, or making a better product. In other words, this time is incredibly valuable, and small business owners would simply like to ask that the information and paperwork they must produce be deemed truly necessary before they are forced to deal with it.

Most federal officials who develop and promulgate regulations are largely unaware of the many activities and requirements of their fellow agencies. Information could be combined, and redundancies could be eliminated. In order to accomplish this goal, however, it is absolutely necessary that there be a centralized authority to examine the overall regulatory scheme of the federal government.

## The Environmental Protection Agency

Of course, our purpose here today is to specifically discuss the Environmental Protection Agency and that agency's efforts to work more cooperatively and sensibly with the regulated community. Since the "reinventing government" initiatives began, I must report that my business has seen areas of considerable improvement, most notably in terms of procedure simplification, policy flexibility, and personnel attitudes. The programs that have been instituted for the sharing of data
with California and other states, the memorandum of understanding with other departments, and the revisions in procedures to allow changes to be made by notification, rather than review, will certainly reduce both the work load and the regulatory delays we face. We congratulate the EPA for making this progress. Nevertheless, much still remains to be done.

On March 4 of 1995, President Clinton issued a Directive to Department and Agency heads, calling for a complete regulatory review. We think that the President hit the major points in this Order. :'ut will the memorandum ultimately be lost in the regulatory bog, as have so many similar efforts? In the case of the Environmental Protection Agency, there has been a great deal of public attention to weeding out unnecessary regulations. However, we mostly hear the results in terms of how many pages of rules have been expunged or what percent of regulations have been affected. We would prefer to discuss statistics dealing with the lowering of private sector costs and employee time away from commercial affairs, not with CFR pages.

Let me take some time to give some examples from my own business, and relate them to specific recommendations that came out of the White House Conference on Small Business (WHCSB).

## Simplified Language

WHCSB Recommendation \#188 says that Congress should "require all agencies to simplify language and forms required for use by small business." But why must such simplification be required by Congress; cannot the agencies take action themselves? For example, I recently received a draft of a proposed pesticide regulation (1) relating to "Toxicologically Significant Levels of Pesticide Active Ingredients." It took several thorough readings of the entire proposal (13 pages) to even comprehend whether and how it applied to our business, and its cross-
referencing of five other regulations and laws did not help. Simply stating up-front the following would have helped tremendously: "This notice provides a table that establishes the maximum amounts of foreign active ingredients that can be incorporated into a product. Where repackaging is done, both the supplier and repackager are responsible for not exceeding those levels." We would have known immediately the implications of the proposal. Separating the factors relating to practical application of rules from their technical discussion would improve compliance. Also, each document should be self-contained in its instruction.

## Paperwork Reduction

WHCSB Recommendation \#188 goes on to state that each agency should have an ongoing review of regulations directed toward a goal of "reducing its total paperwork burden by at least five percent each year for the next five years." But our company has, for at least the last 15 years submitted a report to the EPA regarding our pesticide sales for each individual product (2). Each year, the same physical data has to be resubmitted with the only new data being amount of production, total sales, and where sold. The USEPA format has three products per page and requires a report of as many as $18-\mathrm{to}-20$ pages for the 50 products we have registered--plus those we formulate for others. On the other hand, the State of California uses a columnar layout for submission of similar data, with products pre-printed on the form. Redundant and/or previously supplied information is eliminated, and the form is kept to three pages. Stepping back to review their requirements would almost certainly lead EPA to a similar form. Such paperwork reduction and simplification will reduce both public and private sector costs.

## Permitting and Registrations

The area of registrations can often be one of the most frustrating for small business owners, since we must depend on the accountability and timeliness of others, and these decisions directly affect our livelihoods. Products are first registered with USEPA, and then with each state where sold. As an example, in 1994 we obtained a registration from USEPA for a powder to control fleas in carpets (3). But the California EPA turned us down. But under FIFRA, Congress required EPA to act within 90 days on "me-too" registrations, so we found a competitive product that had been approved by California and applier' for a "me-too" registration from USEPA to enter this market. That was in November, 1994, and we have yet to receive a permit. When we last spoke to the Product Manager at the EPA, he was very sympathetic and reported that he was working nights and weekends to make-up for staffing problems, and we are expecting approval in the next two weeks. With the requirement for state approval, we will not be able to market the product in 1996 and thus have lost two years of sales opportunities.

## Duplicative Regulations Across Agencies

WHCSB recommendation $188(d)$ stated that we should "eliminate duplicate regulations from multiple government agencies." That problem is certainly one which we experience. Chemicallybased products are regulated by multiple agencies at both the federal and state levels. A chemical used in a pesticide formulation requires USEPA approval after extensive testing for characteristics and toxicity prior to marketing. Confirmation of the same data is required by the various state regulators. The same chemical may or may not be regulated, if used for nonpesticide purposes. For these overlapping purposes, the same product can be regulated by the Department of Transportation, the Food and Drug Administration, the Department of Labor, the

Department of Agriculture, the Environmental Protection Agency (of course), and others. On top of that the corresponding agencies in each of the 50 states can have their say.

I would suggest that thought be given to the establishment of a national coordinating committee, which would develop a plan for centralized administration of chemically derived products. Thereby, staff persons specifically familiar with the properties of the chemical, could coordinate regulatory activity related to development, production, transportation, and utilization of such products. Potentially, these agencies would then be able to eliminate overlapping rules and conflicting decisions. The federal government should have sole sway over matters conceming interstate product safety.

## Enforcement

In the enforcement area, the EPA has made progress by creating new rules, like those of their colleagues at OSHA, that waive many fines for relatively insignificant first-time violations. More general reform needs to occur which would change the enforcement environment for a broader base of small businesses that want and intend to obey the law.

## A Progress Report Card

When Vice President Gore addressed the White House Conference on Small Business last year, he spoke about regulatory reform in terms of his reinventing government message. At the end of his prepared remarks, the Vice President went on to say that there should be a "report card" for the Administration, to measure how well the government is doing in removing and reforming
unreasonable regulations. Chairman Meyers, we were very happy to hear that the Vice President had picked-up on your idea of developing such a report card.

In the past, an easy way out for agencies has been to simply put on the chopping block regulations that are obviously silly, but are also not very significant in terms of the time and resources necessary to comply. We believe that any meaningful progress report on reducing the regulatory burden should quantify the time and financial resources that have been saved the private sector. It should also spell out which industries and sizes of businesses have been helped. To talk about reducing regulations in terms of pages or pounds of regulations is meaningless. Instead, we should talk about hours and dollars.

We should also put those saved hours and dollars into perspective. How significant a percentage are they in terms of the total regulatory burden imposed upon small business by the federal government or the particular agency? By looking at the picture in this complete way, we will know when a major difference has been made.

On the enforcement side, change is also in order. Over time, the key measure of success should be a decrease in the number of fines issued, combined with an increase in compliance rates. Such a change would clearly indicate an attitudinal change at the agencies and among their enforcement personnel. A further measure should be an analysis of the objective of the regulation: is it being met overall or is it even needed?

This Committee has been key to the ultimate passage of the new Paperwork Reduction Act. Among other major reforms, that Act called for a reduction in federally required paperwork of ten
percent. More recently, the Committee has been at the forefront of efforts to advance reform of the Regulatory Flexibility Act. This Committee should continue to play an important role on regulatory reform issues. Without the relentless Congressional spotight, this reform might never happen. We applaud the Small Business Committee for the activist role it has taken.

## Conclusion

I appreciate the opportunity to have been beiore you today in order to present our point of view. We thank the Committee for its critical interest and help on regulatory reform. This oversight hearing and others like it are very important.

## TESTIMONY

TO

THE U.S. HOUSE OF REPRESENTATIVES' COMMITTEE ON SMALL BUSINESS<br>March 7, 1996<br>by<br>Dennis Murphey<br>Director<br>Center for Environmental Education \& Training<br>Division of Continuing Education The University of Kansas

## EXECUTIVE SUMMARY

Small businesses are subject to a myriad of environmental regulations that continue to grow in volume, complexity, and cost. Well meaning efforts by the U.S. Environmental Protection Agency and state environmental agencies to reduce regulatory burdens and provide assistance to small businesses often do not produce the expected results. This happens, in part, because small businesses perceive themselves as enforcement prospects for the agencies, and they are reluctant to have any contacts with regulators.

The perception of EPA as enforcement-minded rather than assistance-minded will not change based upon public announcements. Concrete actions are needed to demonstrate fundamental shifts in agency policies. One step is to avoid the creation of new regulations that result in unreasonable burdens on the regulated community with little or no benefit to environmental quality. In addition, EPA must be willing to move beyond the previous reliance upon a command-and-control approach. We need to create a climate that is conducive to businesses and industries managing for environmental quality, not mere regulatory compliance.

Tride associations and universities can be significant bridges between EPA and small businesses as the agency attempts to reinvent itself as a compliance assistance organization. One example of this approach is the Kansas Small Business Environmental Assistance Program whereby the Kansas Department of Health and Environment utilizes a consortium of universities to provide technical and regulatory assistance to small businesses statewide. At leist two models of networking effectively with the regulated community via trade associations and universities also exist within EPA: the agency's Small Business Ombudsman's Office and the Pollution Prevention program.

With sufficient time and new approaches, positive working relationships can be developed with small businesses to assist them in protecting the environment while maintaining their viability.

Madam Chair, Congressman Lafalce, and members of the Small Business Committee:

My name is Dennis Murphey. I am the Director of the Center for Environmental Education and Training at the University of Kansas. The Center serves as the Small Business Assistance Program contractor for the State of Kansas pursuant to provisions of the federal Clean Air Act Amendments of 1990 and the 1993 amendments to the Kansas Air Quality Act. In that role the Center leads a consortium that includes our colleagues at the Pollution Prevention Institute at Kansas State University and the Center for Technology Application at Wichita State University. The consortium provides free technical and regulatory compliance assistance to small businesses across the state.

Services we provide to small businesses include:
-a quarterly newsletter, KANSAS AIRLines, that provides timely information regarding critical regulatory developments and case sudies of small business success stories, -seminars and workshops to teach small businesses various skills and strategies: -how to estimate their air emissions for purposes of determining whether they are subject to regulation under new EPA requirements, -how pollution prevention can be a viable approach to regulatory avoidance and regulatory compliance, and
-how to complete required regulatory forms and documents. -publishing and distributing fact sheets, pamphlets, and manuals that explain regulatory issues in simple, understandable language,
-site visits to assist small businesses in identifying areas for needed environmental improvements and suggesting cost effective solutions,
-operating a resource center to provide written materials on relevant regulatory requirements and technical assistance, -a toll-free hotline to answer any technical or regulatory questions, and -a computer bulletin board that provides direct, electronic access to informational materials.

The Kansas Small Business Environmental Assistance Program is funded by the Kansas Department of Health and Environment (KDHE) through emission fees assessed against major air emission sources. The program is unusual because it is operated external to the state environmental agency. Most states operate their small business assistance programs within their regulatory agencies, often within organizational units which have regulatory responsibilities. KDHE made the decision to contract with a consortium of state universities. This decision was based partially on the fact that the resources existed within the institutions to operate the program. However, a major consideration was KDHE's recognition that to be successful, the program needed to be conducted by an entiry that would be less intimidating to small businesses than a regulatory agency.

In addition to my current position as Director of the Center, I have also served as the director of environmental affairs for a national trade association representing small businesses (retail fertilizer dealers) and as the administrator of the hazardous waste management program for the State of Kansas. In all three positions I have observed the dreald, even fear, experienced by small business owners and operators regarding the U.S. Environmental Protection Agency and state environmental agencies.

To such businesses, it is not only the potential for administrative fines and penalties that produces such emotions. It is also the difficulty of understanding a nearly incomprehensible maze of regulatory requirements that continues to grow in volume,
complexity, and cost. It is a fear that the time, effort, and expense of complying with pollution control measures (plus the monitoring and recordkeeping requirements that are an integral part of environmental regulations) will be the final, crushing blow for a business that is already faced with a myriad of other regulatory requirements and is operating on a very thin profit margin.

In our Center's efforts to be a support system for small businesses regarding environmental affairs, one of the biggest challenges we face is establishing a degree of credibility with the small businesses we want to serve. Many of them would never contact EPA or a state environmental regulatory agency regarding an environmental issue or problem. Our experience has shown that small businesses are even reluctant to come forward to the universities for help. I have had telephone conversations with people who would not register to attend one of the Center's free seminars until they were assured that attendance would not result in them being visited by a regulatory agency inspector or being put on a "list" that might eventually target them for enforcement action. Others appear to be afraid to ask questions about environmental situations for fear that the answers will result in the need for expenditure of human and financial resources that are beyond their means.

In a 1993 survey of 506 small businesses in Kansas conducted by the Institute of Public Policy and Business Research at the University of Kansas, the four top barriers to achieving and maintaining compliance with environmental regulations were reported to be:
-the cost of compliance,
-the difficulty of keeping up with changes in the regulations,
-the difficulty in understanding the regulations, and
-the excessive amount of regulatory requirements.

Virtually all small businesses are faced with growing demands upon their time as they attempt to maintain their profitability. Even finding the time for them or their employees to attend a training seminar or workshop can be a significant burden upon already stretched human resources. Thus, another major challenge we face in the Small Business Environmental Assistance Program is how to deliver our services in a manner that is acceptable and usable to our audience. In the overused vemacular of the day, we must become "user friendly" if we hope to serve our small business customers.

I have used the term "small business" as though it were descriptive of a homogenous mixture of enterprises. Of course, nothing could be further from reality. Small businesses are a collection of approximately 6 million separate enterprises that employ over half of our nation's working people. They vary greatly in the types of activities in which they are engaged, the environmental impacts of their activities, the degree of technical sophistication they possess among their staff, the support systems they have available to them via trade associations, and many other key factors. This makes it critical for us to recognize that there is no panacea that will work in assisting small businesses with environmental issues and helping them achieve our society's environmental goals and expectations.

## Effectively raising the level of awareness and understanding of environmental issues

 among small businesses will not happen in short order. Nor will dispelling the fear they hold for environmental agencies. In large part, their primary perceptions of EPA and state agencies result from media reports that focus upon major enforcement actions and multimillion dollar liabilities. These perceptions of environmental agencies as enforcementminded rather than assistance-minded organizations will not change based upon public announcements regarding policy shifts that reduce regulatory burdens on small businesses. Such assentions have to be followed by concrete actions that demonstrate fundamental shifts in agency policies, not just tweaking the system around the edges. A 25-yeartradition of being the environmental enforcer can not be changed overnight into a workable environmental teacher role.


#### Abstract

One necessary step in this direction is to avoid the creation of new regulations that result in unreasonable burdens on the regulated community with little or no benefits to environmental quality. A specific case that illustrates this problem is the utilization of the "potential to emit" concept in the regulations developed pursuant to the 1990 Clean Air Act Amendments. As originally crafted by the agency, the proposed rules would have required businesses to estimate their potential emissions based upon 24 hours a day of operation, 365 days a year, operating at maximum capacity. This potential-to-emit then determined whether the businesses were subject to the extensive and expensive requirements of obtaining a Title V air permit.


Thus, even a small business that operated under substantially reduced conditions relative to this "worst case scenario" could have been subject to the full-blown permitting process developed for major air emission sources. The only relief was provided for facilities who limited their potential-to-emit via federally enforceable permits. This created a circumstance where the states were left to construct remedies (such as simplified permit processes at the state level that were incorporated into their State Implementation Plans, thereby becoming federally enforceable) to avoid subjecting many small businesses to unnecessary regulatory burdens.

Another small, but significant, example involves Clean Air Act regulations affecting dry cleaners. The degree of regulatory requirements becomes more extensive as the amount of perchloroethylene used in the business increases--a reasonable approach that encourages reduced usage of a potentially hazardous chemical. However, if a dry cleaner installs a new piece of equipment that will substantially reduce the amount of perchloroethylene
previously utilized, but the amount used in the initial loading of the new machine kicks him into a higher level of regulation, he is forever regulated at the higher level. Thus, he is "penalized" with more regulatory requirements despite taking the initiative to reduce his chemical usage.

Beyond avoiding the creation of counterproductive regulatory requirements, legislative bodies and regulatory agencies must be willing to move beyond the previous reliance upon a command and control approach. The movement at the state level to enact audit privilege statutes is one manifestation of such a change. Without debating the merits of specific provisions of various audit privilege statutes, I would assert that providing incentives for businesses to evaluate and assess their operations for regulatory compliance status and identification of potential environmental problems that should be resolved is a sound concept. Providing substantial relief from the threat of enforcement is a powerful motivator for regulated businesses. However, EPA's published intent to increase federal oversight of delegated state regulatory programs in states with audit privilege statutes does little to persuade the business community that the agency has changed its mind-set from a primary reliance on enforcement.

At a time when much discussion regarding environmental management is directed at risk assessment, risk-based decision making, and risk management, there is a critical need for industry, regulatory agencies, and environmental groups to accept the "risk" of working together in new ways to achieve environmental goals. We need to create a climate that is conducive to businesses and industries managing for environmental quality, not mere regulatory compliance. EPA should risk giving the states more flexibility and latitude in operating their environmental programs. EPA and the states should risk providing opportunities for business and industry to utilize innovative approaches and voluntary measures to mitigate the potential environmental impacts of their operations. Business and
industry should risk taking a critical look at their activities and making changes in response to observed problems (even if that means going beyond regulatory compliance).

Environmental groups should risk working cooperatively with business and industry rather than adversarily.

We have seen the beginnings of this transition. The Great Printers Project in the Great Lakes area included the Printing Industry of America, the U.S. EPA, the Environmental Defense Fund, the Council of Great Lakes Governors, and the state regulatory agencies, in an attempt to pursue environmental goals via the aggressive, voluntary implementation of pollution prevention measures within the printing industry. From the feedback I've heard, it appears to be a success story worthy of replication.

In some cases, such as the Great Lakes project, it is necessary for EPA to be a direct participant. However, in other cases where technical and regulatory assistance is the desired outcome, EPA must understand that it is difficult to wear the enforcer's hat and the teacher's hat interchangeably. Therefore, at least in the short term, EPA should consider using intermediaries as buffers between themselves and small businesses. Organizations such as trade associations and universities can, and should be, integral to EPA's attempts to reinvent itself as a compliance assistance organization. These organizations can be a conduit in the short term for technical assistance to flow from the agency to the small business community. Small businesses are more likely to perceive themselves as potential clients or customers of universities and trade associations, whereas they perceive themselves as potential enforcement prospects by the agency.

Two models of such cooperation exist within the agency. EPA's Small Business
Ombudsman has a significant track record of cooperating with associations, business groups, and universities to network into the small business community. The

Ombudsman's Office could be allocated additional resources to expand its ability to interact with outside organizations who can and do reach small businesses. For many years this office has accomplished much with little, even at a time when an enforcement mentality was more prevalent within the agency.

## Another EPA success story is its Pollution Prevention program. Working in concert with

 state agencies and universities across the country, the agency has utilized training and technology transfer as the primary means to promote voluntary pollution prevention efforts.This partnership has made substantial progress in support of a national transition integrating pollution prevention into all environmental management programs. public and private. Business and industry (large and small) and local units of govemment are adopting pollution prevention as the strategy of choice to minimize their environmental liability and costs.

I applaud EPA's recent creation of compliance assistance centers for several types of industries. However, the decision to staff and operate the centers out of an agency office whose historic mission was enforcement sends a mixed message to the regulated community. For many years, one of EPA's self-measures of success was the number of agency enforcement actions and the penalties assessed against environmental violators. This was a mind-set that raised some concerns. As a former environmental manager in the private sector and a former administrator of state environmental regulatory programs, viewing enforcement as a general indicator of agency success seems backward. Voluntary compliance with environmental regulations achieved by means of education and other technical assistance seems more like success to me. Lalways saw the need for enforcement as an indicator of failure in the system. The failure may have resulted from a lack of understanding, a lack of resources, or a lack of will by the regulated community, but it was symptomatic of a problem.

While enforcement will always be a necessary activity of EPA, the agency's overall success should be indicated by its ability to protect environmental quality and achieve broad environmental regulatory compliance with a lesser dependence upon enforcement as the primary means. Only after a long-term cultural change within the agency is demonstrated to the private sector by concrete actions will EPA be effective in holding its hand out directly to the regulated community as a trustworthy source of assistance.

Until the confidence of the small business community is earned, merely building an assistance program and hoping they will come is a flawed approach. Trade associations and universities can be significant bridges between EPA and small businesses. With sufficient time and new approaches, we can develop positive relationships for working with small businesses to protect the environment while maintaining their viability.

I thank you for the opportunity to appear at today's hearing to discuss ways to assist small businesses with environmental issues.


Statement of
Sal Risalvato
Owner
Riverdale Texaco
Riverdale, New Jersey
on behalf of the
National Federation of Independent Business (NFIB)

| Subject: | EPA's Progress in Reducing Unnecessary Regulatory and Paperwork Burdens <br> Upon Small Business |
| :--- | :--- |
| Before: | House Committee on Small Business |
| Date: | March 7,1996 |

600 Maryland Ave. S.W., Suite 700 • Washington, DC 20024 - 202-554-9000 - Fax 202-554-04\%
The Guardian of Small Business for Fifty Years

Good aftemoon. I am Sal Risalvato, owner of Riverdale Texaco, a gasoline service station in Morris County, New Jersey. I have been in the service station business since 1978 and have been affected by many environmental regulations. These regulations have touched every aspect of my business from the sale of petroleum products to the service we provide in our repair shop.

Thank you for allowing me the opportunity to speak with you about the unnecessary regulatory burden upon small business. I would like to accomplish two things. First. I would like to tell you about the most costly environmental regulations imposed on me and the negative effects they have had. Second, I would like to describe to you a positive scenario that would likely exist if these regulations had not been imposed upon me. I would also like to point out to you how a decision that seems intelligent at any point in time, can be rendered a stupid one, by govemment regulatory curve balls, that can not be detected with anything less than a crystal ball.

In 1986 the service station that I had been leasing for the previous eight years was lost to the real estate boom of the $80^{\prime}$ 's. My lease was up with the landlord and the property was too valuable to remain as a service station and the owner evicted me and built a group of retail stores. I lost my business. I spent the next year along with my brother Vinny, who had become my partner, looking for a suitable and affordable location. Of course there wasn't any way I was going to lease again. After looking at over 100 locations in northern New Jersey, my brother and I finally found a location that met our requirements. Due to rising environmental concerns, one of our most stringent requirements was that the integrity of the underground storage tanks at any location we investigated must not be compromised. Making what seemed to be an intelligent decision, we purchased a location that had new underground tanks installed one year prior to our purchase. We paid a premium price for the location because it had new tanks. Our crystal ball was not working correctly when we made that decision.

Within five years, unexpected govermment regulation altering the standards and requirements for underground storage tanks, picked my pocket for $\$ 95,000$. Please keep in mind that after losing my business in 1986. I was left with virtually nothing. At the time I lost my business I still had six months lefi to pay on the note that I owed the bank when I purchased the business nine years earlier. When I purchased the second location in 1987, I had to borrow from family members and banks using my dad's home as collateral. Finding $\$ 95,000$ in order to meet new EPA regulations was not going to be easy. Fortunately, between borrowing more money from family members, and funds advanced by Texaco in exchange for a supply contract. I obtained the money to meet the new government regulations. This really amounted to extortion, since I would not have been allowed to remain in business had I not met with these requirements. In fact many service stations have been forced to close or have stopped selling gasoline simply because they could not find the capital necessary to meet the EPA requirements.

One would think that the EPA had inflicted enough pain and torture on my business. Not so. The new regulatory agenda is now attempting to blackmail me, my Governor, the motorists of my State, and my fellow service station owners of New Jersey.

The State of New Jersey probably has the best motor vehicle inspection system in the nation. Presently motorists must have their cars inspected on an annual basis by either a State Inspection facility or a licensed private repair facility such as mine. Vehicles are inspected for safety items such as brakes, lights, tires, and mirrors. Inspection of the vehicle emissions system are also conducted. Presently, New Jersey is faced with losing its inspection system because the regulators at the EPA are demanding that a tougher emissions test be performed on all vehicles.

What does this mean? It means that in order to meet EPA requirements, the State of New Jersey will have to invest millions in new equipment at the State inspection facilities. It also means that if private facilities are to be permitted to continue performing inspections, they will have to invest in new equipment valued at $\$ 40,000$ to $\$ 100,000$. This decision making process has paralyzed the decision making of the owners of private repair facilities. Once again, a faulty crystal ball that tries to unravel the logic of the bureaucrats and regulators could prove costly.

One concem of the State is the length of time it will take to perform the new type of inspection. So far, estimates of the time needed to fulfill EPA requirements, will cause far more lengthy lines at State run facilities. Also, due to the amount of time required to perform the emissions tests, the safety inspection that is class of the nation will have to be eliminated.

Since there will obviously be a large number of private inspection facilities that will be unable to meet the capital requirements needed to purchase the new mandated equipment, more motorists will be forced to visit the State facilities, thereby lengthening the already long lines. The net result is this. Motorists will be far more inconvenienced than they already are. They will be expected to pay more for an inspection, including inspections at the State lanes which are currently free. Their time and money will be rewarded with less value since now there will not be a safety inspection. Small businesses such as mine will be forced to either give up an important profit center, or make purchases of equipment that are virtually unaffordable. I am running out of family members that have any capital, and those family members that do have it are running out of it, always loaning it to me.

Aside from the debate that is held trying to decide if the public interest is being served by any of these regulations, there is an awful lot of good that can be had without them. Let's assume that the previous regulations regarding underground storage tanks were less stringent. Let's also assume that the current threat of EPA regulations governing motor vehicle inspections are eliminated. A quick calculation gives my business between $\$ 135,000$ and $\$ 195,000$ to expand. Make no mistake about it, when we purchased this location, our dream was to add on three or four service bays and a sales room, errployee room, sufficient storage space, and sufficient office space. Presently, in order to utilize space inside the main building, our offices are housed in an office trailer in the side of my building. This hes caused great stress with the municipal fathers, and twice in seven years we needed to receive temporary variances from the local Board of Adjustment in order to keep our office. Each time we appease the Board by promising to expand the existing building. We explain to them that if not for costly government regulation, we would already have had the expansion complete. Our most recent appearance before the Board was November of 1994. We received temporary and final approval for another two years. I did not have the courage to tell them the EPA was holding another gun to my head. I pray a lot.

If our physical facility was expanded to the size we wish, there would be employment for at least 3 more full time technicians, and 3 part time assistants. There would also be a position for at least I full time office person.

Please do not think that I have little regard for the environment. That would be false. I drink the same water and breathe same air as everyone else. I have no desire to see the quality of either jeopardized. I do believe however, that the downside of burdensome regulation must be properly evaluated relative to any benefits that may be derived fromit. I am convinced that in my case the bad effect has outweighed the benefits.

## THE WHITE HOUSE <br> WASMINOTON

March 4, 1995

# © MEMMORANDUM FCR READS OF DEPARTMEMTS AND ACEENCIES 

-SUBJECT: Reguletory Reinvageion Inieiative


#### Abstract

Lagt week, I announced thin Adminiatration'mplans for further reform of the Federal regulacory aymen. This in a oentral part of reinventing our Government. Ali Amerionn want the benefite of effective fegulation: clean water, safe workplacos, wholesome food, sound financinl institutions. But, too ofter the riles are drafted with auch derailed liars of don and don'ta that the ob: cetives they aeak to achieve are undermined. Clear goals and cioperation woulc work better. Too ofron, buainemen. especially ?mali ones, face a profugion of overlapping and somerimes conflicting rules.


We have already made real progrene in reforming regulation. This memorandum will build on the ragulatory philomophy act ferth in Esecutive Order No. 12866 of Beptember $30,1993$. "Regularogy' Planning and Reviow," which in premised on the recognition of the legitimate role of govermment to govern, but to do 10 is a focused, tailored, and seneible way.

5:. She year and a half sinco that order wae signed, we have opened the rulemaking procene to the public, wh heve increased cooperaticn and coordination among the Federal agencien, and we have $\quad$ ef good procesmea produce good decinions.

However, sor all agancies have taken the atope necaueary to amplement regulacory reform. To reaffirm and inplement the p:inciplos of Execurive order NO. 12866, regulatory raform mide be a rop prioriey.

Accordingly, I direct you to focus on the following four atepe, which are an integral part of our ongoing Reguletory Reform エryこiatio.

## EIRST: CTH ORSOLETE RECTHATIONS

I direct you to corduct a page-by-page seview of all of your agency regulationn now in force and eliminate or revise chome that are outdaced or otherwiee in need of reform. Your review hould include caraful considaration of at leage the followigg 180ues:

## - Is this regulation absolece? <br> - Could ita intended goal be achieved in more efficiene, 2ene int <br> - Jre there bettur private nector alternativa日, auch an market machanisme, that can bettar achievo the public good enviaioned by the regulation? <br> - Could privete burineas, netting ita own srandards and being subject to public eccountability, do the job ae well? <br> - Could the States or local goverrmante do the job, making Federal reguiatior unaceesaary?

Thin review should build on the work already being done by your agencien under aection 5 of Executive Order No. 12866.

Your regulatory raview rank force nould be beaded by one of your eppointees who ohould be giver your Eull apport and should, to the extant practicable, be freed of other dutios.

I Eurcher direct you to deliver to me by June 1 a liet of regulatione that you plan to ilminate or uodify with a copy of the report aent to gally Katzen, Adminiatrator of the office of Information and Regulatory Affaira (OIRA). The lint abould d:atimguiah between tho ragulations that cas be modified or eiiminaced adminiatratively and thone that require legislative au=hority for modificetion or limiration.

SEROND: REWARD RESUTTS, NOT RED TAPE
I direct you to change the wey you maanure the performance of boch your agency and your frontline regulacora oo an to focu on resules, not proceas and puniahment. For example, Occuparionnl Safery and Health Adminiatration (OSHA) inapectora ahouid not be evaluated by the number of eieatione they wiste. nor ahould official. of the corsumar product safety commanion be judjed by the number of boxes of conmumer goode that are detained in ohipment. Thi ohange in meanurament hhould involve two-gtap proces:.

Firat, you thould identify appropriate pariosmance maneures and prepere a draft in elear, underatandable term, of the rosuler you are mecking co nchieve through your regulatory program. The drafe should be cisculatad to frontline regulacora for review and comment. This is the samo work needed to meet the requiraments. of the Government Performance and Reaulea Act of 1993.
gecond, you mould evaluate and roward employean besed on the realization of thoe unenures/gonla.

By no later than Juse 1. I direet you to (a) ilmynate all 1ncernal pereonnel parformanae meebures baned on procens (number of visita made, ete.) and punishment (number of violetions found, amount of finea levied, ecc.), and (b) provida to the National Performance Review (NPR) ataff a catalogue of the changen that you are making in eximeing internal periommance evaluarione to reward employoer. You bhould aleo provide material describing ahift. in remouree ellocation from anforcement to compliance.

DHIRD: GET OTT OF MAGHTNGTON AND CREATE GRASGROOTS PARTNERSHTPS
I direct you to promptly convene groupa conainting of frontlino reguiators and the peopl affected by their regulations. These converastions thould rake place arourd the country - at our cleanup aiten, our factories, our ports.

I further direct you to oubmit a schedule of your plansed moetinge to the NPR ateff by March 30 and work with NPR in following through on chowe meetinge.

EQURTH: NEGOTTATE DON'T DTCNANE
It de time to.move from a procesa where lewyers and bureaucrate write volumes of regulations to one where people work in partnership to iseue menaible regulationm that impome the least burden without gecrificing rational and neceacery protectione. In Beptember 1993. I anked each of you to identify at leatt one mule that could be conducted through negotiaced rulemaking for to explain why uleh could not be done) in order to promore consenauel rulemaking an opponed to the more tradicional sulemaking that has domirated the regulatory arene.

E now direct you to expend ubseanelally your efforte to promote coneangunl rulemaking. To Ehis end, you ahould mumit so OIRA, no lacer tha mazch 30 , a list of upcoming rulomaking that dan be converted into negoriated fulemaringe. I bave direceed gally Katzen to reviev your jieta with view toward making cleat to the regnlated community that we wart to work together productivaly on evar eha most difficult eubjecta.

To facilitate our ability to learn from those affected by regulation, I will amend Executive Order No. 12838 (which requires agencies to reduce the number of advisory committee that they lune and to 11 mit the future use of auth commeteel to allow for advisory committee established for negotiated ェulemakinge.

I also intend to take addtciannl steps to increase our ability to learn from those affected by regulation. Wail many law and mules that limit the ability of zagularore to talk with those being regulated ware imposed to curb abuse, they now often nerve as brier to manaingiul comanalcation between the regulators and the regulated. To addrase thin problem, and to promote consensus building and a lesa adversarial envirommart, I direct you to review all of your administrative ex paste rules and oliminate any that restrict commancacion prior to the publicneton of a proposed rule $-=$ other than rulea requiring the simple disclosure of the time, place, purpose. and participant m of meeting (an In Executive Order No. 12866). We will also begin drafting legislation that will carve out exemption to the Federal Advisory Committee Act to promote a better understanding of the ismuen, such an exemptions for meeting with State/local/tribal governments and with scientific or technical advisors.

I also ask you to think about other way to promote better communication, conmenaun building, and a lena adversarial envizamment. Please mend your ideas to the office of tho Vice President.

As I maid on Tuesday, February 21, 1995, you are to make regulatory reform a top priority. Good government demands it and your tull cooperation is crucial.

## Research Papers

RESPONSE OF KANSAS' SMALL BUSINESSES
TO ENVIRONMENTAL REGULATION: IMPLICATIONS FOR TRAINING

## Institute for Public Policy and Business Research

## The University of Kansas



# INSTITUTE FOR PUBLIC POLICY AND BUSINESS RESEARCH THE UNIVERSITY OF KANSAS 

## RESPONSE OF KANSAS' SMALL BUSINESSES TO ENVIRONMENTAL REGULATION: IMPLICATIONS FOR TRAINING

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A copy of this report may be obtained from the Institute for Public Policy and Business Research, 607 Blake Hall, University of Kansas, Lawrence, Kansas 66045.

## INTRODUCTION

Current U.S. environmental law is based upon the National Environmental Policy Act of 1969 (NEPA, 42 U.S.C.A. Sec 4321-4370). NEPA and subsequent environmental policies and regulations significantly affect the economy and individual businesses. Policies and regulations create markets for goods and services needed by firms seeking to comply with regulations. While compliance can result in savings by use of more efficient processes, businesses can also incur costs as they seek to comply with environmental regulations. As the EPA's regulatory efforts spread, small businesses increasingly feel the impact. The large variety of local, state, and federal laws must be dealt with simultaneously, along with the inconsistency between local, state, and federal regulations. In some cases, small businesses just do not have the necessary capacity or funding to comply with existing regulations or to adjust to new regulations and policies.

In general, the most researched and publicized issues stemming from environmental regulations and policies are predominantly "after-the-fact" issues. For businesses, environmental issues can seem very large in scope, costly, and never ending. An individual company may face a large range of environmental issues: solid waste, waste water, air pollution, pesticides, PCB's, radon, etc. The question becomes one of how to cope with the entire range of environmental requirements in a situation that never stabilizes. New rules and regulations beget even newer rules and regulations, so keeping up becomes difficult at best (Blue, Meneguzzi, \& Cole, 1992). Unfortunately, keeping up is not the only problem. As environmental regulations and policies are modified, they will probably continue to increase in scope and complexity and become even more stringent (Ofori, 1992).

Once a firm has identified the regulations that apply, it must then determine how to comply. Compliance becomes complicated and expensive. Firms often face escalating excise taxes imposed because of old machinery (Ziffer, 1992). Firms must consider replacing old facilities and machinery not built to meet current regulations or standards. Intermediary solutions may require expensive retrofitting (Caney, 1992). Disposing of waste is a growing problem as landfills reach capacity, landfill costs increase, and regulations make siting a new landfill more difficult (Carlile, 1992). While compliance often costs, small businesses may find it more difficult to pass the cost of compliance on to their customers because passing on their costs may make them less competitive (McKee, 1992).

In the midst of trying to be informed of and comply with environmental regulations, firms also face legal issues stemming from environmental regulations and policies. Environmental laws, regulations, policies, enforcement procedures, and interpretations of compliance are set by
all three levels of government and may not be in agreement (Forbes, 1992; Biles, 1992). Thus, firms face liability issues in the form of common law and specific legislation, regulations, bylaws, and policies (Blue et al., 1992; Darcey, 1992; Kiser, 1992).

Serious legal problems confront firms and individual managers. Infractions can result in expensive fines as well as criminal charges. Courts have ruled that a manager can be guilty even if the manager does not know about the regulation or is unaware that corporate behavior violates a "nuanced" interpretation (Spencer, 1992; Riesel \& Jacobson, 1992). Thus the traditional lines between civil and criminal law are blurred and the result is increased anxiety, uncertainty, and commercial paralysis. The focus is actually moving away from the environmental issues and moving toward the legal and political issues (O'Leary, 1991). This has an especially significant impact because no company is ever completely in compliance due to the large number of environmental laws, their complexity, and the constant changes in regulations (Personal communication; Spencer, 1992). Because environmental regulations and policies change frequently, many firms try to "over-comply" (Filipczak, 1992).

Firms and individual managers face a real and substantial challenge in identifying their potential obligation and liability (Rittenberg, Haine, \& Weygandt, 1992). One way to address this problem is to use internal environmental audits to evaluate compliance obligation, firm and individual manager exposure and liability, and compliance status (Riesel \& Jacobson, 1992). An environmental audit is a primary tool for companies questioning their level of compliance. The audit process itself can be complicated and require the cooperation of a wide variety of people but software does exist to help guide and document the process. The audit process may point out unsafe work practices, discover potential contamination sites, reveal the potential for accidental spills, present altematives to toxic chemicals in the work place, and report other aspects of business operations that might be in violation of legal requirements.

To summarize, there is no clearly defined, comprehensive, and integrated federal policy, so states and localities can develop their environmental regulations according to their own needs and interpretations. Thus, the regulation umbrella is growing and so are costs. Compliance is expensive, and the failure to comply carries with it heavy punishment.

The literature is surprisingly silent on how businesses find out about existing regulations, new regulations, or changes in regulations. It does not identify information needs, where companies get environmental regulation and compliance information, and where companies go for technical assistance with implementation/compliance problems. Does this mean these are not current business problems? Large businesses have the capacity to support a staff of environmental specialists or to access specialists or consultants, but most small businesses do not and cannot (Alston \& Stoss, 1992).

Environmental information is available in general interest databases, but these databases may not meet the specific needs of small businesses. There is a real need for new information delivery systems which provide effective and efficient access to information. Although there are many sources, environmental information is often organized or available by regulation area or
type of pollutant (e.g., air, asbestos, water, PCB's, radon, wetlands, etc.). Thus, for most businesses with multiple areas of regulation, there is no single source of information. Even public agencies such as the EPA or state agencies may not have one source that can tell a business which rules apply. Enhancements and modifications in services and technologies continue to change how environmental information is produced, identified, and accessed, making it difficult to determine which information source and what specific information is applicable and relevant. Keeping up with current developments requires a tremendous amount of time and effort because the environmental issues encompass many disciplines and this multi-disciplinary characteristic exacerbates the information search process. Effective information exchange is also hampered by the history of conflict between the business community and the environmental interest groups.

Information sources can be grouped into three categories: general interest or broad base, technical or scientific, and business related. The factors determining access to different sources of information are need, coverage, cost, and format. The most common environmental information sources are periodical literature (e.g. newspapers, magazines, news summaries, and newsletters), bibliographic sources, books, databases, consulting firms, and state and federal agencies. Periodical literature is timely, specifically identifies the various current issues the public feels are important, and gives a reasonable reading of the public's perceptions and feelings about the issues. This may be especially useful given that business issues are frequendly driven by public opinion. The information contained in most of the periodical literature is often not detailed and thus is generally more useful to the public than to the business community. Although environmental information is widely scattered throughout these sources and the information spans a wide range of topics, it is often difficult to sort out and detemine what is relevant or applicable. Bibliographic files are useful because they provide a bridge between popular or general interest literature and the more scientific, technical writings. Newsletters are widely read by management for environmental information. The Bureau of National Affairs (BNA) has a long-standing reputation for producing materials which offer terse, highly researched, and objective descriptions. They often provide names and addresses of organizations and persons mentioned in the articles.

Several books may be useful sources of information for businesses. The Kirkothmer Encyclopedia of Chemical Technology provides comprehensive technical treatment of the environment and includes information on chemical contamination, hazardous waste management, and chemistry information resources. Legislative histories of various laws are also reviewed. They are comprehensive and provide insight into interpretations, purpose, and significance of a given law. A preamble presents the current intent of an administrative agency regulation, and preambles may be found in the Federal Register. The Code of Federal Regulations (CFR) is a complete source of all federal regulations. Finally, The Government Institutes' Environmental Law Handbook presents a good overview of environmental law.

Databases seem to be the fastest growing information medium. Anything found in hard copy is probably also available on some database or bulletin board, although the reverse may not be true. There are databases that cover environmental topics. For example, Greenwire is a new
service that covers environmental news. Electronic bulletin boards offer both general and technical help and are especially useful for answering questions like "Where do I ..?", "How do I ...?", and "Which software package is the best for ..?" A series of articles provides an excellent summary of available databases and the information they contain (Alston \& Stoss, 1992). Despite the flurry of activity around tracking and gathering environmental information, companies still are not very competent at it. One factor contributing to limited use of databases is how information is indexed. Training and perseverance are needed to access specific information.

To summarize, the review of the literature revealed that, for small businesses, being informed about environmental regulations is a difficult task because of the diversity of regulaions, the lack of coordination between different levels of government, by frequent changes in regulations, and the lack of a single source of information.

So what are small businesses in Kansas doing to cope with and respond to environmental regulations? The purpose of this study was to:

- Determine how Kansas firms are organized to deal with environmental regulation and compliance;
- Determine where Kansas firms currently obtain information regarding environmental regulations;
- Determine what issues and barriers are faced by Kansas firms in obtaining information regarding current and future environmental regulations;
- Determine and prioritize unmet needs for information and training related to environmental regulation and compliance.


## PROCEDURES

Although small businesses are struggling with increasing environmental compliance costs as regulation spreads to smaller companies, little information regarding what information and training small businesses need exists. To determine what Kansas' small businesses know about environmental regulations and compliance, where they obtain their information, what additional information they need, and what training is needed, a telephone survey was conducted. The survey was developed with the Kansas Department of Health and Environment (KDHE) and the University of Kansas Center for Environmental Education and Training staff knowledgeable in environmental regulations. It was then field tested with a small number of businesses.

After the survey instrument was developed, a random sample was drawn from a list of Kansas businesses which employed 10 to 500 workers. The sample was drawn from eight categories or industrial sectors (Table 1). These categories were chosen because of the
importance of environmental regulation to those industry sectors. Each firm was contacted by telephone to determine who was responsible for environmental regulation/compliance. The survey was either completed with that person at that time or an appointment was made for completing it at a later time. Surveys were completed by 506 businesses, with 414 declining to participate, yielding a response ratio of $0.55 .{ }^{\text {' }}$

Table 1 SURVEY SAMPLE

|  | No. Firms in <br> Data Base | Percent | Number <br> Surveyed | Percent <br> Surveyed | Z * |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Sector: | 344 | 6.9 | 32 | 6.3 | 0.14 |
| Agriculture | 223 | 4.5 | 22 | 4.3 | 0.05 |
| Mining | 45 | .9 | 3 | .6 | 0.07 |
| Construction | 1388 | 27.8 | 154 | 30.4 | -0.07 |
| Manufacturing | 446 | 8.9 | 43 | 8.5 | 0.09 |
| Transportation | 151 | 3.0 | 21 | 4.2 | -0.27 |
| Wholesale | 498 | 10.0 | 59 | 11.7 | -0.41 |
| Retail | 1900 | 38.0 | 169 | 33.4 | 1.27 |
| Services |  |  | 3 | .6 | -0.13 |
| Not known |  | 100.0 | 506 | 100.0 |  |
|  |  |  |  |  |  |
| Total |  |  |  |  |  |

* No significant differences were found.

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey

[^0]
## FINDINGS

## Impact of Environmental Regulations

Ninety percent of those surveyed report that their products, activities, or processes are subject to federal, state, or local environmental regulations. Table 2 shows that a majority of firms are affected by hazardous waste, solid waste, spills/release, and water regulations. ${ }^{2}$ Eightythree percent said regulation issues were moderately to extremely important to their firm (Table 3). Ninety-seven percent have some degree of difficulty understanding the environmental regulations that apply to their firm. These results indicate that most firms are affected by environmental regulations, are concerned about regulations, and are having difficulty understanding them. Clearly, small firms in Kansas are feeling the impact of environmental regulations.

Table 2 TYPE OF ENVIRONMENTAL REGULATION AFFECTING FIRMS

| Regulation | Percentage of Firms |
| :---: | :---: |
| Hazardous waste | 75\% |
| Solid waste | 62\% |
| Spills/release | 58\% |
| Water | 55\% |
| Recycling/waste management | 49\% |
| SARA Title III | 46\% |
| Air | 45\% |
| Ozone depleting substances | 30\% |
| Asbestos, lead, PCB, other toxic substances | 28\% |
| Underground storage tank | 25\% |
| Pesticide | 24\% |

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey

[^1]
## Table 3 <br> IMPORTANCE OF ENVIRONMENTAL REGULATIONS

| Importance of <br> environmental issues: | Percentage <br> of Firms |
| :--- | ---: |
| Extremely important | $50 \%$ |
| Moderately important | $33 \%$ |
| Slightly important | $14 \%$ |
| Not important | $3 \%$ |

Source: Instimute for Public Policy and Business Research, University of Kansas, 1993 Survey

## How Firms Are Organized to Respond

Within firms, responsibility for environmental regulation compliance is often organized by regulatory program (air, water, hazardous waste, etc.), by functional area (regulation, legal, financial, compliance, training), or by some other method. Thirty-eight percent of firms surveyed are organized by regulatory program (air, water, hazardous waste, etc.), and 41 percent are organized by functional area (regulation, legal, financial, compliance, training). The remaining 21 percent are organized by some other method. ${ }^{3}$ In 23 percent of the firms, the owner, president, or vice president of the firm was the person identified as most knowledgeable about environmental regulations, 41 percent identified an administrative person (manager, director, coordinator, administrative assistant, etc.), 5 percent identified a safety, regulatory, or environmental officer/department, and 1 percent identified an engineer. The remaining companies idenified others such as an attomey, lab technician, staff counselor, bookkeeper, etc. Thus, the majority of small businesses must rely upon someone who has multiple duties to keep the firm informed about and in compliance with environmental regulations.

## Firms Access to Information

Only half of the firms reported conducting an internal environmental audit and 91 percent of those had conducted the audit within the past three years. Table 4 shows that the larger the firm, the more likely it was that an intermal environmental audit had been conducted. Table 5 shows that manufacturers were more likely to have conducted an internal audit than other industries.

[^2]Table 4
PERCENTAGE OF FIRMS CONDUCTING INTERNAL ENVIRONMENTAL AUDIT BY FIRM SIZE

| Conducted | Number of Employees * |  |  | Total |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Audit? | $10-14$ | $15-29$ | $30-99$ | $100-500$ | Firms |

* $\mathrm{p}<.047$

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey

Table 5
INTERNAL ENVIRONMENTAL AUDIT CONDUCTED BY INDUSTRY

|  | Number of Firms by Industry: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Agriculture $(\mathrm{N}=32$ | Mining 22 | $\begin{gathered} \text { Construction } \\ 3 \end{gathered}$ | $\begin{aligned} & \text { Manufacturing } \\ & 154 \end{aligned}$ | $\begin{gathered} \text { Transportation } \\ 43 \end{gathered}$ | $\begin{aligned} & \text { Whalesale } \\ & 21 \end{aligned}$ | $\begin{gathered} \text { Retail } \\ 59 \end{gathered}$ | Services $169$ | $\begin{aligned} & \text { Total } \\ & \text { 503) } \end{aligned}$ |
| Yes | 10 | 10 | 0 | 101 | 21 | 6 | 20 | 81 | 249 |
| No | 18 | 10 | 3 | 43 | 20 | 11 | 30 | 80 | 215 |
| Don't Know | 4 | 2 | 0 | 8 | 2 | 3 | 9 | 8 | 36 |

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey

Fifty-four percent reported that someone from their facility had attended an environmental conference and most of them ( 85 percent) had attended a conference in the past two years. Again, the larger the firm, the more likely it was that someone had attended a conference (Table 6 ). The list of who sponsored the conference attended most recently is included in Appendix B.

Table 6
ENVIRONMENTAL CONFERENCE ATTENDANCE: PERCENTAGE OF FIRMS

| Conference | Number of Employees * |  | Total |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| Attended? | $10-14$ | $15-29$ | $30-99$ | $100-500$ | Firms |
| Yes | $48 \%$ | $49 \%$ | $54 \%$ | $73 \%$ | $54 \%$ |
| No | $46 \%$ | $46 \%$ | $39 \%$ | $23 \%$ | $41 \%$ |
| Don't Know | $6 \%$ | $5 \%$ | $7 \%$ | $4 \%$ | $6 \%$ |
|  | $\mathrm{~N}=137$ | 125 | 174 | 70 | 506 |

$$
* p<.031
$$

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey

Firms were asked to identify their primary sources for learning about existing environmental regulations and obligations (Table 7). Over 25 percent of the firms stated that they rely upon trade groups and magazines, professional organizations and publications, newsletters, and general publications for information. A sizeable percentage also tum to KDHE , OSHA (Occupational Safety and Health Administration), and the EPA (Environmental Protection Agency). Firms also turn to trade groups and magazines, newsletters, professional organizations and journals, and general publications as primary sources of information regarding new regulations and changes (Table 7). KDHE and other state agencies, as well as OSHA and the EPA, are other important sources of information regarding new regulations and changes. A slightly different picture emerges when firms seek technical assistance for compliance (Table 7). Twenty-three percent of the firms turn to other sources, such as suppliers, for technical assistance. Other sources include KDHE and other state agencies, OSHA, EPA consultants, and employees in other organizations or plants.

## Table 7 <br> PRIMARY SOURCES OF INFORMATION: PERCENTAGE OF FIRMS

|  | Existing Regulations | New/Changing Regulations | Technical Assistance |
| :---: | :---: | :---: | :---: |
| LOCAL: |  |  |  |
| Local Emergency Planning Commission | 1\% | 1\% | 1\% |
| Local County Health Department | 3\% | 3\% | 3\% |
| Local Zoning Commissions | 1\% | $<1 \%$ | <1\% |
| Other local agency | 4\% | 5\% | 4\% |
| STATE: |  |  |  |
| State Emergency Response Commission | 2\% | $1 \%$ | <1\% |
| KDHE | 16\% | 13\% | 13\% |
| "Right-to-Know" Organization | <1\% | $1 \%$ | 1\% |
| Ks Corporation Commission | 1\% | $1 \%$ | 1\% |
| Other state agency | 14\% | 14\% | 11\% |
| FEDERAL: |  |  |  |
| OSHA | 17\% | 13\% | 12\% |
| USDA | 1\% | 1\% | 1\% |
| FDA | $1 \%$ | 1\% | $1 \%$ |
| FTC | 0\% | 0\% | 0\% |
| EPA | 17\% | 16\% | 13\% |
| Other federal agency | 7\% | 6\% | 3\% |
| TRADE GROUPS, PUBLICATIONS, NEWSLETTERS: |  |  |  |
| Trade groups/magazines | 28\% | 26\% | 9\% |
| Newsletters | 26\% | 24\% | 9\% |
| Professional organizations/journals | 24\% | 23\% | 8\% |
| General publications | 24\% | 20\% | 5\% |
| OTHER: |  |  |  |
| Employees in other organizations/plants | 9\% | 6\% | 11\% |
| Consultants | $7 \%$ | 8\% | 13\% |
| Corporate staff | 6\% | 6\% | 7\% |
| Suppliers | 6\% | 3\% | 5\% |
| Environmentalists/groups/publications | 4\% | $4 \%$ | 4\% |
| Private training companies | 3\% | 3\% | 2\% |
| Law firms/attorneys | $2 \%$ | 2\% | 2\% |
| Networks or data bases | 1\% | 1\% | 0\% |
| Public libraries | 1\% | 1\% | 1\% |
| Catalogs (Whole Earth, etc.) | $1 \%$ | 1\% | <1\% |
| Fairs/shows | 0\% | <1\% | 0\% |
| Other | 11\% | 23\% | 23\% |

* Firms could respond to more than one item

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey

When asked to rank their sources of information for existing regulations, KDHE and trade groups and magazines were ranked first by 10 percent of the firms and some "Other" source was ranked first by 14 percent (Figure 1). Trade groups and trade magazines were the second choice of 18 percent. Professional organizations and journals were the second choice of 12 percent and the third choice of 14 percent. When the first through third rankings are combined (Figure 1), trade groups and magazines and professional organizations and journals, newsletters, and "other" are important sources of information for existing regulations. EPA, OSHA, and KDHE are agencies most frequently cited the top three sources of information regarding existing regulations.

Similar patterns occurred when firms ranked sources of information regarding new or changing regulations (Figure 2). Trade groups and magazines, professional organizations, "other" (especially suppliers), and newsleters were frequently mentioned as first, second, or third choice. EPA, OSHA, KDHA, and other state agencies were also cited frequently.

The largest percentage of firms listed "Other" as the first ranked source of technical assistance (Figure 3). The largest primary source within that miscellaneous group was suppliers. OSHA, consultants, EPA, professional organizations and journals, newsletters, and KDHE were ranked by at least 20 percent of the firms as a top ranked resource for technical assistance.

Firms were specifically asked about use of data bases and holines. Ninety-one percent of the firms do not use online data bases such as EPA's Pollution Information Exchange System, and 78 percent do not use the EPA hotlines.

The pattern that emerges is one of turning to state and federal agencies as well as trade groups and publications for information regarding existing and new regulations. Firms turn to a larger group (state and federal agencies, trade groups/publications plus consultants, employee networks, and suppiiers) for technical assistance in matters of compliance. The survey was not designed to identify why firms use a larger pool of sources for technical assistance. Perhaps it is more difficult to find sources who can interpret regulations and help contain compliance costs.

## Firms Access to Training

In 76 percent of the firms, the department or person responsible for environmental compliance is also responsible for environmental training. Forty-six percent of the firms had someone who received environmental training in the past 12 months, 49 percent had no one who had received training, and the remaining 5 percent did not know if training had occurred. The larger the firm, the more likely it was that training had occurred (Table 8). Training for the firm or facility was most frequently provided by someone on the staff (Table 9). Fourteen percent of the firms hired a consultant and another 9 percent used a trade association or organization. Very few obtained training through universities or community colleges. The use of in-house staff, consultants, and trade associations may indicate that firms prefer training that is customized to their particular needs.

The type of training currently provided to employees of over 80 percent of the firms is general awareness/familiarization and safety training (Table 10). Emergency response, function specific training, and certification training also occur for many firms. These topics may be the ones that require some degree of customization or specificity across industry sectors.

Figure 1
Information Sources for Existing Regulations (Ranked by Importance)


Figure 2
Information Sources for New or Changing Regulations (Ranked by Importance)


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Figure 3
Sources for Technical Assistance (Ranked by Importance)


Table 8
PERCENTAGE OF FIRMS WHOSE EMPLOYEES RECEIVED ENVIRONMENTAL TRAINING IN THE LAST TWELVE MONTHS

| Training | Number of Employees * |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Received? | 10-14 | 15-29 | 30-99 | -500 | Firms |
| Yes | 37\% | 44\% | 49\% | 65\% | 46\% |
| No | 60\% | 50\% | 46\% | 29\% | 49\% |
| Don't Know | 3\% | 6\% | 5\% | 6\% | 5\% |
|  | $=137$ | 125 | 174 | 70 | 506 |

$$
* p<.004
$$

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey
Table 9
TRAINING PROVIDERS USED BY FIRMS *

|  | Percentage <br> of Firms |
| :--- | ---: |
| Facility's staff | $51 \%$ |
| Consultant | $14 \%$ |
| Trade assoc., organization, or |  |
| Chamber of Commerce | $9 \%$ |
| Professional environmental |  |
| $\quad$ training firms | $6 \%$ |
| None/not sure | $6 \%$ |
| Suppliers/manufactures/ |  |
| $\quad$ distributors | $3 \%$ |
| Seminars/conferences | $3 \%$ |
| University | $3 \%$ |
| EPA | $3 \%$ |
| Community College | $2 \%$ |
| KDHE | $2 \%$ |
| Professional education firms | $2 \%$ |
| Insurance company | $2 \%$ |
| OSHA | $2 \%$ |
| Other | $6 \%$ |

* Firms could specify more than one source

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey

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Table 10 TRAINING CURRENTLY PROVIDED FOR EMPLOYEES

|  | Percentage of <br> Firms |
| :--- | :---: |
| General awareness/familiarization | $84 \%$ |
| Safety | $84 \%$ |
| Emergency response | $68 \%$ |
| Function specific training | $63 \%$ |
| Certification training | $33 \%$ |
| Other | $13 \%$ |

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey

## Firms Need for Information and Training

Firms were asked to indicate the amount of additional information needed about certain topics on a five point scale. Figure 4 shows that the largest percentage of firms indicated that they needed much more information (ranked 1 or 2 ) on new regulations and obligations, changes in regulations, legal liability, implementation issues, problem solving, and training requirements. They also needed more information in specialized areas of hazardous waste and SARA Title III. Other areas of need included pollution prevention and existing regulations.

For 25 percent of the firms, obtaining current and needed information regarding environmental regulations and obligations is difficult due to lack of knowledge concerning where to obtain information (Table 11). For an additional 32 percent, regulations are either too difficult to understand or the information seems conflicting and inconsistent. As the additional complaints listed in Table 11 are reviewed, the recurring theme is one of lack of time to obtain information, the complexity of regulations, and the constant changes in regulations. Table 12 shows that the top four barriers are problems for firms of all sizes.

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Figure 4
Amount of Additional Information Needed


## Table 11 <br> MAJOR BARRIERS TO OBTAINING INFORMATION

|  | Percentage <br> of Firms |
| :--- | :---: |
|  | Don't know where to look for information |
| Regulations too difficult to understand | $25 \%$ |
| Information is conflicting/inconsistent | $19 \%$ |
| Too time consuming to track | $13 \%$ |
| Information not available | $12 \%$ |
| Diversity of regulations | $11 \%$ |
| Information changes too quickly | $10 \%$ |
| No central source | $10 \%$ |
| Too costly to track | $9 \%$ |
| Uninformed local, state, federal employees | $9 \%$ |
| No official notification of changes | $9 \%$ |
| No one responsible at this facility | $5 \%$ |
| Other | $2 \%$ |
|  | $17 \%$ |

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey

## Table 12 <br> BARRIERS TO OBTAINING INFORMATION BY FIRM SIZE: PERCENTAGE OF FIRMS

|  | Number of Employees |  |  |  | Total |
| :--- | ---: | ---: | :--- | :--- | :--- |
| Top Four Barriers: | $10-14$ | $15-29$ | $30-99$ | $100-500$ | Firms |
|  |  |  |  |  |  |
| Don't know where to look | $26 \%$ | $26 \%$ | $35 \%$ | $14 \%$ | $25 \%$ |
| Regulations difficult to understand | $18 \%$ | $27 \%$ | $38 \%$ | $17 \%$ | $19 \%$ |
| Conflicting/inconsistent information | $22 \%$ | $27 \%$ | $34 \%$ | $17 \%$ | $13 \%$ |
| Too time consuming to track | $34 \%$ | $22 \%$ | $34 \%$ | $10 \%$ | $12 \%$ |
|  | $\mathrm{~N}=137$ | 125 | 174 | 70 | 506 |

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey

For firms who currently need training for their employees, training is needed in existing regulations, new regulations, changes in regulations, hazardous waste requirements, and training requirements (Table 13). Table 14 shows the type of training needed by each industry sector. ${ }^{4}$ The most frequently cited training need for the agriculture sector was training in existing and new regulations. Hazardous waste regulation training is needed by the mining sector. The needs of the manufacturing sector are more diverse, with hazardous waste regulations, existing, new, or changing regulations, and training requirements being frequently mentioned areas. The transportation sector, wholesale, and retail sectors all need training in existing, new, and changing regulations. Hazardous waste regulations was an area of concern for the transportation and retail sectors and problem solving, recycling/waste management regulations, and training requirements concemed retail firms. The service sector also needs training in existing/new/changing regulations, in hazardous waste regulations, and in training requirements.

## Compliance Issues

Over 20 percent of the firms reported that the cost of compliance and the difficulty of keeping up with changes are the biggest barriers to achieving and maintaining environmental compliance (Table 15). Table 16 shows that firms of all sizes struggle with these barriers. Thirty percent of the firms do not try to anticipate or prepare for future compliance requirements (Table 17). For those that do, 42 percent rely upon professional or trade resources (magazines, journals, newsletters, meetings, workshops).

[^3]
## Table 13 <br> FIRMS' CURRENT TRAINING NEEDS

PercentageNeeding:
Existing regulations/obligations ..... 19\%
New regulations/obligations ..... 18\%
Changes in regulations/obligations ..... 17\%
Hazardous waste regulations ..... 17\%
Training requirements ..... 12\%
How to solve problems ..... 8\%
Implementation issues/procedures ..... $7 \%$
Spills/release regulations and procedures ..... $7 \%$
Solid waste regulations ..... 6\%
Legal liability ..... 5\%
Air regulations ..... 5\%
Water regulations ..... 5\%
Recycling and waste management regulations ..... 5\%
SARA Title III ..... 4\%
Pollution prevention ..... 4\%
Pesticide regulations ..... $3 \%$
Asbestos, lead, PCBs, other toxic substance regulations ..... 3\%
Toxic Substances Control Act ..... 3\%
Underground storage tank regs ..... $2 \%$
Ozone depleting substance regulations ..... 2\%

[^4]Table 14
TRAINING NEEDS BY INDUSTRY

| Number of Firms by Industry:* |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TYPE: Agricu | are | Mining | Construction | Manufacturing | Transportation | Whoiesale | Retail | Services | Total |
| Existing regulations |  |  |  |  |  |  |  |  |  |
| \& obligacions | 10 | 3 | 0 | 28 | 10 | 2 | 12 | 30 | 95 |
| New regulations |  |  |  |  |  |  |  |  |  |
| \& obligations | 11 | 2 | 0 | 27 | 7 | 4 | 11 | 30 | 93 |
| Changes in regulations | 8 | 2 | 0 | 23 | 7 | 4 | 15 | 25 | 84 |
| Implementation issues/procedures | 3 | 0 | 0 | 13 | 0 | 3 | 3 | 12 | 34 |
| How to solve problems | 6 | 2 | 0 | 10 | 1 | 3 | 7 | 15 | 40 |
| Air regulations | 1 | 1 | 0 | 5 | 3 | 1 | 2 | 11 | 24 |
| Witer regulations | 3 | 0 | 0 | 8 | 5 | 0 | 1 | 8 | 25 |
| Solid waste regulations | 4 | 1 | 0 | 7 | 4 | 0 | 4 | 10 | 30 |
| Pesticide regulations | 5 | 0 | 0 | 1 | 1 | 2 | 1 | 5 | 15 |
| Underground storage unik regulations | 2 | 0 | 0 | 1 | 3 | 0 | 2 | 4 | 12 |
| Hezardous waste regulations | 2 | 6 | 0 | 30 | 7 | 1 | 6 | 35 | 87 |
| SARA Title III - | 0 | 1 | 0 | 7 | 2 | 1 | 3 | 8 | 22 |
| Recycling/waste management |  |  |  |  |  |  |  |  |  |
| Spillshelease regulacions | 1 | 2 | 0 | 13 | 4 | 3 | 4 | 7 | 35 |
| Asbertos, lead, PCBz, other toxic substances regulations | 0 | 0 | 1 | 2 | 2 | 0 | 1 | 7 | 13 |
| Ozone depleting |  |  |  |  |  |  |  |  |  |
| Toxic Substance Control Act | 1 | 1 | 0 | 6 | 2 | 0 | 1 | 6 | 17 |
| Pollution prevention | 1 | 1 | 0 | 4 | 3 | 0 | 2 | 9 | 20 |
| Training requirements | 5 | 4 | 0 | 19 | 4 | 2 | 7 | 18 | 59 |
| Legal linbility of firmvemployees | 3 | 2 | 0 | 4 | 4 | 1 | 2 | 7 | 23 |

- Fims could identify more than one type of raining need.

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey

Table 15
BARRIERS TO ACHIEVING OR MAINTAINING COMPLIANCE

|  | Percentage <br> of Firms |
| :--- | :--- |
| Barrier: | $22 \%$ |
| Cost | $21 \%$ |
| Keeping up with changes | $18 \%$ |
| Understanding regulations | $14 \%$ |
| Excessive regulation | $8 \%$ |
| Need for training | $8 \%$ |
| Regulatory inefficiency | $6 \%$ |
| Excessive paperwork and | $2 \%$ |
| reporting requirements | $28 \%$ |
| Impact on production |  |
| Other |  |

Source: Institute for Public Policy and Business Research, University of Kansas, 1993 Survey

Table 16
BARRIERS TO COMPLIANCE BY FIRM SIZE: PERCENTAGE OF FIRMS

|  | Number of Employees |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
| Top Four Barriers: | $10-14$ | $15-29$ | $30-99100-500$ | Tirms |  |
|  |  |  |  |  |  |
| Too costly | $24 \%$ | $26 \%$ | $33 \%$ | $18 \%$ | $22 \%$ |
| Keeping up with changes | $31 \%$ | $23 \%$ | $30 \%$ | $16 \%$ | $21 \%$ |
| Understanding regulation | $24 \%$ | $26 \%$ | $30 \%$ | $20 \%$ | $18 \%$ |
| Excessive regulation | $21 \%$ | $23 \%$ | $40 \%$ | $16 \%$ | $14 \%$ |
|  | $\mathrm{~N}=137$ | 125 | 174 | 70 | 506 |

[^5]Table 17
HOW FIRMS PREPARE FOR FUTURE COMPLIANCE REQUIREMENTS

|  | Percentage <br> of Firms |
| :--- | :--- |
| Do not try to predict future |  |
| compliance requirements |  |
| Trade magazines, joumals | $30 \%$ |
| and newsletters | $21 \%$ |
| Professional/rade association |  |
| meetings or workshops | $21 \%$ |
| Ongoing training | $19 \%$ |
| Strategic planning sessions | $10 \%$ |
| Over compliance | $4 \%$ |
| TQM | $1 \%$ |
| Pollution prevention | $1 \%$ |
| Other | $19 \%$ |

Source: Instiute for Public Policy and Business Research, University of Kansas, 1993 Survey

## SUMMARY AND IMPLICATIONS FOR TRAINING


#### Abstract

Almost all firms in the industries surveyed are subject to federal, state, and/or local environmental regulations and are very concerned about regulation and compliance issues. To comply with environmental regulations, firms are most likely to be organized by functional area (regulation, legal, financial, compliance, training) or by regulatory program (air, water, hazardous wastes, etc.). A large percentage of furms identified someone with multiple responsibilities within the firm as the most knowledgeable about environmental regulations. About half of the firms provide their own training. Firms have trouble dealing with regulations due to lack of knowledge about where to obtain information, difficulty in understanding the regulations, and/or inconsistent or conflicting information. The biggest barriers to achieving and maintaining compliance are cost of compliance and difficulty with keeping up with changes. This creates a picture of firms pressed for time and resources trying to cope with complex regulation and compliance issues.


Because of limited time and resources to deal with complex environmental regulation and compliance, firms rely heavily upon trade groups, trade/professional publications and newsletters for information about existing regulations and about new or changing regulations. To a lesser extent, they also rely upon state and federal agencies. In addition to using trade groups and public agencies, firms are likely to pay consultants and use suppliers for technical assistance with compliance.

Most firms provide their employees some sort of general training in environmental regulation awareness, familiarization, and safety. A large number also provide training in responding to emergencies and in specific functions. Firms report that they need additional information in the following areas:

- New regulations;
- Changes in regulations;
- Legal liability;
- Implementation issues;
- Problem solving; and
- Training requirements.

Additional training for employees is needed in:

- Existing regulations;
- New regulations;
- Changes in regulations;
- Hazardous waste requirements; and
- Training requirements.

To meet the needs of small firms with limited time and resources but large needs for information and training, several training topics should be considered. The first, and perhaps most important, would be training that helps firms develop, implement, and assess in-house training on existing regulations and obligations, legal liability, and training requirements. Another topic that could be included in this course would be information on how to access and use data bases and governmental sources for information regarding new and changing regulations.

The survey did not explore how firms prefer to have training delivered (workshops, videos, manuals, etc.). However, several methods could be considered to allow greater access to firms who cannot afford to send employees to off-site training courses. The medium in which initial training materials are presented (e.g., printed manuals, videos, computer-based training) could also be coordinated and packaged with offers for periodic updates of information. This would enable firms to keep abreast of new developments and update their in-house training packages. KDHE and the Division of Continuing Education might consider ways to provide periodic updates in new and changing regulations, legal liability, and training requirements for those firms who have received training. Perhaps firms could receive brochures, videos, or updated training manuals (hard copy or disk) as part of a periodic retraining program.

For firms who need but cannot provide adequate training in existing, new, and/or changing regulations, courses that are customized to meet the needs of various industry groups should be considered. In addition to providing information about new and existing regulations, these customized courses could include more specific information regarding implementation and compliance issues as well as problem solving. Since the cost of compliance is a major barrier to achieving or maintaining compliance, ways to contain costs and the costs/savings of over compliance should be included. Many firms do not try to predict future compliance requirements, probably because they do not have the time and resources necessary to access the persons or groups who might have this information. Thus, training that provided information
about future regulations and changes and how to build that into current compliance activities would also be useful and should be tied to legal/liability issues. Again, because keeping up with new and changing regulations is such a problem for small firms, attention to providing periodic updates in changing regulations, legal liability, and training requirements is an additional service that should be considered.

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## APPENDLX A

ANALYSIS BY INDUSTRY

Table 1
REGULATIONS THAT AFFECT FIRMS

| TYPE | Number of Firms by Industry: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { qriculture } \\ & \text { (N = } 32 \end{aligned}$ | Mining 22 | Construction 3 | Menufacturine 154 | Transportacion 43 | Wholesile 21 | $\begin{gathered} \text { Renil } \\ 59 \end{gathered}$ | Services 169 | $\begin{aligned} & \text { Toral } \\ & \text { s03) } \end{aligned}$ |
| Air (vehiclefurinems amissions, acid rain. cond) | 10 | 13 | 0 | 77 | 12 | 19 | 28 | 65 | 224 |
| Weter (drinking, waste. stream, welinnde, ground, pre-trearment) | 22 | 15 | 0 | 89 | 30 | 16 | 30 | 76 | 278 |
| Solid waste (commercinl. inctustrial) | 20 | 12 | 1 | 97 | 21 | 9 | 29 | 12 | 311 |
| Pessicide | 28 | 2 | 0 | 20 | 8 | 20 | 2 | 39 | 119 |
| Undererround storige tenk | 9 | 7 | 0 | 19 | 14 | 12 | 27 | 35 | 123 |
| Hazardous waste (storage. hendiing, reatment) | 21 | 13 | 2 | 106 | 25 | 14 | 47 | 145 | 373 |
| SARA Tille III | 12 | 9 | 1 | 87 | 16 | 16 | - 26 | 60 | 227 |
| Recyeling to waste mgnt. | 10 | 7 | 1 | 83 | 14 | 6 | 37 | 84 | 242 |
| Spills or release regs. | 15 | 16 | 0 | 94 | 26 | 18 | 36 | 87 | 292 |
| Asbestos, lead PCBs, other wxic substancer | 5 | 6 | 2 | 38 | 13 | 4 | 11 | 59 | 138 |
| Ozone depleting subatances | 4 | 4 | 0 | 42 | 14 | 4 | 36 | 8 | 149 |

- Firms could idencify more than one.

Source: Instirute far Public Policy and Business Research. University of Kansss. 1993 Survey

Table 2
FIRM ORGANIZATION FOR DEALING WITH ENVIRONMENTAL REGULATION BY INDUSTRY

| TYPE: | Agriculare$(\mathrm{N}=32$ | Number of Firms by Industry: |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mining 22 | Construction 3 | $\begin{aligned} & \text { Manufacturing } \\ & 154 \end{aligned}$ | $\begin{gathered} \text { Ttansporation } \\ 43 \end{gathered}$ | Wholesale 21 | $\begin{gathered} \text { Retail } \\ 59 \end{gathered}$ | Services 169 | $\begin{aligned} & \text { Toul } \\ & 503 \text { ) } \end{aligned}$ |
| By regulatory program: sin, water, hazardous waste. underground storage tanks, SARA Title III | 10 | 10 | 2 | 57 | 11 | 10 | 26 | 66 | 192 |
| By functional areas: regulation, legal. financial, compliance. training | 13 | 5 | 0 | 60 | 20 | 7 | 22 | 73 | 200 |
| Other | 9 | 7 | 1 | 34 | 11 | 4 | 11 | 29 | 106 |

Source: Instibute for Public Policy and Business Research, Universiry of Kansas, 1993 Survey

Table 3
ENVIRONMENTAL CONFERENCE ATTENDANCE BY INDUSTRY

|  | Number of Firms by Industry. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Agricularre $(N=32$ | $\underset{22}{M i n i n g}$ | Construction 3 | Manufacarring 154 | Trersportation 43 | Wholesale 21 | Retail 59 | Services 169 | $\begin{aligned} & \text { Toul } \\ & \text { s03) } \end{aligned}$ |
| Yes | 17 | 13 | 0 | 92 | 20 | 10 | 28 | 88 | 268 |
| No | 13 | 7 | 3 | 51 | 22 | 10 | 26 | 71 | 203 |
| Don't Know | 2 | 2 | 0 | 10 | 1 | 1 | 4 | 9 | 29 |

Source: Intirute for Public Policy and Business Research. University of Kusss, 1993 Survey

Table 4
PRIMARY SOURCES OF INFORMATION ABOUT EXISTING REGULATIONS BY INDUSTRY


[^6]Source: Instiute for Public Policy and Business Research, University of Kensas, 1993 Survey

Table 5
PRIMARY SOURCES OF INFORMATION ABOUT NEW OR CHANGING REGULATIONS BY INDUSTRY

| Source* | Number of Firms by Industry: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mining 22 | Construction 3 | Manufactoring 154 | Trexrportation 43 | Wholeale $21$ | $\begin{gathered} \text { Retuil } \\ 59 \end{gathered}$ | Services 169 | Total 503) |
| Local Emargency Plarning |  |  |  |  |  |  |  |  |  |
| Commission | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 2 | 4 |
| Local County Health Depr. | 1 | 0 | 0 | 2 | 2 | 0 | 1 | 7 | 14 |
| Local Zoning Commistions | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| Other local agency | 3 | 0 | 0 | 7 | 1 | 1 | 5 | 6 | 23 |
| Stute Emergency Response |  |  |  |  |  |  |  |  |  |
| Commission | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 4 |
| KDHE | 5 | 4 | 0 | 20 | 4 | 1 | 5 | 23 | 62 |
| "Rithe to Know" Ongmization | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 4 |
| Ks Corporation Commission | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 5 |
| Other stute agency | 6 | 2 | 0 | 18 | 9 | 5 | 7 | 23 | 70 |
| OSHA | 2 | 2 | 0 | 11 | 3 | 1 | 3 | 44 | 66 |
| USDA | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 4 |
| FDA | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 6 |
| FTC | 0 | 0 | 0 | 0 | 0 | 0 | - 0 | 0 | 0 |
| EPA | 5 | 5 | 0 | 28 | 9 | 3 |  | 20 | 79 |
| Other foderal agency | 2 | 2 | 0 | 9 | 4 | 1 | 4 |  | 30 |
| Employees in other |  |  |  |  |  |  |  |  |  |
| Trude group/imaguines | 9 | 7 | 2 | 47 | 12 | 3 | 15 | 36 | 131 |
| Professional orgenizations |  |  |  |  |  |  |  |  |  |
| Networkes or data basces | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Gencral publications | 2 | 3 | 1 | 46 | 9 | 3 | 6 | 32 | 102 |
| Newsletters | 6 | 3 | 1 | 40 | 13 | 1 | 12 | 43 | 119 |
| Public libraries | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 2 | 5 |
| Private training companies | 0 | 0 | 0 | 8 | 0 | 0 | 1 | 5 | 14 |
| Law firms or athorrics | , | 1 | 0 | 2 | 3 | 0 | 0 | 3 | 9 |
| Consulants | 2 | 1 | 0 | 16 | 2 | 2 | 2 | 16 | 41 |
| Corporate persomnel/aflaff 0 1 0 10 5 1 5 6 28 <br> Environmentists, eroups          |  |  |  |  |  |  |  |  |  |
| Environmentulists, groups. publications | 0 | 0 | 0 | 15 | 4 | 2 | 0 | 1 | 22 |
| Cutulogs (Whole Eerth, etc.) | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 4 |
| Fairs or shows | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Other | 5 | 4 | 1 | 36 | 7 | 10 | 15 | 39 | 117 |

[^7]Source: Instinte for Public Policy and Business Research. University of Kansas, 1993 Survey

Table 6
PRIMARY SOURCES OF INFORMATION ABOUT TECHNICAL ASSISTANCE FOR COMPLIANCE BY INDUSTRY


- Firms could identify more than one.

Source: Institute for Public Policy and Business Rewearch, University of Kansas, 1993 Survey

Table 7
USE OF ENVIRONMENTAL DATABASES
BY INDUSTRY

| Type: | Number of Firms by Industry. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Arpiculare $(N=32$ | Mining 22 | Construction 3 | $\begin{aligned} & \text { Manufnctaring } \\ & 154 \end{aligned}$ | $\begin{gathered} \text { Transportacion } \\ 43 \end{gathered}$ | Wholesile 21 | $\begin{gathered} \text { Retril } \\ 59 \end{gathered}$ | Services 169 | $\begin{aligned} & \text { Towal } \\ & \text { s03) } \end{aligned}$ |
| Environmental anlipe datibases | 1 | 3 | 0 | 8 | 3 | 2 | 2 | 14 | 33 |
| EPA hotines | 2 | 3 | 0 | 36 | 14 | 6 | 8 | 18 | 87 |

Source: Instruse for Public Policy and Business Research. Universiry of Kanse, 1993 Survey

Table 8
TRAINING ACTIVITY BY INDUSTRY

| Type | Agriculare$(N=32$ | Number of Fums by Industry: |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{22}{M}$ | $\begin{gathered} \text { Construction } \\ 3 \end{gathered}$ | Manufacturins 154 | Trasportation 43 | $\begin{aligned} & \text { Wholessle } \\ & 21 \end{aligned}$ | $\begin{gathered} \text { Retail } \\ 59 \end{gathered}$ | $\begin{gathered} \text { Services } \\ 169 \end{gathered}$ | $\begin{aligned} & \text { Toul } \\ & \text { SO3) } \end{aligned}$ |
| Truining and compliance seperate within firm |  |  |  |  |  |  |  |  |  |
| Training rectived with lest 12 months | 12 | 8 | 0 | 76 | 23 | 14 | 23 | 75 | 231 |
| Truining provided by: |  |  |  |  |  |  |  |  |  |
| Fraty s staff | 13 1 | 10 | 0 | 88 | 17 | 0 | 2 | 5 | 14 |
| Community college | 0 | 0 | 0 | 1 | 2 |  | 0 | 7 | 11 |
| KDHE | 3 | 0 | 0 | 4 | 0 | 0 | 1 | 4 | 12 |
| EPA | 0 | 0 | 0 | 5 | 4 | 1 | 1 | 4 | 15 |
| Consultart | 3 | 5 | 0 | 29 | 6 | 1 | 5 | 21 | 70 |
| Truining fimm | 1 | 1 | 0 | 3 | 0 | 0 | 2 | 5 | 12 |
| Envisonmental firm | 1 | 2 | 0 | 13 | 7 | 0 | 2 | 5 | 30 |
| Ocher | 13 | 7 | 1 | 41 | 15 | 12 | 21 | 61 | 171 |

Source: Instinue for Public Policy and Business Research. Universiry of Kansas. 1993 Survey

Table 9
TYPE OF TRAINING PROVIDED FOR EMPLOYEES BY INDUSTRY

| Type: | Agricularre$(\mathrm{N}=32$ | Mining <br> 22 | Construction 3 | Number of Firms by Industry: |  |  | $\begin{gathered} \text { Retail } \\ 59 \end{gathered}$ | $\begin{gathered} \text { Services } \\ 169 \end{gathered}$ | $\begin{aligned} & \text { Total } \\ & \text { 503) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Manufacturing 154 | Transportation 43 | $\begin{gathered} \text { Wholesale } \\ 21 \end{gathered}$ |  |  |  |
| General awireness \& |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Function specific | 20 | 8 | 1 | 108 | 23 | 13 | 29 | 113 | 315 |
| Cerrification | 13 | 4 | 1 | 43 | 21 | 9 | 29 | 45 | 165 |
| Safery | 26 | 18 | 2 | 135 | 33 | 20 | 43 | 147 | 424 |
| Emergency response | 22 | 13 | 0 | 104 | 30 | 16 | 31 | 129 | 345 |
| Oher | 2 | 4 | 1 | 30 | 7 |  | 3 | 15 | 65 |

- Firms could idensify more than one.

Source: Instiute for Public Policy and Business Research, University of Kansas, 1993 Survey

Table 10
AREAS WHERE MUCH MORE ADDITIONAL INFORMATION IS NEEDED BY INDUSTRY


[^8]Source: Institute for Pubbic Policy and Business Research. University of Kerses, 1993 Survey

Table 11
MAJOR BARRIERS TO OBTAINING INFORMATION BY INDUSTRY

| Type* Ag | Number of Firms by Industry: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Mining 22 | Constraction 3 | Manufacturing 154 | Transportacion 43 | $\begin{aligned} & \text { Wholesale } \\ & 21 \end{aligned}$ | $\begin{gathered} \text { Retail } \\ 59 \end{gathered}$ | Services 169 | $\begin{aligned} & \text { Total } \\ & \text { s03) } \end{aligned}$ |
| Don't know where to look for information | 9 | 4 | 1 | 34 | 8 | 5 | 15 | 48 | 124 |
| Regulations too difficult to understand | 4 | 7 | 0 | 35 | 10 | 5 | 8 | 26 | 95 |
| Diversity of regulations | 5 | 3 | 0 | 19 | 4 | 2 | 3 | 14 | 50 |
| Information chenges quickly | 1 | 2 | 0 | 20 | 4 | 2 | 6 | 12 | 47 |
| Too time consurning to track | 5 | 1 | 0 | 18 | 5 | 7 | 7 | 15 | 58 |
| Too costly to rack | 3 | 2 | 0 | 18 | 3 | 2 | 4 | 11 | 43 |
| Uninformed local, state, or federal employees | 3 | 3 | 0 | 17 | 7 | 2 | 3 | 11 | 46 |
| No official notification of changes | 0 | 1 | 0 | 10 | 4 | 1 | 2 | 7 | 25 |
| No central source | 4 | 1 | 0 | 13 | 5 | 1 | 6 | 13 | 43 |
| Information not available | 4 | 3 | 0 | 18 | 5 | 2 | 8 | 14 | 54 |
| Conflictingfinconsistent information | 3 | 4 | 0 | 22 | 5 | 2 | 6 | 22 | 64 |
| No one in firm responsible | 2 | 1 | 0 | 5 | 0 | 2 | 0 | 1 | 11 |
| Other | 7 | 2 | 0 | 26 | 8 | 2 | 6 | 35 | 86 |

- Firms could idencify more than one.

Source: Instirute for Public Policy and Business Research, University of Kursas, 1993 Survey

Table 12
BARRIERS TO ACHIEVING OR MAINTAINING COMPLIANCE BY INDUSTRY

|  | Number of Firms by Industry: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type* Apor | Apriculure $(N=32$ | Mining 22 | $\begin{gathered} \text { Consoruction } \\ 3 \end{gathered}$ | Manufacuring 154 | $\begin{aligned} & \text { Trensportation } \\ & 43 \end{aligned}$ | $\begin{aligned} & \text { Wholesale } \\ & 21 \end{aligned}$ | $\begin{gathered} \text { Retwil } \\ 59 \end{gathered}$ | Services 169 | $\begin{aligned} & \text { Toul } \\ & 503 \text { ) } \end{aligned}$ |
| Inplect on carrens |  |  |  |  |  |  |  |  |  |
| production | 0 | 0 | 0 | 1 | 0 | 3 | 2 | 2 | 8 |
| Tos costly | 5 | 7 | 0 | 32 | 10 | 11 | 19 | 29 | 113 |
| Too many excessive regs. | . 7 | 2 | 0 | 23 | 7 | 5 | 5 | 20 | 69 |
| Keeping up with chenges | 5 | 3 | 0 | 40 | 9 | 4 | 9 | 34 | 104 |
| Need for truining | 0 | 2 | 1 | 8 | 7 | 2 | 5 | 14 | 39 |
| Regulatory inefficiency | 3 | 3 | 0 | 14 | 5 | 0 | 3 | 14 | 42 |
| Undersunding regulations | - 7 | 4 | 1 | 34 | 10 | 1 | 11 | 25 | 93 |
| Excessive peperwork \& reporing requirements | 2 | 1 | 1 | 13 | 2 | 2 | $\therefore 2$ | 8 | 31 |
| Ocher | 12 | 8 | 1 | 53 | 17 | 6 | 16 | 65 | 178 |

- Firms could identify more than one.

Source: Insoinse for Public Policy und Business Research. University of Kansas, 1993 Survey

Table 13
HOW FIRMS PREPARE FOR FUTURE COMPLIANCE REQUIREMENTS BY INDUSTRY

| Type: A | Number of Firms by Industry: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Mining } \\ 22 \end{gathered}$ | Construction 3 | $\begin{gathered} \text { Manufacaring } \\ 154 \end{gathered}$ | Transportacion 43 | $\begin{gathered} \text { Wholeszale } \\ 21 \end{gathered}$ | $\begin{gathered} \text { Retail } \\ 59 \end{gathered}$ | $\begin{gathered} \text { Services } \\ 169 \end{gathered}$ | $\begin{aligned} & \text { Total } \\ & \text { 503) } \end{aligned}$ |
| Strategic plenning |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Overcomplimes | 3 | 0 | 0 | 3 | 1 | 1 | 4 | 7 | 19 |
| TQM | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 4 |
| Pollution prevention | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 5 |
| Ongoing training | 9 | 6 | 0 | 28 | 6 | 6 | 8 | 34 | 97 |
| Trade magazines, professional joumals, newsletrers | 8 | 1 | 1 | 37 | 11 | 4 | 14 | 28 | 104 |
| Profession/rade association meetings or workshops | 6 | 3 | 2 | 35 | 15 | 4 | 11 | 31 | 108 |
| Do not try to predict fuure compliance requirements | 7 | 12 | 1 | 38 | 8 | 5 | 26 | 48 | 145 |
| Orher | 10 | 3 | 2 | 39 | 7 | 3 | 7 | 34 | 105 |

## - Firms could identify more then one.

Source: Institute for Public Policy and Buriness Research. University of Kansas, 1993 Survey

## APPENDIX B

## WHO SPONSORED THE CONFERENCE ATTENDED MOST RECENTLY (One response per entry unless otherwise indicated)

| AIM |  |  |
| :---: | :---: | :---: |
| Air and | Waste | Management |
| Association |  |  |
| Air Toxins in Missouri |  |  |
| ALI and ABA session |  |  |
| Amer. Assoc. of Aipport Executives |  |  |
| Amer. Assoc. of Med. Instrumentation |  |  |
| American Dental Association |  |  |
| American Feed Industry Associacion |  |  |
| American Founderman's Society |  |  |
| American Retred Association |  |  |
| American Vegetable Growers A |  |  |
|  |  |  |
| Ass. General Contractor |  |  |
| Auto Dealers Association ( $\mathrm{N}=2$ ) |  |  |
| Brown Medical |  |  |
| Cambridge Institute |  |  |
| Cargill Inc. |  |  |
| Cultured Marble Association |  |  |
| Depl of Health Storage \& Tank |  |  |
| Deph of Water Resources ( $\mathrm{N}=3$ ) |  |  |
| Detroit, Michigan |  |  |
| DIACA, Dept. of Agriculture |  |  |
| Dupont |  |  |
| Eagle Assoc. |  |  |
| Eaton Corp. |  |  |
| Environmental Resource Center, C |  |  |
| EPA ( $\mathrm{N}=10$ ) |  |  |
| Gass Processors Assoc. |  |  |
| General Electric |  |  |
| Govermment ( $\mathrm{N}=3$ ) |  |  |
| Government Instiutes Copr. ( $\mathrm{N}=2$ ) |  |  |
| Heathwood Oil Co. |  |  |
| Insurance company ( $\mathrm{N}=3$ ) |  |  |
| Insurance Management Assoc. |  |  |
| Johnson County |  |  |
| Kansas City area |  |  |
| Kansas Dental Assoc. |  |  |
| Kansas Electric Corp. |  |  |
| Kansas Farmers Service ( $\mathrm{N}=4$ ) |  |  |
| Kansas Funeral Directors |  |  |
| Kansas Health Care Assoc. ( $\mathrm{N}=2$ ) |  |  |
| Kansas Hospital Assoc. ( $\mathrm{N}=3$ ) |  |  |
| Kansas Independent Oil \& Gas Assoc$(\mathrm{N}=2)$ |  |  |
| Kansas Livestock Assoc. ( $\mathrm{N}=3$ ) |  |  |
| Kansas Medical Society |  |  |
| Kansas Motorcar Dealer Assoc ( $\mathrm{N}=2$ ) |  |  |
| Kansas Motor Carrier Association$(\mathbb{N}=3)$ |  |  |
| Kansas Na | Reso | ces Council |

Kansas Oil Marketers ( $\mathrm{N}=2$ )
Kansas Opoometric Association
Kansas Reporting of Hazardous Waste Material
Kansas State Depl. of Agriculture
Kansas State University ( $\mathrm{N}=6$ )
KDHE ( $\mathrm{N}=16$ )
KG\&E
KHA
KLA
Kodak
MAC
Manhatian
MAMTC Conference
Meyer Industry Supply
Missouri Dept. of Natural Resources
Missouri Emergency Preparedness Program
Missouri Medical Managers
Morris. Co. Comm. Solid Waste
Morrison \& Hacker
National Cattemen Assoc.
National Groundwater
National Solid Waste Management Assoc.
National Tapes and Coating Assoc.
National Tooling and Machine Assoc.
NEHA Program
Not Applicable
Not sure ( $\mathrm{N}=54$ )
Oklahoma State University
OMI, New Orieans
OSHA ( $\mathrm{N}=13$ )
Philliport Oil
Printing Industry of Kansas
Professional Lawn Care Assoc. ( $\mathrm{N}=2$ )
Reed Braden \& Co.
Regulatory Consultancy Inc.
Robin Air Conditioner
Safety Kleen $(\mathrm{N}=10)$
San Antonio Manufacturers Assoc.
Schin
Self-sponsored ( $\mathrm{N}=4$ )
SERC
Society of Petroleum Engineering ( $\mathrm{N}=2$ )
State of Califormia
Suppliers
Terra-Con
Texas Water Commission

Trade Assoc. ( $\mathrm{N}=2$ )
University of Kansas ( $\mathrm{N}=3$ )
University of Missouri
Vickers Corp. headquarters
Vulcan Chemicals

APPENDIX C
ANALYSIS BY HOW FIRMS ARE ORGANIZED

## ANLYSIS OF SELECTED QUESTICNS BY BOW THE EACILITY WAS ORGNNIEED: 1 - BY REGULNTORY PROGRAM <br> 2 - BY FUNCTIONAL AREA <br> 3 - OTHER

017 Do you use any environmental online data by $Q 5$ How is this facility organized...



```
Q18 Do you use the EPA hotlines? by Q5 Hov is this facility
organized...
```



```
    Chi-Square
Significance
```



```
Pearson
.43108
Iikelihood Ratio
.43388
Mantel-Haenszel test for
.42865
linear association
Minimum Expected Erequency - 3.193
Cells with Expected Frequency < 5-1 \(10 \% 1\) (11.18)
```

Number of Missing Observations:
\$011 What are your primary sources for laarning about existing regulations? by 05 How is this facility organizad...

Page 1 of 2

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Count Col pet |  |  |  | $\begin{aligned} & \text { Row } \\ & \text { Total } \end{aligned}$ |
|  | 1 | 2 | 3 |  |
| \$011 |  |  |  |  |
| Other state Q1119 | 25 | 35 | 13 | 73 |
|  | 14.1 | 18.5 | 14.1 | 15.9 |
| Is osmat Q11J10 | 34 | 37 | 15 | 86 |
|  | 19.2 | 19.6 | 16.3 | 18.8 |
| Is USDA? 011R11 | 0 | 1 | 2 | 3 |
|  | . 0 | . 5 | 2.2 | . 7 |
| Is FMA? 011512 | 1 | 5 | 0 | 6 |
|  | . 6 | 2.6 | . 0 | 1.3 |
| Is EPA? Q1IN14 | 36 | 40 | 12 | 88 |
|  | 20.3 | 21.2 | 13.0 | 19.2 |
|  | 10 | 19 | 8 | 37 |
|  | 5.6 | 10.1 | 8.7 | 8.1 |
| Q11P16 | 25 | 15 | 4 | 44 |
| Employees in other organizations/plants 011017 | 14.1 | 7.9 | 4.3 | 9.6 |
|  | 66 | 44 | 30 | 140 |
| Trade groups and | 37.3 | 23.3 | 32.6 | 30.6 |
| Q11R18 <br> Professional organi- | 61 | 37 | 23 | 121 |
|  | 34.5 | 19.6 | 25.0 | 26.4 |
| Q11S19 | 6 | 1 | 0 | 7 |
| Networks or data bases | 3.4 | . 5 | . 0 | 1.5 |
| General publications | 59 | 40 | 17 | 116 |
|  | 33.3 | 21.2 | 18.5 | 25.3 |
| ColumTotel | 177 | 189 | 92 | 458 |
|  | 38.6 | 41.3 | 20.1 | 100.0 |

Percents and totels based on respondents
(Continued)
\$011 (tabulating 1) Info source by 05 How is this facility organized...

Pege 2 of 2


Percents and totals based on respondents
458 valid cases; 48 missing cases
$\$ 013$ What are your primary aource for leanning about new or changing regulations?
by 05 How is thi facility organized...
Page 1 of 3

| QS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Count } \\ & \text { Col pet } \end{aligned}$ |  |  |  | Row Total |
|  | 1 | 2 | 3 |  |
| \$013 |  |  |  |  |
| Q13A1 | 3 | 1 | 0 | 4 |
| Is local Emergency $\quad 1.7 \times 10$ |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Health Department?  <br>  Q13c3 |  |  |  |  |
| Is the local zoning $\quad .6$. 5 . ${ }^{\text {a }}$ |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Is there another | 5.6 | 5.7 | 2.0 | 4.9 |
| local agency? |  |  |  |  |
| Is the State Energency 1.7 . 0 |  |  |  |  |
|  |  |  |  |  |
| Q13F6 | 18 | 27 | 18 | 63 |
| Is the R0RE? 10.1 13.9 28.4 13.4 |  |  |  |  |
|  |  |  |  |  |
| Is the "Right-to- 2.2 .0 .0 .8 <br> Know" organization?     |  |  |  |  |
|  |  |  |  |  |
|  | 1.2 | . 5 | 2.0 | 2.1 |
| Commission? |  |  |  |  |
| Ocher atate agency? | $\begin{array}{r} 27 \\ 15.1 \end{array}$ | $\begin{array}{r} 30 \\ 25.5 \end{array}$ | $\begin{array}{r} 13 \\ 13.3 \end{array}$ | 70 14.9 |
|  |  |  |  | 14.9 |
| Colum | 179 | 194 | 98 | 471 |
| Total | 38.0 | 41.2 | 20.8 | 100.0 |

Percents and totala based on respondents
(Continued)
$\$ 013$ (tabulating 1) Sources new regs by $Q 5$ How is this facility organized...

Page 2 of 3

| Q5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Count Col pct |  |  |  | Row Total |
|  | 1 | 2 | 3 |  |
| \$013 <br> 120 | 28 | 26 | 12 | 66 |
| Is osha? | 15.6 | 13.4 | 12.2 | 14.0 |
| Is USDA? Q13K11 |  |  | 1 | 4 |
|  | 1.1 | . 5 | 1.0 | 8 |
| Is FDA? 013212 |  |  |  |  |
|  | 2 | 2.1 | . 0 | 6 1.3 |
|  |  |  |  |  |
| Is EPA? Q13N14 | 34 | 35 | 10 | 79 |
|  | 19.0 | 18.0 | 10.2 |  |
|  | 4 | 19 | 7 | 30 |
| Other federal agency? | 2.2 | 9.8 | 7.1 | 6.4 |
| Q13P16 | 16 | 12 | 4 | 32 |
| Employees in other Organizations/plants? 013017 | 8.9 | 6.2 | 4.1 | 6.8 |
|  |  |  |  | 133 |
|  | 63 35.2 | 21.6 | 28.6 | 28.2 |
| Trede groups 6 trade magazines? | 35.2 |  |  |  |
|  |  | 37 | 20 | 117 |
| Q13R18 <br> Professional organi- <br> zations 6 journals? <br> 013519 | 33.5 | 19.1 | 20.4 | 24.8 |
|  |  | 2 | 0 | 3 |
| Networks or data | . 6 | 1.0 | . 0 | . 6 |
| bases? 013720 |  | 27 | 18 | 99 |
| General publications | 30.2 | 13.9 | 18.4 | 21.0 |
| $813021$ <br> Newsletters? | 58 | 38 | 21 | 117 |
|  | 32.4 | 19.6 | 21.4 | 24.8 |
| ColumaTotal | 179 | 194 | 98 | 471 |
|  | 38.0 | 41.2 | 20.8 | 100.0 |

Percents and totals based on respondents
(Continued)
$\$ 013$ (tabulating 1) Sources new rega by 05 How in this facility organized...

Page 3 of 3

| \$013 ${ }^{\text {Count }}$ Col pe | 1 |  |  | Row Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2 | 3 |  |
| Public libraries? | 1.1 | 3 1.5 | 0 .0 | 1.1 |
| $\begin{aligned} & \text { Ql3w23 } \\ & \text { Private training } \\ & \text { companies? } \end{aligned}$ | 9 5.0 | 2.6 | 0 .0 | 24 3.0 |
| $013 \times 24$ <br> Law fisms of attornies? | 1.1 | 2.1 | 3.1 | 9 1.9 |
| $013 Y 25$ <br> Consultants? | 18 20.1 | 16 8.2 | 7 7.1 | 8.7 |
| Q13226 <br> Corporate resource personnel staff? | 10 5.6 | 9 4.6 | 9 9.2 | 28 5.9 |
| $9132227$ <br> Envirommentalists, | 7 3.9 | 14 7.2 | 1.0 | 22 4.7 |
| $0132228$ <br> Catalogs (e.g. Whole Earth) ? | 2 1.1 | 1 .5 | 1.0 | . 8 |
| Q13z229 <br> Fairs or shows such as lawn garden? | 1 .6 | 0 .0 | . 0 | 1 2 |
| Other Q132230 | $\begin{array}{r} 43 \\ 24.0 \end{array}$ | $25.3$ | $\begin{array}{r} 26 \\ 26.5 \end{array}$ | $\begin{array}{r} 118 \\ 25.1 \end{array}$ |
| Columan Totel | $\begin{array}{r} 179 \\ 38.0 \end{array}$ | $\begin{array}{r} 194 \\ 41.2 \end{array}$ | $\begin{array}{r} 98 \\ 20.8 \end{array}$ | $\begin{array}{r} 471 \\ 100.0 \end{array}$ |

Percent: and totals based on respondents
471 velid cases; 35 missing cases
$\$ 015$ (tabulating 1) That are your primary sources Lor technical assistance in complying with regulations? by 05 Bow is this facility organized...

Page 1 of 3


Percents and totals based on respondents
(Continued)
\$Q15 (tabularing 1) Sources tech ass't
by 05 How is this facility organized...
Page 2 of 3

| Q5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Count $\mid \quad$ Row |  |  |  |  |
|  |  |  |  | Total |
| \$015 $\quad 2$ |  |  |  |  |
| 015015 <br> Other federal gency | 3 | 9 | 5 | 17 |
|  | 1.7 | 4.8 | 5.2 | 3.7 |
| Q15P16Employees in otherorganizations/plants?015017 | 28 | 18 | 7 | 53 |
|  | 16.2 | 9.7 | 7.2 | 11.6 |
|  | 20 | 16 | 11 | 47 |
| Trade groups trade magazines? | 11.6 | 8.6 | 11.3 | 10.3 |
| Q15R18 <br> Professional organi- | 22 | 9 | 10 | 41 |
|  | 12.7 | 4.8 | 10.3 | 9.0 |
| zations 6 journals? | 13 | 10 | 3 | 26 |
| General publications? | 7.5 | 5.4 | 3.1 | 5.7 |
| Newsletters? ${ }^{\text {915021 }}$ | 24 | 12 | 7 | 43 |
|  | 13.9 | 6.5 | 7.2 | 9.4 |
| Public libraries? | 1 | 1 | 1 | 3 |
|  | . 6 | . 5 | 1.0 | . 7 |
| Q15w23 <br> Private training companies? | 6 3.5 | 2 | 1 1 | 9 2 |
|  |  |  |  | 2.0 |
| $015 \times 24$ <br> Law fimbs or | 2 | 5 | 3 | 10 |
|  | 1.2 | 2.7 | 3.1 | 2.2 |
| $015 Y 25$ <br> Consultants? | 19 | 30 | 15 | 69 |
|  | 11.0 | 16.1 | 15.5 | 14.0 |
| Corporate resource | 9 | 13 | 13 | 35 |
|  | 5.2 | 7.0 | 13.4 | 7.7 |
| ColumTotal | 173 | 186 | 97 | 456 |
|  | 37.9 | 40.8 | 21.3 | 100.0 |

Percents and totals based on respondents
(Continued)
\$015 (tabulating i) Sources tech ass't by Q5 How is chis fecility organired...

| Q5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Count <br> Col pet$\left\|\begin{array}{c}\text { Row } \\ \end{array}\right\|$  <br> Total  |  |  |  |  |
|  |  |  |  |  |
| \$015 |  |  |  |  |
| 0152227 | 5 | 11 | 1 | 20 |
| Envicommentalists, 2.9 5.9 1.1 1.4 |  |  |  |  |
| environ. publications | 1 | 0 | 0 | 1 |
| Cetelogs such as tho | . 6 | . 0 | . 0 | . 2 |
| Other? 0152230 | 47 | 49 | 28 | 124 |
|  | 27.2 | 26.3 | 28.9 | 27.2 |
| Colum | 173 | 186 | 97 | 456 |
|  | 37.9 | 40.8 | 21.3 | 100.0 |
| Percents and totals based on respondents |  |  |  |  |
| 456 valid cases; 50 missing cases |  |  |  |  |

## * CROSSTABUIATION**

$\$ 019$ (tabulating 1) What additional information does your facility need with respect to anvironmental regulations and issues?
by Q5 Bow is this Iacility organized...
Page 1 of 2

| Q5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  |  |  |  |  |
| \$019 $\quad 1$ |  |  |  |  |
|  |  |  |  |  |
| Q19A 37 39 19 95 <br> Existing environmen- 22.6 21.3 20.4 21.6 |  |  |  |  |
|  |  |  |  |  |
| Q19B 15 24 7 46 |  |  |  |  |
| New environmental 9.1 13.1 7.5 10.5 |  |  |  |  |
| 019 C 24 22 9 45 |  |  |  |  |
| Changes in environ. 8.5 12.0 9.7 10.2 |  |  |  |  |
| Implementation issue | 20 | 24 | 11 | 55 |
|  | 12.2 | 13.1 | 11.8 | 12.5 |
| How to solve problem | 24 | 26 | 14 | 64 |
|  | 14.6 | 14.2 | 15.1 | 14.5 |
| Q19F <br> Rir regulations | 82 | 78 | 41 | 201 |
|  | 50.0 | 42.6 | 44.1 | 45.7 |
| Water regulations | 64 | 70 | 37 | 171 |
|  | 39.0 | 38.3 | 39.8 | 38.9 |
| Wolid waste regs. | 74 | 60 | 31 | 165 |
|  | 45.1 | 32.8 | 33.3 | 37.5 |
|  | 128 | 132 | 70 | 330 |
|  | 78.0 | 72.1 | 75.3 | 75.0 |
| Underground Storage | 136 | 145 | 71 | 352 |
|  | 82.9 | 79.2 | 76.3 | 80.0 |
| Hazardous waste regu | 51 | 57 | 37 | 145 |
|  | 31.1 | 31.1 | 39.8 | 33.0 |
| ColumTotal | 164 | 183 | 93 | 440 |
|  | 37.3 | 41.6 | 21.1 | 100.0 |

Percents and totals based on respondents
(Continued)

## 152

\$Q19 (tabulating 1) Info needed
by QS How is this facility organized...
Page 2 of 2

| QS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Count Col pct |  |  |  | $\begin{aligned} & \text { Row } \\ & \text { Total } \end{aligned}$ |
| \$019 | 1 | 2 | 3 |  |
|  |  |  |  |  |
| Q19L | 61 | 56 | 36 | 153 |
| SARA Title III | 37.2 | 30.6 | 38.7 | 34.8 |
| Q19M | 59 | 68 | 33 | 160 |
| Recycling and waste | 36.0 | 37.2 | 35.5 | 36.4 |
| Q19N | 63 | 73 | 34 | 170 |
| Spills or release | 38.4 | 39.9 | 36.6 | 38.6 |
| 0190 | 108 | 124 | 64 | 296 |
| Asbestos, lead, PCBs | 65.9 | 67.8 | 68.8 | 67.3 |
| Q19P | 99 | 117 | 52 | 268 |
| Ozone depleting | 60.4 | 63.9 | 55.9 | 60.9 |
| Q190 | 64 | 87 | 47 | 198 |
| Toxic substancs | 39.0 | 47.5 | 50.5 | 45.0 |
| Q19R | 50 | 68 | 31 | 149 |
| Pollution prevention | 30.5 | 37.2 | 33.3 | 33.9 |
| 0195 | 34 | 36 | 22 | 92 |
| Training requirement | 20.7 | 19.7 | 23.7 | 20.9 |
| Q19T | 29 | 31 | 21 | 81 |
| Legal liability of | 17.7 | 16.9 | 22.6 | 18.4 |
| Column | 164 | 183 | 93 | 440 |
| Total | 37.3 | 41.6 | 21.1 | 100.0 |

Percents and totals based on respondents
440 valid cases; 66 missing cases
$\$ 020$ (tabulating 1) What are the major barriers to obtaining current and needed information regarding environmental regulations and obligations?
by $Q 5$ How is this fecility organizad...
Page 1 of 2
05

| Count col pet | 1 | 2 | 3 | $\begin{aligned} & \text { Row } \\ & \text { Total } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| \$ 020 |  |  |  |  |
| Q20A | 53 | 50 | 20 | 123 |
| Don't know where to | 36.1 | 30.3 | -25.3 | 31.5 |
| Q208 | 32 | 43 | 20 | 95 |
| Regs. too difficult | 21.8 | 26.1 | 25.3 | 24.3 |
| Q20C | 19 | 25 | 6 | 50 |
| Diversity of regs. | 12.9 | 15.2 | 7.6 | 12.8 |
| Q20D | 24 | 13 | 11 | 48 |
| Info. changes too | 16.3 | 7.9 | 13.9 | 12.3 |
| Q20E | 22 | 18 | 18 | 58 |
| Too time consuming | 15.0 | 10.9 | 22.8 | 14.8 |
| Q20F | 18 | 11 | 14 | 43 |
| Too costly to track | 12.2 | 6.7 | 17.7 | 11.0 |
| Q20G | 18 | 16 | 12 | 46 |
| Uninformed local, | 12.2 | 9.7 | 15.2 | 11.8 |
| Q20H | 10 | 9 | 6 | 25 |
| No official notice | 6.8 | 5.5 | 7.6 | 6.4 |
| Q20I | 13 | 21 | 10 | 44 |
| No central source | 8.8 | 12.7 | 12.7 | 11.3 |
| Q20J | 30 | 14 | 10 | 54 |
| Information is not | 20.4 | 8.5 | 12.7 | 13.8 |
| Q20x | 24 | 26 | 14 | 64 |
| Information conflict- | 16.3 | 15.8 | 17.7 | 16.4 |
| ing or inconsistent Column | 147 | 165 | 79 | 391 |
| Total | 37.6 | 42.2 | 20.2 | 100.0 |

Percents and totals based an respondents
(Continued)
** crossin bita TION***
$\$ Q 20$ (tabulating 1) Barriers
by 05 How is this facility organized...
Page 2 of 2


Percents and totals based on respondents
\$Q25 (tabulating 1) What type of environmental training do employees of this facility need? by 05 How is this facility organized...

Page 1 of 2

| Count Col pet |  |  |  | Row Total |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |  |
| \$025 |  |  |  |  |
| Existing regulations | $\begin{array}{r} 36 \\ 36.4 \end{array}$ | 41 34.2 | 17 31.5 | 34.4 |
| Q25B | 35 | 39 | 18 | 92 |
| New regulations | 35.4 | 32.5 | 33.3 | 33.7 |
| Changes in regralation | 36 | 31 | 16 | 83 |
|  | 36.4 | 25.8 | 29.6 | 30.4 |
| Q25D | 15 | 15 | 4 | 34 |
| Implementation issues | 15.2 | 12.5 | 7.4 | 12.5 |
| Q25E | 17 | 19 | 4 | 40 |
| Problem solving | 17.2 | 15.8 | 7.4 | 14.7 |
| 入is regulations | 11 | 11 | 2 | 24 |
|  | 11.1 | 9.2 | 3.7 | 8.8 |
| Water regulations | 11 | 10 | 4 | 25 |
|  | 11.1 | 8.3 | 7.4 |  |
| Solid waste025 H <br> regs. | 13 | 16 | 1 | 30 |
|  | 13.1 | 13.3 | 1.9 |  |
| Pesticide regs. | 5 | 9 | 1 | 15 |
|  | 5.1 | 7.5 | 1.9 | 5.5 |
| Q25J | 7 | 5 | 0 | 12 |
| Underground storage tank regs. | 7.1 | 4.2 | 0 | 4.4 |
| Hazardous waste regs | 34 | 38 | 15 | 87 |
|  | 34.3 | 31.7 | 27.8 | 31.9 |
| ColumTotal | 99 | 120 | 54 | 273 |
|  | 36.3 | 44.0 | 19.8 | 100.0 |

Percents and totals based on respondents
(Continued)

## \$Q25 (tabulating 1) Training needed

 by QS How is this facility organized...Page 2 of 2

| Q5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Count Col pet |  |  |  | Row Total |
|  | 1 | 2 | 3 |  |
| \$Q25 |  |  |  |  |
| Q25L | 5 | 12 | 5 | 22 |
| SARA Title III | 5.1 | 10.0 | 9.3 | 8.1 |
| Q2 5M | 5 | 9 | 9 | 23 |
|  |  |  |  |  |
| management regs. <br> Q25N <br> Spills or release reg | 10 | 17 | 8 | 35 |
|  | 10.1 | 14.2 | 14.8 | 12.8 |
| ```Q250 Asbestos, lead, PCBs other toxic subs. Q25P``` | 5 | 8 | 0 | 13 |
|  | 5.1 | 6.7 | . 0 | 4.8 |
|  | 2 | 5 | 1 | 8 |
| Ozone depleting | 2.0 | 4.2 | 1.9 | 2.9 |
| substance regs | 4 | 9 | 3 | 16 |
| Toxic substances | 4.0 | 7.5 | 5.6 | 5.9 |
| control act | 6 | 11 | 3 | 20. |
| Pollution prevention | 6.1 | 9.2 | 5.6 | 7.3 |
| Q25STraining requirements | 26 | 28 | 15 | 59 |
|  | 26.3 | 15.0 | 27.8 | 21.6 |
| 025 T | 5 | 8 | 10 | 23 |
| Legal liability of firm or employees | 5.1 | 6.7 | 18.5 | 8.4 |
|  | 99 | 120 | 54 | 273 |
| Columa Total | 36.3 | 44.0 | 19.8 | 100.0 |

Percents and totals based on respondents
273 valid cases: 233 missing cases
\$Q26 (tabulating 1) That are the major barriers to achieving or maintaining environmental compliance? by QS How is this Eacility organized...

| Q5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Count col pet |  |  |  | $\begin{aligned} & \text { Row } \\ & \text { Total } \end{aligned}$ |
|  | 1 | 2 | 3 |  |
| \$Q26 |  |  |  |  |
| Q26A | 3 | 4 | 1 | 8 |
| Impact on production | 2.1 | 2.3 |  | 2.0 |
| Q2 6B | 43 | 45 | 24 | 112 |
| Too costly | 29.9 | 25.9 | 27.0 | 27.5 |
| Q26C | 26 | 31 | 12 | 69 |
| Too many regs. | 18.1 | 17.8 | 13.5 | 17.0 |
| Reeping up with changes | 38 | 37 | 28 | 103 |
|  | 26.4 | 21.3 | 31.5 | 25.3 |
|  | 16 | 14 | 9 | 39 |
| Need for training | 11.1 | 8.0 | 10.1 | 9.6 |
| Q26F | 21 | 13 | 8 | 42 |
| Regulatory inefficiency | 14.6 | 7.5 | 9.0 | 10.3 |
|  | 33 | 41 | 19 | 93 |
| Understanding regs. | 22.9 | 23.6 | 21.3 | 22.9 |
| $\mathrm{Q} 26 \mathrm{H}$ <br> Excessive paperwork <br> c reporting requirmts $026 I$ <br> other | 17 | 8 | 6 | 31 |
|  | 11.8 | 4.6 | 6.7 | 7.6 |
|  | 53 | 84 | 40 | 177 |
|  | 36.8 | 48.3 | 44.9 | 43.5 |
| ColumTotal | 144 | 174 | 89 | 407 |
|  | 35.4 | 42.8 | 21.9 | 100.0 |

Percents and totals based on respondents
407 valid cases; 99 missing cases

## Where To Turn

For assistance with andits, technical information, permits, general information, or fact sheets on specific businesses:

## SBEAP hotline

1-800-578-8898

If you have a complaint, a question, or are unsure of whom to call: Office of the Public Advocate
1-800-357-6087 (in Topeka, 296-0669)

To receive a copy of the SBEAP newsletter, Kansas AIRLines: Center for Environmental Education \& Training
(913) 864-3968


The University of Kansas
Small Business Environmenta! Assistance Program
Continuing Education Building
Lawrence, KS 66045-2608
Phone (913) 864-3968 • Fax (913) 864-5827

The Unversity of Kansas, Kansas State Unversity, and Wichua State University are committed to providing programs and actuittes to all persons. regardless of race, religion, color, sex, disability, national ongin, ancestry, sexual orientation, manital or parental status and, to the extent cosered by law, age or veteran status.

## Kansas SBEAP



Operating through a consortium of:


Kansas State University


The University of Kansas


University

## What Is SBEAP?

The mission of the Small Business Environmental Assistance Program (SBEAP) is to help Kansas small businesses comply with the Kansas Air Quality Act.

SBEAP provides a mechanism to educate, train, and prepare a segment of the business community that traditionally has been unaffected by air quality negulations. SBEAP also provides permitting and technical assistance to businesses that otherwise would not have access to such help because of financial constraints. SBEAP emphasizes technical assistance designed to diminish the burden of compliance. Its staff can introduce you to pollution prevention practices such as changes in product design, substitution of materials, process optimization, waste minimization, and recycling.

SBEAP operates independently of the Kansas Department of Health and Environment (KDHE), but coordinates with the agency to ensure that SBEAP's interpretation of Kansas air quality regulations is consistent with KDHE's intent.

SBEAP provides a confidential, non-threatening source of regulatory compliance assistance, cooperating with the Office of the Public Advocate and the Small Business Compliance Advisory Panel so Kansas small businesses are well served.

## Who Operates SBEAP?

The consortium operating SBEAP is composed of The University of Kansas' Center for Environmental Education and Training (CEET), Kansas State University's Pollution Prevention Institute (PPI), and Wichita State University's Center for Technology Application (CTA).

## What Does SBEAP Do?

SBEAP provides many services, all free to the small business community. They include:

- Sponsoring educational workshops and seminars throughout Kansas.
- Publishing and distributing fact sheets, pamphlets, and technical manuals for businesses affected by air quality regulations.
- Publishing and distributing a quarterly newsletter, Kansas AIRLines, which explains air quality regulations in clear terms.
- Offering small businesses on-site technical assistance.
- Helping small businesses comply with air quality laws and obtain appropriate permits.
- Operating a toll-free hotline, 1-800-578-8898.

Developing an electronic bulletin board through which small businesses will have easy access to current air regulations and technical assistance.


## When Is Your Air Permit Due?

If you think you'll need an operating permit from KDHE's Bureau of Air and Radiation, be aware of scheduled deadlines.

As of press time, EPA had not approved Kansas' Title V operating permit program. KDHE fully expects approval soon after the agency is off furlough. The program approval date and permit application deadlines will be published in the April issue of Konsos AIRLines.

Particularly important is the timeline for Class II permits. You may apply for a Class II permit if your potentiol air emissions classify you as a major source but your actuol emissions fall below the major source threshold ( 10 tons/year for individual HAP; 25 tons/year of a combination of HAP; or 100 tons/year of CO, VOC, PM10, NOx, or SOx). Class II permit applications are much simpler and less expensive to prepare than Class I
 permit applications.
Class I permits are Class I permits are required of sources whose octual emissions are above the listed thresholds.

If you choose to apply for a Class II permit, you must file your application six months before your Closs I permit is due. If you decide to apply for one of the special
permits (called "permits-by-rule"), you must apply by the Class II permit application due date. Permits-by-rule have been developed for organic solvent evaporative sources (surface coating, printing, and degreasing operations), as well as reciprocating engines and hot-mix asphalt plants. (See "KDHE Announces Air Permit Program" in the August 1995 Kansos AIRLines.)

Perhaps you are unsure whether you need an air permit. If so, first calculate your facility's potential emissions. Inventory all emission sources. If you need help, call SBEAP. If after completing your calculations you determine that you do not need a permit based on your potential emissions, keep on site a record of your calculations. If a KDHE inspector visits your facility, you will be able to demonstrate how you concluded that your potential to emit is below the permitting thresholds.

If you determine that you do need an air permit, contact Connie Carreno at KDHE, 913-296-6422, and order the appropriate application forms. SBEAP has completed sample Class II application forms (specifically for solvent evaporative sources) for referral when completing your own application. Call the SBEAP hotline.

KDHE has set a schedule for permit applications. The schedule, which will go into effect after EPA approves Kansas' program, is printed on page 4.

Kansas Small Business Environmental Assistance Program The University of Kansas • Kansas State University - Wichita State University



## Acronyms Used in Kansas AIRLines

| CAA | Clean Air Act (as amended in 1990) |
| :--- | :--- |
| EPA | U.S. Environmental Protection Agency |

HAP hazardous air pollutants
KDHE Kansas Department of Health and Environment

MACT maximum achieveble control technology

MSDS material safety data sheets
NOx nitrogan oxides
PM10 particulate matter equal to or less than 10 microns in diameter

PTE potential to emit
SBEAP Kansas Small Business Environmental Assistance Program

SOX sulfur oxides

VOC
volatile organic compounds

## Ediforial Board

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Kansas Aph hes is a quarterty publication of the kansas small Business Erwtonmental Acstrance Program (SBEAP). The Universit Karsas Sicte University's Pollution Prevention institute. and Whand State Uliverzity's Center for Tectnotogy Application apende SEEAP as a partinerstip. with the mbston of hetping sinal
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polution control and prevention tectriology. focusing on the logat ingts and ablogrtions of small businesses under the Kansas Ar Qurtit Act.
you wh to stont an atricte or woutd Eke me newsletter to address a specinic troptc. confoct SBEAP of $913-864-3968$. This putication is funded by the Kansos Department of Heath and Envionment.

## MACT Affects Aerospace Industry

On September 1, 1995, EPA issued its final MACT standard related to aerospace manufacturing and rework facilities that are major sources of air pollution. A major source emits or has the potential to emit 10 tons/year of any single HAP; 25 tons/year of any combination of HAP; or 100 tons/year of SOx, NOx, PM10, or VOC. The new rule affects cleaning operations, coating operations (primers and topcoats), depainting, chemical milling, and waste handling and storage.

Cleaning operations will be regulated by limiting vapor pressure of solvents for hand-wipe and flush operations to less than 45 mm Hg . The rule also requires affected facilities to follow specific housekeeping and work practice standards.

Primer emissions are limited to 2.9 lbs HAP/ gal (minus water), and topcoat emissions are limited to 3.5 lbs HAP/gal (minus water). The rule allows flexibility to control emissions through add-on equipment or use of low-solvent coatings. Coatings must be applied via flow coat, roll coat, brush coat, dip coat, electrostatic attraction, or high-volume low-pressure spray guns. Coatings must be applied in a booth and air
exhausted through dry particulate filters or a waterwash system.

Depainting must be accomplished through media blasting equipment, nonchemical techniques, or chemical strippers that do not contain HAP. A limited amount ( $26-50 \mathrm{gal} / \mathrm{aircraft} / \mathrm{year}$ ) of HAP-containing solvents such as methylene chloride may be allowed for spot stripping.

HAP and VOC emissions from chemical milling maskant operations must be no greater than $1.3 \mathrm{lbs} / \mathrm{gal}$ (minus water). Emissions averaging, use of compliant coatings, and add-on controls are acceptable methods of achieving compliance.

The final rule also includes waste handling and storage, monitoring, and reporting requirements. In October 1995, KDHE mailed an EPA Fact Sheet to Kansas industries potentially affected by the aerospace MACT standard. To receive a copy of this fact sheet, call the Public Advocate, 800-357-6087, or the SBEAP Resource Center.

## Three Chemicals Removed from TRI and VOC Lists

Effective June 1995, EPA removed three chemicals from the Toxic Release Inventory (TRI) chemicals list: acetone, nonaerosol forms of sulfuric acid, and ammonium sulfate. The TRI is a publicly accessible database to which certain industrial facilities must report their annual environmental releases of listed toxic chemicals. The TRI list currently contains more than 600 chemicals.

Acetone. In addition to removing acetone from the TRI list, EPA also removed acetone from the list of volatile organic compounds under the Clean Air Act. Acetone is now exempt from regulation as an ozone precursor because EPA concluded that acetone's contribution to the formation of tropospheric ozone is negligible.

Ammonia. Companies must now report releases of aqueous ammonia solutions as 10 percent of the total aqueous ammonia volume. Anhydrous forms are reportable as 100 percent.

Sulfuric acid. EPA concluded that nonaerosol forms of sulfuric acid do not adversely affect human health or the environment under normal exposure.

Although these three chemicals no longer reside on the TRI list, they still are considered hazardous and are subject to OSHA (Occupational Safety and Health Administration), DOT (Department of Transportation), National Fire Code, and hazardous waste regulations.

For information about nonhazardous alternatives to these chemicals, call the SBEAP hotline. For information on TRI reporting requirements, call EPA's technical hotline, 800-535-0202, or KDHE's Bureau of Air and Radiation, 913-2961690.


## Upcoming Standard Targets POTWs

If you manage or operate a publicly owned treatment works (POTW), you may be regulated under a pending MACT standard. If your POTW is a major source of HAP (emitting 10 tons or more/year of one HAP or 25 tons or more/year of a combination of HAP), you may be affected by the new standard. Control of your air emissions will further depend on whether your influent meets or exceeds two of the three following criteria:

- Dry weather flow is greater than 50 million gal/day;
- Volatile organic HAP concentration is greater than five parts per million by weight on an annual average basis;
- Industrial flow is greater than 30 percent by volume.
Assuming that your operation falls under the proposed regulation, EPA recommends that you take one or more of the following steps:
- Develop a control approach (source control, engineering control, or a combi-
nation) to reduce HAP emissions below the 10/25-ton major source threshold;
- Use pretreatment or process modifications so your facility no longer meets two of the three threshold criteria;
- Cover the units before biological treatment to capture HAP emissions.
EPA plans to publish the proposed MACT standard in February 1996. After a public comment period and agency review, EPA will publish the final MACT standard, projected for March 1997. For a copy of the proposed MACT, see EPA's electronic bulletin board,
ttnbbs.rtpnc.epa.gov or via modem at 919-5415742, or call the SBEAP Resource Center, 913-864-3968.

SBEAP has prepared a fact sheet outlining the POTW MACT standard. For a copy or further assistance, call the SBEAP Resource Center.

| Source type - | SIC code(s) | Class I permit <br> Number of days following program approval | Class II permit <br> Number of days following program approval |
| :---: | :---: | :---: | :---: |
| Group A Natural gas transmission | 4922 | 180 deys | N/A (SIC code includes only major sources) |
| Group B <br> Agriculture, forestry; and Gshing; mining: construction and wholosale/retall trado | 0111 through 1799 5012 through 5999 | 270 days | 90 days |
| Groap C <br> Manufacturing, transportation; communications; electric, gas; and sanitary services. All other sources not elsewhore listad. | 2011 through 3999 4011 through 4971 All other applicabla SIC codes | 368 days | 180 days |
| Note: Title V permit requiremen regulatod under tha chromium, | or arem sources heve <br> cleaning, degraasing | doferred for five yea othylena oxdde MAC | his affects area sources ndards. |

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## Haz Waste Disposal May Become Easier

Recent legislation is raising hopes that SQG (small quantity generator) wastes soon will be managed properly through existing household hazardous waste (HHW) facilities.

SQG is a term used to identify businesses that generate certain quantities of hazardous waste. It also refers to their regulatory requirements. SQGs are the smallest generator category of hazardous waste, and are exempt from certain regulations. SQGs sometimes are incorrectly referred to as "small business hazardous waste generators." Keep in mind, however, that it is the amount of hazardous waste a business generates, rather than the size, that determines its category.

In Kansas, a small quantity generator is a facility that generates no more than $55 \mathrm{lbs}(25 \mathrm{~kg}$ ) of hazardous waste, or no more than $2.2 \mathrm{lbs}(1 \mathrm{~kg})$ of acutely hazardous waste, per calendar month. Although SQGs in Kansas are not subject to notification or reporting requirements, they are required to manage their hazardous waste in an environmentally sound manner.

SQGs have had few alternatives other than disposing of their hazardous waste along with other solid waste, because the small quantities make professional hazardous waste disposal economically prohibitive. As a result, hazardous waste continues to enter municipal solid waste landfills in Kansas, potentially threatening land-
fill employees and contaminating groundwater and surface water. But that situation may soon be remedied.

House Bill 2036, signed into law in April 1995, authorizes KDHE to provide grants for developing and implementing SQG collection programs. Kansas has 20 permitted HHW facilities, which will be able to collect and manage SQG wastes under the new law. However, the HHW facility must first receive approval to modify its operations plan. An acceptable plan will detail how the HHW facility intends to collect, store, segregate, and dispose of the additional waste, ensuring that it is not exceeding regulation quantities.

To date, Johnson, Douglas, and Jefferson counties have taken advantage of the SQG grant program. Johnson county has submitted a permit modification and intends to start collecting certain SQG wastes in spring 1996. Douglas and Jefferson counties have proposed a joint assessment to analyze the potential number of SQGs in their area and the possible volume of waste to be collected and managed.

For further information contact Kathleen Nyquist, HHW program coordinator, 913-2961611, or call your local HHW program manager.

## Mark Your Calendar Solvent Alternatives Expo Planned for April

Are you still using chlorinated solvents? Have you tried water-based cleaners and found them unsatisfactory? Would you like a variety of vendors to demonstrate their products on your hard-to-clean materials? If so, SBEAP's Second Solvent Alternatives Expo is for you.

The expo will be held April 25, 1996, at the Salina Bicentennial Center. More than two dozen vendors will demonstrate their products and equipment on your dirty parts. The results should help you decide whether an alternative cleaning product will meet your needs.

In addition, speakers will cover such topics as choosing a cleaning product and a cleaning
process, and regulatory implications of traditional and new technologies and materials. The speakers also will identify other process characteristics to consider when switching solvents, including mechanical cleaning, temperature, and drying time.

Plan to attend this FREE event! To receive a brochure or to register, call SBEAP, 800-578-8898.

## Kansas P2 Case Study

## Midland Brake Reduces Waste Costs

## Company history

Midland Brake in Iola, Kansas, manufactures brakes and brake components for large trucks and tractor-trailers, with gross sales greater than $\$ 85$ million/year. Dan Willis, environmental engineer at Midland, leads the company in pollution prevention planning to reduce waste costs.

For most new manufacturing projects at Midland, the company requires a two-year payback. For environmental or safety projects, this payback may be waived. Potential fines often are included in the financial justification of an environmental project.

## Employee involvement

Midland's pollution prevention efforts begin with its employees. Teams of $10-12$ people and one engineer hold biweekly 45 -minute team meetings that explore ways to prevent pollution, increase efficiency, and reduce waste. Employees wear red "T.E.A.M." (Total Effort at Midland) Tshirts. All manufacturing, maintenance, ergonomics, environmental, safety, purchasing, and office staff belong to a team. Teams that submit four cost-saving ideas per year, one of which is related to the environment or safety, earn a day off work.

Midland bales cardboard and recycles office white and computer paper. This has reduced plant solid waste volume by 80 percent since 1990. The first baler cost $\$ 6,000$. That amount was paid back in less than two years from cardboard sold to a local recycler. The employees

then built a second baler. Cost savings from recycling cardboard totaled $\$ 17,000$ in 1994.

## Cutting oil recovery system

Midland uses water-based cutting fluids for machining zinc and aluminum parts. The fluid is piped directly to the machines, virtually eliminating spills. Tramp oils are removed with a coalescer. The cutting fluid's oil/water concentration is adjusted by a technician before the fluid returns to the cutting fluid storage tank. By vising better quality equipment, tightening seals to prevent tramp oil leaks, cleaning sumps, and removing chips (wbere bacteria may grow) via a centrifuge process, Midland has extended the life of its cutting fluids. Cost savings from switching to water-based fluids funded a new position responsible for preventive maintenance on the cutting machines.

When disposal is required, oil and particulates are separated from water in the coolant. The water goes to an industrial wastewater treatment facility and the oil is sent off site for fuel blending. As a result, Midland has reduced its waste stream by 73 percent, from 37,000 gallons in 1990 to 10,000 gallons in 1995 (projected). The cost savings from these efforts is $\$ 66,000$ annually.

## Solvent cleaners material substitution

Midland has switched from petroleum-based solvent to water-based detergent in its tapping and turning areas. Individual heated parts washers were installed so water-based detergents could be used: Midland found that liquid Tide or Dawn worked well for these parts washers. Annual cost savings are $\$ 2,500$.

Waste from these parts washers, as well as floor scrubber water and stormwater runoff, goes into a newly constructed wash pit. The wash pit is part of Midland's stormwater pollution prevention plan. All water from the pit is passed through a $\$ 1,200$ coalescer to separate oil and water. The oil is recycled by a vendor at no charge to Midland. The water is sent to the publicly owned treatment works. Avoiding potential liability and fines was part of the. justification for the firm's $\$ 300,000$ stormwater pollution prevention project.

## Chemical finishes

Midland applies chromate conversion coating to some manufactured parts, primarily to provide corrosion resistance. Chromate conversion involves an alkaline bath wash followed by two countercurrent rinse baths. Parts are then placed in a nitric acid/ammonium bisulfate etch bath, followed by two countercurrent rinses. Next, parts are dipped into the chromic acid tark and rinsed twice; the final rinse is heated. Improvements on this process since 1990 include reduced water use (lower overflow of water in the rinse tanks) and longer drain times (which reduce chemical carry-over).

In the nitric acid etch bath, process improvements decreased nitric acid use by 42 percent (from 209,000 pounds in 1990 to 88,000 pounds in 1994). Staging time was increased to minimize drag-out, and immersion times were cut in half.

Midland has a wastewater treatment system for the chromate conversion line. Hexavalent chrome is reduced to trivalent chrome and the pH is adjusted. Calcium chloride and ferric chloride are added, as is a polymer flocculent, to precipitate the chrome and zinc. The precipitate is pressed to remove excess water, forming wet filtrate cakes that are shipped to Rockwood, Tennessee. There the cakes are vaporized in a kiln, gases are condensed, and zinc and chromium are sent back to the foundry in Pennsylvania. These line changes have reduced hazardous cake waste by 35 percent (from 56,700 pounds in 1990 to 36,800 pounds in 1994). This represents an annual cost savings of $\mathbf{\$ 3 4 , 0 0 0}$.

## Cooting operation

Midland switched from manual to automated powder coating in fall 1993. The new booth cost $\$ 10,000$, and payback took less than two years. The excess powder is mixed with virgin powder in a 1:1 ratio. No air or liquid wastes are associated with this process. Because the powder application is automated, operators no longer need respiratory protection-a substantial added benefit.

Every time powder is collected and mixed with virgin powder for reapplication, particle size is reduced. Eventually, powder particles become so small they no longer adhere to the parts. The

## Degreaser Exemptions Change

The December 1994 degreaser MACT standard has been revised. If you use only small amounts of halogenated solvents, you probably are exempt from the rule's requirements. Chlorine is a halogen, and the six chlorinated solvents regulated under this MACT are methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, and chloroform. The rule exempts:

- Wipe cleaning activities-using a rag saturated with halogenated solvents or a spray cleaner containing halogenated solvents.
- Small cleaning buckets-buckets, pails, and beakers holding two gallons ( 7.6 liters) or less of a halogenated solvent.

Questions? Call the SBEAP hotline.
powder is sent to the landfill as nonhazardous waste and the process begins again with virgin material.

## Conclusion

Midland's success can be attributed to management commitment, employee involvement, and a staff member who is an advocate of the environment. Midland's management served on the T.E.A.M. committees, reduced the payback requirements for environmental and safety projects, and allowed time in the work day for employees to participate on committees. Midland employees responded enthusiastically, including building their own cardboard bailer. Dan Willis championed the pollution prevention efforts by attending conferences and workshops and networking with other manufacturers, technical assistance providers, and vendors. From 1990 to 1994, total cost savings from the company's pollution prevention programs amounted to more than $\$ 190,000$. Midland Brake was recognized as a "Trendsetter" by the 1995 Kansas Pollution Prevention Awards Committee.

For further information on Midland's efforts, contact Dan Willis, 316-365-6911, extension 259. For other case studies or to discuss pollution prevention opportunities for your facility, contact SBEAP, 800-578-8898.

## Calendar

February 7
46th Annual Environmental
Engineering Conference
Lawrence
Call Chris Barritt, 913-864-3968

## February 7-9

International Conference on Air Pollution from Agricultural
Operations
Kansas City, Missauri
Call Albert J. Heher, 317-494-1214
March 3-4
Transportation of Hazardous Materials
Overland Park
Call Barbara Miles, 913-897-8549

## March 26-28

AWMA conference on woste combustion in boilers and industriol furnaces
Kansas City, Missouri
Call Beth Rice, 816-532-7600

## April 12

Envinonmental Risk Management
Overland Park
Call Barbara Miles, 913-897-8549

## April 25

SBEAP's Solvent Alternotives Expo Salina
Call Tim Piero, 913-532-6501
May 14-16
Certified Hozardous Materials
Monager Review Course
Wichita
Call Pam Hicks, 913-897-8522
May 17
CHMM Exam
Wichita
Call Pam Hicks, 913-897-8522
P2 for Printers Teleconference Overland Park and Wichita Call Jean Waters, 913-532-6501

## Resources

## MACT Compliance Vldeotapes Avallable through SBEAP

Have you missed the technical teleconfereaces that SBEAP downlinked over the past year? If so, call the SBEAP Resaurce Center, 913-864-3968, to obtain the following videotapes and technical manuals free of charge. Tapes may be copied at your own expense.

- Clearing the Air on Clean Air: Strategies for Perc Dry Cleaners
- Clean Air Act Compliance for Vapor Degreasers
- Clean Air Act Compliance for Chromium Emissions from Electrolytic Processes


The University of Kansas, Kansas State University, and Wichita State University are EEO/AA state educatianal institutione
The University of Kansas
Kansas SBEAP
Continuing Education Building
Lawrence, KS 66045-260B

## Infosheeft

## GALLERY PRE-EMERGENCE HERBICIDE

Every weed is a tough weed. They're even tougher once they emerge and get a stranglehold on turf and ornamentals. The time to fight weeds is before they appear, and the best preventative treatment for broadleaf weeds on the market today is Gallery* 75 Dry Flowable herbicide.

Gallery ${ }^{+}$is a selective preemergence herbicide that prevents the growth of 95 species of broadleaf weeds for up to six to eight months. And it can be used in 440 field-grown and 230 container-grown ornamentals.

What makes Gallery so unique is its active ingredient, isoxaben, a new class of chemistry developed by DowElanco.

## Weeds controlled

One application of Gallery herbicide at 0.66- to $1.33-$ pounds per acre will provide six to eight months pre-emergence control of 95 broadleaf weed species such as:

- bittercress - black medic
- Carolina - chickweed
geranium - speedwell
- clover - dandelion
- filaree - groundsel
- henbit - kochia

| - little mallow | - morning- |
| :--- | :--- |
| - mustard | glory |
| - pineappleweed | - pennywort |
| - prostrate | - pigweed |
| knotweed | - plantain |
| - Russian thistle | - thistle |
| - woodsorrel | - purslane |
| (oxalis) | - spurge |

## Turfgrass and ornamental recommendations

Gallery is recommended for use on most established cooland warm-season turfgrasses. Turfgrasses include:

- bahiagrass - bentgrass
- bermudagrass • bluegrass
- buffalograss - ryegrass
- centipedegrass• fescue
- St. Augustine- - zoysiagrass grass

It can be used in more than 440 landscape-grown and 230 container-grown ornamentals, ground covers, nursery stock, non-bearing fruit and nut crops, non-bearing vineyards and non-cropland areas.

Gallery should not be applied to:

- golf course putting greens or grass grown for seed;
- nursery seedbeds, forest or Christmas trees seedling transplant beds;
- newly seeded turf (including
overseeded turf) before seedlings are established (three-leaf stage and tillering) and well rooted. Do not overseed established turf sooner than 60 days following an application of Gallery 75 DF .


## Tank mixing

Gallery 75 DF may be tankmixed with Surflan* A.S. herbicide and applied to landscaped and field-grown ornamentals. This one-two punch will provide pre-emergence control of a broad spectrum of annual grass and broadleat weeds. It can also be applied to warm-season turfgrass for weed control.

Tank-mix Gallery with many other labeled herbicides, fungicides and insecticides to expand pest control efforts in turf and ornamentals. Although Gallery won't control established weeds, it can be tankmixed with a labeled postemergence herbicide to knock out existing weeds.

In addition, Gallery is available in a number of leading fertilizers to provide broadleaf weed prevention and fertilizer in one convenient application.
(over)

[^9]
## Gallery Infosheet

## How Gallery works

Gallery must be activated by at least one-half inch of rainfall or sprinkler water to set up a solid control area around the weed seedlings. As the weed seeds germinate, Gallery disrupts and halts root and stem development of the weeds and seedlings gradually die before they ever break the soil surface.


Activated by a half-inch of water. Gallery sets up a control area around weed seedlings.

As weed seeds germinate. Gallery shuts down further growth.

With Gallery, seedlings die before you ever see them.

## Active ingredient

Gallery herbicide contains the unique new chemical isoxaben developed by DowElanco. Isoxaben provides excellent plant tolerance and long-lasting, broad-spectrum control.

It bonds tightly with soil particles and is low in water solubility, so it won't move out of the weed germination zone.

Studies show that Gallery herbicide is stable on the soil surface and resists leaching even in heavy rainfall. Once isoxaberı is activated, it establishes a herbicidal zone that stops the emergence of germinating broadleaf weeds so they won't interfere with ornamental and turfgrass growth.

## When to apply

To prevent an onslaught of broadleaf weeds, Gallery should be applied just prior to emergence of target weeds. A fall application of Gallery is especially beneficial because it will prevent winter-, fall- and many of the spring-germinating weeds. In fact, in northern states, one application may provide year-round control of broadleaf weeds. Southern climates may need a second application.

## How to apply

When applying Gallery 75 DF, use a properly calibrated low-pressure herbicide sprayer that provides uniform distribution. Spray-tip screens should be no finer than 50 mesh. Gallery should be applied at 0.66 - to 1.33 -pounds per acre along with 10 - to 200 -gallons
of water carrier per acre
Calibration should be checked frequently to be sure equipment is working properly and distributing spray uniformly

Special application precautions:

- Eliminate existing weeds with a post-emergence herbicide or by hand cultivation.
Gallery doesn't control established weeds.
- Remove or thoroughly mix into the soil weed residues, prunings and debris prior to treatment. Soil in nonturfgrass areas should be in good condition and free of clods at the time of application.


## Gallery \& Integrated Pe. Management (IPM)

The key to controlling weeds through an IPM program is properly identifying your problem weeds, and, more importantly learning when they germinate.

To achieve optimum results with Gallery, apply the herbicide just prior to the time problem weeds germinate. By accurately timing the application of Gallery, you will save time and labor during your busy season. You'll also reduce your dependency on post-emergence herbicides, using a smaller amount of herbicide overall.

DowElanco

## Team Infosheed

## How Team works

Team must be applied prior to weed seed germination and activated by at least one-half inch of rainfall or irrigation. Once activated, Team sets up a solid "weed control zone" about one-half inch below the soil surface. Team stops weeds from germinating by inhibiting cell division in the seed as soon as it begins to root.

## How to apply

For uniform application, use either a drop-type or rotary spreader designed for the application of granular herbicides. Calibrate spreaders prior to use and check frequently to ensure the granules are uniformly distributed. Spread only half the desired amount to start, then apply the remainder at right angles to the first application.

## When to apply

To stop grassy weeds such as crabgrass, apply Team in early spring or late fall, approximately one to two weeks before weed seeds germinate. This generally occurs when the soil temperature is at least 50 degrees Fahrenheit for three or more days. Apply Team in spring for control of summer annual grasses such as
crabgrass, foxtail and barnyardgrass, and in late spring for latespring or early-summer germinating annual grasses such as goosegrass. Apply in late summer or early fall to control annual bluegrass (Poa annua).

## Take-home points

When selecting a pre-emergence herbicide, keep these benefits of Team in mind:

- It works. Team provides close to 100 percent control of grassy weeds and some broadleaf weeds.
- Won't leach. The low water solubility of Team means it stays where it's applied and resists leaching - even in heavy rain or during irrigation.
- Gentle. Team can be applied near well-established ornamentals without concern of damage.
- Versatile. In addition to a claybased formula, Team is available on a number of different fertilizer formulations.
- Economical. Team is competitively priced. And, when applied with fertilizer, it's not only economical, you'll save labor costs, too.
For more information on Tearn, call 1-800-352-6776 or contact your DowElanco sales representative.

*WAT: Weeks After Treatment

MI, OH, IN University Studies


## Infosheet

## TEAM PRE-EMERGENCE HERBICIDE

When it comes to managing annual grassy weeds, Team* herbicide consistently provides effective pre-emergence control.

Team is a selective, pre-emergence herbicide used to control crabgrass, goosegrass and most other annual grassy weeds in established turf, such as lawns and golf courses. Team combines the strength of two powerful and proven herbicides Balan* pre-emergence herbicide (benefin) and Treflan* pre-emergence herbicide (trifluralin) - for effective, season-long control. Studies show Team is tough on weeds, yet gentle on turfgrasses.

## Product of choice

Team provides turf managers with the qualities they want most in a pre-emergence herbicide - effectiveness and economics. Since coming on the market in 1985, Team has been proven effective at stopping troublesome grassy weeds, even in years with heavy infestations. Turf professionals who know the value of sticking with a proven performer know that predictability is what makes Team herbicide their product of choice.

## Weeds controlled

As a broad-spectrum herbicide, Team provides effective pre-emergence control of grasses, and partial control of some broadleaf weeds including:

- crabgrass - goosegrass
- foxtail
- barnyardgrass
- annual • spurge bluegrass •woodsorrel (Poa annua) (oxalis)


## Turfgrass recommendations

Team is recommended for use on most established turfgrasses including:

- fescue - zoysiagrass
- bahiagrass - bermudagrass
- St. Augustine- - ryegrass, grass perennial
- centipede- - bentgrass grass
- bluegrass, perennial (Kentucky)


## Active îngredient

One of the active ingredients in Team herbicide is Balan herbicide, which is well-known for its control of crabgrass and other annual weeds. Because Team is relatively water insoluble, it binds tightly to soil particles. This
means Team stays where it's applied and resists moving or leaching out of the weed germination zone, even in heavy rainfall or during irrigation.

## Application precautions

While Team can be applied with little concern about damaging even sensitive turfgrasses, some precautions remain:

- Do not apply Team in spring to turfgrass planted the previous fall.
- A spring application of Team in bermudagrass may cause thinning if the area has been overseeded with winter grasses.
- Do not use on newly sprigged areas of bermudagrass, St. Augustinegrass or centipedegrass until these turfs are well established.
- Delay reseeding for at least six weeks after applying the lowest rates of Team herbicide. and 12 to 16 weeks after the highest recommended rates.
Always read and follow label directions.

[^10]
## Other Agency (EPA)Personnel Acting In An Ombudsman Capacity

1. Clarence 0 . Lewis serves as the Agency's Registration Division Ombudsman in the Office of Pesticide Programs within the Office of Prevention, Pesticides, and Toxic Substances. His telephone number is (703) 305-5446.
2. Robert Martin serves as the Agency's Resource Conservation and Recovery Act (RCRA) Ombudsman in the Office of Solid Waste Emergency Response. His telephone numbers are (202) 269-9361; Toll Free number, 800-267-7937.
3. Karen V. Brown serves As the Agency's Asbestos Ombudsman;
4. Karen V. Brown serves as the Agency's Small Business Ombudsman. Both offices are in the office of Small and Disadvantaged Business Utilization within the Executive Office of the Administrator. Her telephone numbers are (703) 305-5938; Toll Free. Hotline, 800-368-5888.

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## STATE SMALL BUSINESS ASSISTANCE PROGRAMS

## A. OVERVIEW

The first two parts of this Guide describe the nature and challenges of air pollution, and detail six major provisions of the new Act that will most directly affect the small business community. The range of businesses affected by them is so diverse, however, that it is impractical to tailor this Guide to individual industries, or to anticipate all the difficulties that companies may face when orying to comply with the Act's requirements.

1. Small Business Special Needs: Congress recognized the particular problems that many small businesses would have in dealing with the Act's complex requirements. A typical small business employs fewer than 50 people, and is the only business operated by the owner. It is the comer drycleaner, the "mom and pop" bakery, the auto body repair shop, gasoline service sration. the machine, tool and dye company, or one of a host of other local business establishments. Many have been in the same family and neighborthood for generavions. (See Appendix. A for a list of businesses typically affected by air pollution control measures.)

Air pollurion conmrol regulation may seem very complex to many small businesses. Many may nor be able to afford to hire lawyers or environmental specialists to interpret and comply with all the requirements they may be responsible for in the new Act. Most may be hard pressed to inform thernselves about the most basic requirements and deadines of the convol programs that will affeci" them, les alone the mare complicated issuesthey are going to have to address to control air emissions, such as:

- The types of pollutants their company emits that are subject to the Acr's requirements:
- The mechods they can use to estimate emissions for a permit application;
- The types of control tectnologies that are best and least costly for controlling a specific production process or chermical substance they use to make goods and services; and
- Process or substance subsitites they can use to prevent or reduce emissions.

2. State Lead for Providing Small Business Assistance: The Act gives each state government the lead in developing and irmplemening a Small Business Techrical and Environmental Compliance Assistance Progrom as part of legally enforceable state implementation plans.
3. The Act's Definition of a Small Business: The Act establishes certain criteria that a company must meet to qualify for assistance as a small business. It must be a small business as defined in the Small Business Act which generally means that it is an independendy owned and operated concern that is not dominant in its field. The business must be owned by a person who employs 100 or fewer individuals, and it cannot be a major stationary source of either a primary urban (so-called "criceria") pollutant or toxic air pollutant as described in ParI I. It cannot, in fact, emit 50 tons or more of a single pollutant a year, or more than 75 tons of all regulated pollutants. State governments can modify some of these requirements provided that the particular source does not emit more than 100 tons a year of all regulared pollutants.
4. Federal Oversight and Support: EPA will be providing several forms of guidance and assistance to these state assistance programs for the full dumaion of the Act.
-Federal Guidelines: EPA published final guidelines for states to draw upon to develop their assistance programs. The Agency must approve each state compliance and assistance program to ensure that it meets the Acr's requirements.

Oversight and Monitoring: The EPA Ombudsman in the Office of Small and Disadvantaged Business Utilization will oversec and monitor all state assistance programs and make periodic reports to Congress on each state's progress: Among other things, the EPA Ombudsman will determine how weil the state programs are working and make sure that the information and assistance the states provide is understandable to the layman.
-Technical Assistance and Researeh: EPA will share information and research that it has developed nationally with each stare assistance and compliance program. Seares will be able to receive technical assistance through several EPA Centers and Hotines. These Centers and Hodines will provide a broad range of assistance including information concoming the Clean Air Act requirements, control technology data, pollution prevention methods and altematives, emission measurement mechods, air pollution monitoring devices, and prevention of accidental releases of toxic chemicals into the enviromment. A listing of these Centers and Hodines (including their areas of expertise and telephone numbers), is included in Appendix $C$.

## B. COMPONENTS OF AN OVERALL STATE ASSISTANCE PROGRAM

By November, 1992, each stase muss develop a plan for implementing a Small Business Seationary Source Technical and Environmental Compliance Assistance Program. Congress. envisioned that these programs would be in place before small businesses begin to feed the direct effects or deadines of the Act.

Exch stare program is expected so include three componenss: (1) appoinoment of a state small business ombidsmer; (2) establishment of a comprehensive small business assistance program; and (3) appoinument of a seven-member state compliance advisory panel.

1. State Ombudsman: The firse component is the State Ombudsman who will act as the small business community's representarive in maners thas affect it under the Act. Other responsibiliices of the Stare Ombudsman could be $x$ :

- Review and provide compreins and recommendarions to EPA and statehocal air pollurion consrol aumbrivies reganding the developmens and implement of regulations thas impect small businesses:
- Holp disseminare informarion abour upcoming air regulacions, control requiremenss, and ober pertinem maners so small bosinesses;
- Refer small basinasses 20 the appropriate specintiss in sure goverment and elsewhere for belp widh parricular needs (egg, available conreol-vechnologies and operaing permit requircments); and
- Condicer smodies wo evaluïre the effects of the Ace on sprese and locel economies, and or small businewses geperally.

2. Small Business Astistance Program (SBAP): The second component of the overill sate program is the Smoll Business Assistance Program (SBAP) which will be a rechnical and administrave support component within the state government The SBAP siff should have zccess to air quality experts, technically proficient eagineers, scientists and managers, and environmencal specialisss who will provide support and echnical assisunce needed by small borsinesses to comply with the Act's requirements. Refred respoasibitivies include:

- Informing businesses of all requirements in the Act that apply to therr, and the dates these requirements will apply:
- Helping small busineses deal with specific rectnical, adnuinistraive and complisnce problems:
- Disseminaring up-to-date information about the Act to the small business community, including easy to understand public information marerials; and
- Referring small businesses to environmental auditors who can evaiuate how effective a company's work practices, monitoring procedures, and record keeping are for complying with applicable clean air requirements.

3. State Compliance Advisory Panel: The third component of the overall state assistance program will consist of a seven member state compliance achisory panel in each state for determining the overall effectiveness of the state SBAP. Four of these members must be small business owners or representatives selected by the state legislature; the governor of each state will select two other members to represent the "general public." The seventh member will be chosen by the head of the state agency responsible for issuing operating permits.

The state compliance advisory panels will review and render advisory opinions on the effectiveness of the state SBAP, and make periodic progress repors to EPA's Small Business Ombudsman concerning compliance of the small business program with other permitnent federal regulacions. The compliance advisory panels must also make cermin that information affecuing small business is writen in a style that is clear and understandable.

## 4. Key Dates or Deadlines for Small Businesses:

- By November 15, 1992 all states must submit to EPA plans for establishing a Small Business Assistance Program. EPA guidelines recommend that each State establish its Ombudsman and Compliance Advisory Panel so they can assist in establishing the Small Business Assistance Program.
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CLEAN AIR ACT
SMALL BUSINESS OMBUDSMEN AND TECHNICAL ASSISTANCE DIRECTORS

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| NV | Aaph Capuro | (S) | 17021 6a7.4670. $\times 3162$ (6001) $992-0900, \times 4670$ | Oavid Comperthenete | $\begin{aligned} & \text { (7021687.4670, } \times 3118 \\ & \text { (S) }(800) 992.0900) \times 4670 \end{aligned}$ |
| NH |  |  |  | Rudotph Carter | (603) 271.1379 |
| NJ | John Serkee | (n) | $\begin{aligned} & 16091633.7308 \\ & 18001643.6090 \end{aligned}$ | Cruck McCarty | (609) 292.3600 |
| NM | Edga Thormon | ( 4 ) | $\begin{aligned} & 15051827-2855 \\ & 18001879.3421 \end{aligned}$ | Cectua wimmens | $\begin{array}{r} 15051827.0042 \\ \text { (N) } 1800) 879.3421 \\ \hline \end{array}$ |
| NY | Doreen Monideone | IN1 | $\begin{aligned} & 12121803.2282 \\ & 18001782.8369, \ldots \\ & \hline \end{aligned}$ | Marian Mudar | $\begin{array}{r} \text { (518) } \$ 57.3833 \\ \text { (5) } 18000780.7227 \end{array}$ |
| NC | Edvthe McKinnoy | (n) | $\begin{array}{r} 19191733.1267 \\ 1800) 829.4841 \\ \hline \end{array}$ | Fon Jotrison | (519) 733-0824 |
| no | Jell Burgess | (5) | $\begin{aligned} & 17011326-5153 \\ & 18001755 \cdot 1825 \end{aligned}$ | Tom Bachman | $\begin{array}{r} 17011328.5188 \\ \text { (S) } 18001755.1625 \\ \hline \end{array}$ |
| OH | Maxa Shananen |  | 1614] 224-3383 | Alek Caloskt | (614) 728.1742 |
| OK | Steve Thampson |  | (405) 271.8056 | Alwno Nond | (405) 271.1400 |
| OR | Pawl burner | (S) | $\begin{aligned} & 15031229.5776 \\ & 1800+452-4011 \end{aligned}$ | Terry Obteshika | (5031 229-6147 <br> (5) $18001452-4011$ |
| PA | Rrcherd Sogrow-Daly |  | 1217772.2889 | Cectly Beall | $\begin{array}{r} \text { (215) } 656.8709 \\ \text { (S1 } 18001722-4343 \end{array}$ |
| PA | duan Wooctotfe |  | (8009) 720-5595 | Francisco Claucio | 18091 767-8071 |
| RI | Roger Green |  | 1401) 272-2771 | James 5antruck | $\begin{aligned} & 14011277-2601 \\ & \text { (S) } 18004253-2674 \end{aligned}$ |
| sc | Robon Stephens | (A) | $\begin{array}{r} 18037 \\ 1834-6487 \\ (6001819-9001 \\ \hline \end{array}$ | Chad Pollock | $\begin{gathered} 18037734-2765 \\ \text { (N) } 18001819-9001 \\ \hline \end{gathered}$ |
| 50 | Joe Msomencak |  | $\begin{array}{r} (605) 773.3151 \\ (8001 \\ \hline \end{array}$ | Brvan Gustefson | 1605) 773.3351 |
| TN | Einest Slankmatio |  | (615) 532-0734 | Linde Sactur | $\begin{array}{r} \text { (8151 532-0779 } \\ \text { Isi } 16001734.3619 \\ \hline \end{array}$ |
| TX | Temra Sheo-0aman |  | $\begin{aligned} & \text { (612) 239-1062 } \\ & \text { (800 } 442-2827 \end{aligned}$ | Kerry Orake | $\begin{array}{r} 15121239-1112 \\ \text { in } 1000947.2827 \\ \hline \end{array}$ |
| UT | Tamese Wherton |  | $10011{ }^{536-4231}$ | Frences Berrusis | $\begin{array}{r} 18011536-1056 \\ \text { NM } 18009270-440 \\ \hline \end{array}$ |
| VT | - |  |  | Kovin Bracey | 18021 241-3861 |
| VA |  |  | -.... | Aichard Rasmussen | (5) 1800 ) 5988.4394 |
| v 1 |  |  | - | Merven Stuplaten | (809) 724.3320 |
| WA | Legtron Prate |  | 13801407.2018 | Jerry sowort | (360) 407-6805 |
| wv | Korneth Shaw | (S) | 1304 558.1213 <br> 1800 242-2474 | Fred Ourhsom | $\begin{array}{r} 1304) 568.1217 \\ \text { ISW800) } 247.2474 \end{array}$ |
| wi | Roger Necter | - ${ }^{\text {a }}$ | $\begin{array}{r} 16084269-1386 \\ 18001435.7274 \\ \hline \end{array}$ | Pem Cruateneon | $\begin{array}{r} 16001267.9214 \\ \text { N } 40001435.7274 \end{array}$ |
| wr | Kelly Ambener |  | 13071772.7388 | Cheries Aattimon | (302) 727-7391 |



## WHERE TO CALL FOR MORE INFORMATION AND HELP

## small busmess ombuosman

Toll froe
(800) 368-5888

Local and DC Area
(703) 305-5938
T.D.D.
(703) 305-6824

## PAx

17093 305-4422

## OTHER EPA MOTLANES

- Watershed into. Resource System
$1800726-5253$
- Indeor Air Qualizy informatron Clearinghouse
Radon
18001438.4318
- Ar Control Tech. Assistance Centor 19191541.0800
- Matal Sources Emissions
- Stratospheric Ozone Piotection (CFC's)
- Electric Magnetic Fields 13131868-4511
(8001 296-1996
- Acid Rarn lemissions trading. auctions. general inlormation 18001 363-23e3
- Sate Drinking Water (public water supply.
technucal and reguiatory issuesi
2021 233-9620

Waste Water/Small flows
Clearinghouse
18001426.4791

- Storm Water: Office al Weter

Resource Cemter
18001 624-8301

Werlands information

- Pollution Prevention Clearinghouse
- RCRA (has. Weste) Ombudsman
- Solid and Hazerdour Waste (RCRA). Superfund (CERCLA). and Underground Storage Tanks
- Emergency Plaming \& Commurity Righte to know

202
(SARA Titio III) (EPCRA)
.
Act ITSCAI
Asbestos intormation/Referral ..... (202) 554-1404

- Natronal Pesticide Tolecommunucations Network tprovides informatran ebout pestriendes-spill handling, chsposef
cloan-up and thath effects) . ..... (800) 858-7378
- Olfice ol Pestucide Program Aegistration Div.
(Ombudsman)
(1703) 305-5446
- Public inlormation Center . . . . . . . 12021 260-2080


## OTHIT HOTLMES OA OTHER HELP UMES

- Office of Environ. Jutice
- Recyching Hotlina . . . . . . . . . . . . . .
10001942.6215
foot 947.3271
- Sotid Weste Assoc. of North Amencs 18001877.9424
- National Techrucal Information

Service (NTISI
17031487.4850

- Notional Response Center tOpernied oy the U.S. Cosat Guerd tor reporting
oif spit and hazertous ubstance releases)
$14001424-8802$
Erargy-atficiency 5 Reniwste Energy
Cleang House lOperates by the Dept. of
Enargy tor inqurnes on
mergy related marters
p1001 383-3712
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Alternative Futs Hortine
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- Information Exchange--HAZMAT
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Transportavon and the Federd
Emergency Mare. Ageney for
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(U.S.) $10001467-4922$

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- CHEMTREC Conter Non-Emergency Survicet
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Asaciation-heolth \& Sefery
$10001262-200$
- Emiron. Heath Effects . . .......... re00 e43-474
- Nanonal Lead informetion Center
(General information) . . . . . . . . . . . (800; 532-3384
(Tectricet Assstance) . . . . . . . . . . (1800) 424-5323
- Smen Buainest Adrranstuatuon . . . . . 1000 027-8722
- Occupationa Sofety \& Medth Adrrinuturation
(Werter Saloty| . . . . . . . . . . . . . . . 18003121 -8742
- Consurner Protuct Satery

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| :---: | :---: | :---: | :---: | :---: |
| REGION |  | CT, ME, MA, NH, AI, VT | Owight Prawy | 1687 565-3230 |
|  | 2 | U, NY. PR, VI | Rertieen Melore | [2121 837-4023 |
|  | 3 | $D E . D C, M D . P A, V A, W$, | Nithe Wrieen | 12185 597-1225 |
|  | 4 | AL, FL, GA, KY, MS, NC, SC, TN | Anmate his | H04 347-3555 x 6775 |
| - | 5 | M, IN, MH, MN, OH, WI | Grunis 2ywicki | 1312) 680-4871 |
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|  | , | M, KS, MO, NE | Cremes Hensloy | - 191318E1.7318 |
|  | 8 | CO, MT, ND, SD, UT, WY | Environmertal info. | (303) 312-6312 |
|  | 9 | AZ, CA, MH, MV, AS, GU | Jot Oches | (415) 744-1628 |
|  | 10 | AK, IO, OR. WA | Flovd Wineett | (206) 553-1136 |

# Personnel Contact: Clarence O. Lewis Registration Division Ombudsman 




[^0]:    ${ }^{1}$ Ninety-five percent of the time, the results from a survey such as this should differ by no more than 5 percent in either direction from what would have been obtained by interviewing all firms in the data base. Table 1 compares the proportion of firms included in the sample of each industry sector to the entire population within each sector. Although minor differences existed, those differences were not statistically significant. Therefore, the sample is representative of the population at large.

[^1]:    ${ }^{2}$ See Appendix A for analysis by industry sector.

[^2]:    ${ }^{3}$ See Table 2, Appendix A for analysis by industry. See Appendix C for analysis of all questions by how firms are organized.

[^3]:    ${ }^{4}$ See Appendix A for tables of all analyses by industry sector which were not included in the text of the report

[^4]:    Source: Instiute for Public Policy and Business Research, University of Kansas, 1993 Survey

[^5]:    Source: Instiwte for Public Policy and Business Research, University of Kansas, 1993 Survey

[^6]:    - Firms could identify more than one.

[^7]:    - Firns could idenify more than one.

[^8]:    - Furms could identify more then one.

[^9]:    *Tredemark of DowElanco

[^10]:    * Trademark of DowElanco

