THE TOXIC RELEASE INVENTORY AND ITS IMPACT ON FEDERAL MINERALS AND ENERGY

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

OF THE

COMMITTEE ON RESOURCES
U.S. HOUSE OF REPRESENTATIVES

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C O N T E N T S

OVERSIGHT HEARING ON "THE TOXIC RELEASE INVENTORY AND ITS IMPACT ON FEDERAL MINERALS AND ENERGY"

Thursday, September 25, 2003
U.S. House of Representatives
Subcommittee on Energy and Mineral Resources
Committee on Resources
Washington, DC

The Subcommittee met, pursuant to notice, at 2:05 p.m., in Room 1324, Longworth House Office Building, Hon. Barbara Cubin [Chairman of the Subcommittee] presiding.

Present: Representatives Cubin, Gibbons, Kind, and Tom Udall.

STATEMENT OF HON. BARBARA CUBIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WYOMING

Mrs. CUBIN. The oversight hearing by the Subcommittee on Energy and Mineral Resources will now come to order.

The Subcommittee is meeting today to hear testimony on the Toxic Release Inventory and its impact on Federal minerals and energy. Under Committee Rule 4-G, the Chairman and Ranking Member can make opening statements, but since we don't have exactly a full dais up here, Mr. Gibbons and I will probably be the only ones to make opening statements today.

Today we meet for an oversight hearing, as I said, on the EPA's Toxic Release Inventory program and its impact on domestic mineral and energy production.

The Toxic Release Inventory program was started in 1988 as a part of the Emergency Planning and Right-To-Know Act. It was a response to the chemical disaster in India. The purpose of the Toxic Release Inventory is to inform the public about toxic chemical releases into the environment. Manufacturing facilities for some industries which manufacture, process or use significant amounts of toxic chemicals are required to report their annual releases of TRI chemicals into the environment.

In 1997, EPA expanded the TRI to seven new industry sectors. These new reporting sectors include electric utilities, coal and metal mining industries, all of which manage large volumes of materials. Unfortunately, this expansion took TRI far beyond the scope of the intent of the statute. The result has been onerous reporting requirements, misleading data about toxic releases in various regions of the country, and zero benefit to the public.

Unlike other reporting industries, over 85 percent of the volume of all materials reported by mining operations are metals that occur naturally in the local rock and soil and occur in low concentrations. This material is handled and safely contained in managed facilities at the reporting mine site. It is neither toxic nor is it a hazard to public health.

While courts have ruled that EPA has misinterpreted many of the TRI reporting requirements for mining operations, to date EPA has failed to conform the TRI program to the courts' directives.

Because of the large volume of rock and soil reported from mine sites in the Toxic Release Inventory, mining States and the mining industry are often characterized as the most polluted and dirtiest States in the Nation and the industry as the worst polluter in the Nation. This is an injustice to these States. TRI is being used as a scare tactic about the existence of substances so benign that they appear in the foods and vitamins that we consume daily.

We need the EPA to transform the TRI program back to its initial goal to provide meaningful data pertinent to the public's right to be informed about toxic chemical releases. I look forward to the witnesses' testimony in this hearing.

[The prepared statement of Mrs. Cubin follows:]

Statement of The Honorable Barbara Cubin, Chairman, Subcommittee on Energy and Mineral Resources

The Subcommittee meets today for an oversight hearing on the Environmental Protection Agency's Toxics Release Inventory program and its impact on domestic mineral and energy production.

The Toxics Release Inventory program was started in 1988 as part of the Emergency Planning and Right-To-Know Act. It was a response to the Bhopal chemical disaster in India. The purpose of the Toxics Release Inventory is to inform the public about toxic chemical releases into the environment. Manufacturing facilities for some industries which manufacture, process or use significant amounts of toxic chemicals are required to report their annual releases of TRI chemicals to the environment.

In 1997, EPA expanded the TRI to seven new industry sectors. These new reporting sectors include electric utilities, coal and metal mining industries—all of which manage large volumes of materials. Unfortunately, this expansion took TRI far beyond the scope of the intent of the statute. The result has been onerous reporting requirements, misleading data about toxics in various regions of the country, and zero benefit to the public.

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Because of the large volume of rock and soil reported from mine sites in the Toxics Release Inventory, mining states and the mining industry are often characterized as the most polluted and dirtiest states in the nation and the industry as the worst polluter in the Nation. This is an injustice to these states. TRI is being used as a scare tactic about the existence of substances so benign, they appear in the foods and vitamins we consume daily.

We need for EPA to transform the TRI program back to its initial goal to provide meaningful data pertinent to the public's right to be informed about toxic chemical releases. I look forward to the witnesses' testimony.

STATEMENT OF HON. JIM GIBBONS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEVADA

Mrs. CUBIN. Mr. Gibbons.

Mr. GIBBONS. Thank you very much, Madam Chairman. It is indeed a pleasure to be here today to listen to our witnesses with regard to the Toxic Release Inventory and its application as to several of the industries, which are key industries, significant industries, not just to the State of Nevada but to this country.

Madam Chairman, like the oil and gas industry, which is so prevalent in your State, mining is the key industry in the State of Nevada. In fact, mining is the cornerstone of the economic activity in this country. Should we, as a Nation, therefore decide upon removing mining and its industry from this country, we are doing a damned good job of forcing them out of this country because of some of the ridiculous applications of the rulings which we have before us, one called the Toxic Release Inventory.

Madam Chairman, I may sound a little upset today, but I am. I have good reason and I will delve into those questions once we have an opportunity to question the witnesses as we go along. So I want to thank you for your leadership and I want to thank you for your willingness to bring this issue up. I look forward and welcome our witnesses here today, because it's going to be an important hearing for us to ask some questions and get some straight talk and some straight answers from the EPA.

Thank you, Madam Chairman.

Mrs. CUBIN. Thank you, Mr. Gibbons.

I would now like to recognize the first panel, Kim Nelson, the Assistant Administrator for the Environmental Protection Agency. I now recognize Kim Nelson to testify for 5 minutes. The timing lights on the table will indicate—well, you know what they mean.

Ms. NELSON. I do.

Mrs. CUBIN. Thank you.

STATEMENT OF KIMBERLY T. NELSON, ASSISTANT ADMINISTRATOR AND CHIEF INFORMATION OFFICER, ENVIRONMENTAL PROTECTION AGENCY

Ms. NELSON. Good afternoon, Chairman Cubin, and good afternoon, Congressman Gibbons. Thank you for the opportunity to discuss with you today the Toxic Release Inventory and its impact on Federal minerals and energy.

Today, I'm going to speak to you briefly on three different topics. First, I will address the two recent court decisions regarding mining, two on lead reporting, and the plans of the Agency for burden reduction in the program.

As you mentioned, Chairman Cubin, the Emergency Planning and Community Right-to-Know Act, which is the authorizing statute for the Toxic Release Inventory, directs EPA to provide information to the public on releases and other waste management quantities of toxic chemicals. EPA does this by gathering data and making information accessible to the public through the Internet and a variety of published reports.

Since its implementation in 1987,TRI has been the centerpiece of the Agency's right-to-know programs and a very useful tool for

assisting communities and protecting their environment and making businesses more aware of chemical releases.

Congress initially required only the manufacturing sector to report the TRI. However, Congress also included in the statute the authority for EPA to expand and add additional industry sectors. In 1997, EPA issued a final rule that added seven industry sectors, including the metal mining and coal mining industries to the list of facilities reporting TRI.

In May 1998, the National Mining Association filed a lawsuit challenging that 1997 rule. In 2001, the U.S. Court for the District of Colorado upheld EPA's authority to add the mining industry to the program. However, in its decision, the Court set aside EPA's interpretation of how the statutory threshold activity of processing applies to extraction and beneficiation, essentially ruling that a toxic chemical cannot be processed unless it had first been manufactured under the law. The Court did not rule that these are not covered activities, however.

In the April 2003 decision in Barrick, the U.S. District Court for the District of Columbia upheld EPA's interpretation that mine tailings are not eligible for a de minimis exemption but set aside EPA's interpretation of the exemption as it applied to waste rock. As a result, the listed chemicals in the de minimis concentration in a mine's waste rock may not be eligible for this exemption from TRI reporting requirements.

EPA recognizes that the court decisions in 2001 in the NMA lawsuit has generated some uncertainty regarding the reporting requirements as they apply to both extraction and beneficiation. The Agency intends to propose a rule in the next several months to adopt the revised interpretation that will designate how extraction and beneficiation should be characterized for the purposes of the TRI threshold determinations.

The basis of the TRI lead rule, which was promulgated in 2001, is EPA's determination that lead and lead compounds are persistent, bioaccumulative, and toxic chemicals. In the final rule, EPA decided to defer its determination as to whether lead and lead compounds are highly bioaccumulative and, instead, during some internal discussions within the Agency about a planned SAB review, it became clear that the Agency would benefit from an Agency-wide initiative focused on the scientific approach to the assessment of metals. That approach envisioned a two-phased process: first, the development of a metals action plan, and then the development of specific guidance documents called for in that plan, with the SAB involvement at each phase.

As part of this effort, EPA has commissioned the development of scientific papers on the issues and state-of-the-art approaches to metals risk assessment. The draft versions of these papers, as you may have seen, were released this past Monday for public review and comment. EPA plans subsequently to submit the draft metals framework document for peer review to the SAB and then release the final document some time next summer. It is our intent within the TRI program to take the final metals framework document and apply it to the program, as would be appropriate.

Finally, in terms of burden reduction, I believe EPA has responded to concerns expressed by the mining industry and others

regarding the burden of complying with TRI reporting requirements. There are a number of burden-limiting features already built into the program, including a number of mining specific exemptions in light of comments received during the 1997 facility expansion rulemaking.

EPA is about to undertake the second phase of a TRI stakeholder dialog to continue to explore burden-reduction options for the TRI program. Based on feedback received from a similar dialog last year, the TRI program has been working toward the greater use of electronic submissions over the Internet using our award-winning "TRI-ME" reporting software.

Our upcoming stakeholder dialog will be the basis for a regulatory process that will provide meaningful burden reduction while continuing to provide valuable information to the public as required by the statute.

In conclusion, I would like to reiterate EPA's strong commitment to implementing right-to-know statutes passed by Congress in a balanced manner. We will continue to identify improvements that will help ensure the best possible compliance and the best quality of information for the public.

I thank you, Chairman Cubin, Congressman Gibbons, for the opportunity to be here today, and I would gladly answer any questions you might have.

[The prepared statement of Ms. Nelson follows:]

Statement of Kimberly T. Nelson. Assistant Administrator and Chief Information Officer for Environmental Information, U.S. Environmental Protection Agency

Introduction

Good afternoon, Chairman Cubin and Members of the Subcommittee. I appreciate this opportunity to discuss with you "The Toxics Release Inventory and its Impact on Federal Minerals and Energy." I will speak briefly on the recent court decisions involving EPA and the mining industry, the Agency's current positions on lead reporting, and our efforts to reduce reporting burden for the regulated community.

TRI Background

The Emergency Planning and Community Right-to-know Act (EPCRA) of 1986, which is the authorizing statute for the Toxics Release Inventory (TRI), directs EPA to provide information to the public on releases and other waste management quantities of toxic chemicals. Since its implementation in 1987, TRI has been the centerpiece of the Agency's right-to-know programs and a useful tool for assisting communities in protecting their environment and making businesses more aware of their chemical releases. EPA does this by gathering data and making this information publicly available through the Internet and published reports. Congress initially required the manufacturing sector (Standard Industrial Classification [SIC] Codes 20–39) to report to TRI. Congress also included in the statute at Section 313(b) authority for EPA to add other industry sectors. In 1997, EPA issued a final rule that added seven industry sectors to the list of facilities subject to the reporting requirements of Section 313. The industry groups that were added by this rule included metal mining and coal mining.

Before a facility in a covered industry sector is required to report to TRI, the facility must "manufacture," "process," or "otherwise use" a listed toxic chemical in an amount exceeding a statutory threshold. For most chemicals on the TRI list, the threshold for manufacturing is 25,000 pounds, the threshold for processing is 25,000 pounds, and the threshold for "otherwise use" is 10,000 pounds. Reporting thresholds for those TRI chemicals classified as persistent, bioaccumulative, and toxic (PBT) are lower: 100 pounds for PBT chemicals that are persistent and bioaccumulative; 10 pounds for PBT chemicals that are highly bioaccumulative and highly persistent; and 0.1 gram for dioxin and dioxin-like compounds. Once the designated threshold is exceeded for a listed chemical, the facility is required to report data on the quantity of that toxic chemical released and otherwise managed as a waste.

TRI data have proven to be a very valuable and useful source of information not only to communities but to businesses as well. Communities use TRI data to: learn about their local environment and harmful exposures to toxic chemicals; begin dialogues with local facilities to encourage the reduction of releases; and develop pollution prevention plans; and improve local environmental conditions. Businesses use TRI data to: identify opportunities for pollution prevention; increase efficiency or find cost savings in processes; demonstrate environmental progress; and improve local environmental conditions. These uses of the data are integral to the achievement of the TRI program goal which is to leverage the power of public access to information to improve our environment and, in this case, effect changes in behavior that lead to decreases in the release of toxic chemicals to the environment. The TRI data, in conjunction with other information, can be used as a starting point in evaluating harmful exposures that may result from releases and other waste management activities which involve toxic chemicals. The determination of potential risk depends upon many factors, including the toxicity of the chemical, the fate of the chemical, and the amount and duration of human or other exposure to the chemical after it is released.

Summary of National Mining Association and Barrick Goldstrike Mines Decisions

In 1997, EPA issued a final rule that added seven industry sectors, including mining, to the list of facilities subject to the reporting requirements of Section 313 (62 Federal Register 23834). In May 1998, the National Mining Association (NMA) filed a lawsuit challenging the 1997 rule. In a 2001 decision, the U.S. District Court for the District of Colorado upheld EPA's authority to add the mining industry to the TRI program. The Court did, however, set aside EPA's interpretation of how the statutory requirements for TRI reporting in the statute apply to certain extraction and beneficiation mining activities. In the 1997 rule that added the mining sector, the Agency interpreted the extraction and beneficiation of undisturbed ores to fall within EPCRA Section 313's definition of "processing," on the basis that the naturally occurring, undisturbed ores were first manufactured in the ground by natural forces. The court disagreed with this interpretation ruling that a toxic chemical cannot be processed unless it first has been manufactured under the law.

In the April 2003 decision in Barrick, the U.S. District Court for the District of Columbia upheld EPA's interpretation that mine tailings are not eligible for the de minimis exemption to reporting in EPA's existing TRI regulations. The Court, however, set aside EPA's interpretation of the exemption as it applied to waste rock. As a result, listed chemicals in de minimis concentrations in a mine's waste rock may now be eligible for this exemption from TRI reporting requirements.

EPA recognizes that the court's 2001 decision in the NMA lawsuit has generated uncertainty regarding the reporting requirements as they apply to extraction and beneficiation. The Agency intends to propose a rule in the next several months to adopt a revised interpretation that will designate how extraction and beneficiation should be characterized for the purposes of the TRI threshold determination.

The TRI Lead Rule and Agency-Wide Initiative on Metals Assessment

The basis of the TRI lead rule, promulgated in 2001 (66 Federal Register 4499), is EPA's determination that lead and lead compounds are persistent, bioaccumulative, and toxic (PBT) chemicals. EPA preliminarily concluded in its August 1999 proposal that lead and lead compounds met the criteria for being classified as highly persistent, highly bioaccumulative toxic chemicals. Before determining whether lead and lead compounds are highly bioaccumulative, EPA believes that it would be appropriate to seek external scientific peer review from its Science Advisory Board (SAB), and EPA intends to do so. During internal Agency discussions about the planned SAB review, it became clear that the Agency would benefit from an Agency-wide initiative focused on the scientific approach to the assessment of metals. Accordingly, EPA initiated a more comprehensive review than originally set out in the TRI lead rule. The approach envisioned a two-phase process—development of a Metals Action Plan and then development of specific guidance documents called for in that Plan—with SAB involvement at each phase.

As part of the effort to engage stakeholders and the scientific community and to build on existing experience, the Agency has commissioned the development of scientific papers on issues and state-of-the-art approaches to metals risk assessment. Material contained in these papers, when finalized, may be used in total, or in part, as source material for the assessment framework. To develop the issue papers, EPA assembled teams of experts drawn from academia, consulting firms and other federal agencies to work with Agency scientists. The draft versions of these issue papers were released this past Monday, September 22 to the public for comment (68 Federal Register 55051) as part of EPA's continuing effort to provide opportunities

for external input to the Agency's metals assessment effort. In addition to written comments, EPA plans to hold a stakeholder workshop next month (October of 2003) to discuss the issue papers. In December of 2003, EPA plans to have completed an interim draft version of the metals framework. In the spring of 2004, EPA plans to submit the draft metals framework document for peer review by its SAB and then release the final document in the summer of 2004. Issuance of the metals characterization/ranking guidance document will follow soon thereafter. It is our intent to take the final documents and apply it to the TRI program, as appropriate.

TRI Regulatory Burden Reduction Efforts

Finally, let me address EPA's ongoing efforts to identify and ameliorate any unnecessarily burdensome reporting requirements imposed on the mining sector, as well as the rest of the regulated community by the TRI program.

The information collection burden of TRI reporting is associated with labor hours that staff at each facility will spend to gather relevant information, make compliance determinations, complete calculations, fill in the report, and submit it to appropriate authorities. The burden hour estimates for TRI reporting reflect the time that facilities spend using readily available data or reasonable estimates to complete the TRI reports. These types of estimates are sometimes referred to as "engineering" estimates because they reflect expert judgement rather than burden hour data from responding facilities.

EPA has responded to concerns expressed by the mining industry and others regarding the burden of complying with TRI reporting requirements. First, there are a number of burden-limiting features already built into the program:

- By statute, only facilities with 10 or more full-time employees or the equivalent are subject to TRI;
- Facilities only file TRI reports for specific chemicals that are manufactured, processed, or otherwise used above threshold quantities;
- TRI requires facilities only to report using readily available data, or reasonable estimates. No additional monitoring or measurement is required;
- EPA developed some industry specific exemptions in light of comments received during the 1997 facility expansion rulemaking such as: the coal extraction exemption and the overburden exemption;
- TRI reporting provides for certain "common sense" exemptions for intake air and water, enclosed articles (lead-acid batteries), personal use by employees, laboratory use, etc.;
- If a facility exceeds the reporting threshold for a chemical, it must complete and submit a 5-page form for that chemical. EPA has developed an automated reporting software package (TRI-Made Easy) that over 90 percent of facilities used for the most recent reporting year;
- EPA has created a reduced-burden certification statement (Form A) for facilities that meet certain criteria. This option is available to almost 40 percent of all reporting facilities; and
- The Agency has implemented a range of compliance assistance activities, such as the Toxic Chemical Release Inventory Reporting Forms & Instructions (which is published and mailed every year as well as being available on-line), the industry training workshops, the chemical-specific and industry-specific guidance documents, and the EPCRA Call Center (a call hotline).

EPA is about to undertake a "TRI Stakeholder Dialog" to continue to explore burden reduction options for the TRI program. This is actually the second phase of an ongoing effort to make the TRI program more efficient and relevant for the public. In the first phase, EPA solicited comments on ways to streamline the submission and processing of TRI data, as well as improve TRI compliance assistance programs. Based on feedback from this process, the TRI Program has been working toward releasing the data earlier, and working towards even greater use of electronic submissions through the use of award-winning TRI-ME reporting software (E-Gov Pioneer Award, June 2003) to report through the Internet to EPA's Central Data Exchange (CDX).

As part of the second phase of outreach, EPA is currently developing a white paper that is intended to promote a lively public discussion on burden reduction opportunities. This TRI Stakeholder Dialog is the first step toward entering a regulatory process that will provide meaningful burden reduction associated with TRI reporting while continuing to provide valuable information to the public as required by the statute.

Conclusion

In conclusion, I would like to reiterate EPA's strong commitment to implementing right-to-know statutes passed by Congress in a balanced manner. It is our firm

belief that public access contributes positively to our citizen's ability to understand environmental issues and to make better decisions in their daily lives. We will continue to identify improvements that will help ensure the best possible compliance and best quality of information for the public.

Thank you, Chairman Cubin, and Members of the Subcommittee, for the opportunity to appear today. I would be glad to take any questions you may have at this time.

Mrs. CUBIN. Thank you for your testimony. I would like to start the questioning.

It is my understanding that the mining industry offered many months ago to work with the EPA to develop an approach to the TRI reporting at mining sites that better addresses the real environmental significance of these sites. Is the EPA willing to work with the mining industry on this?

Ms. NELSON. We are certainly willing to work with the mining industry in discussing that, absolutely.

Mrs. CUBIN. So you will commit to the committee today that you will engage in a serious effort to reconsider how the TRI program addresses mining sites?

Ms. NELSON. We will be happy to continue those discussions.

Mrs. CUBIN. Thank you.

The evidence seems overwhelming that the scientific approach used to support the TRI rule, which relied on the BAF BCF model that EPA's chosen experts say is not scientifically supported for use with metals, is wrong.

What actions will you take to rectify this rule's clear-cut reliance on unsound science?

Ms. NELSON. Chairman, in my opening statement I referenced the fact that, after the TRI lead rule had been promulgated, and as the Agency looked to seek additional peer review and outside input from our Science Advisory Board on the issue of whether lead was highly bioaccumulative, it became apparent within the Agency that there was a broader issue that needed to be addressed across the Agency in all of its programs, not just the TRI program, but a broader issue in terms of how the Agency at large looks at metals and risk.

As a result of that, and recognizing there was significant issues and concern from outsiders as well, the Agency embarked on that metals assessment, that metals framework process.

What we intend to do is work just as we have with the Science Advisory Board. They have since put those five papers on the street. One of those papers deals specifically with the issue of bioaccumulation, others deal with the issue of human exposure and ecosystem issues. We will watch that process as it unfolds. We will look for the final documents after they've been publicly commented on and peer reviewed, and we will take the advice of the Science Advisory Board, which we think will have gone through a full assessment and take that framework and apply it to the TRI program.

If, as a result of that new framework, we come up with some different conclusions in the TRI program, I have already committed publicly that we will make whatever changes are appropriate to the TRI program to conform with that new framework.

Mrs. CUBIN. So, having said that, do you believe that a trace metal that is bound up in rock presents a threat to the public safety?

Ms. NELSON. Chairman, I don't know if you've had the opportunity to look at my credentials, but I am not a geologist. I don't have a degree, either a bachelor's degree or master's degree or training in geology. I have to rely on other experts in the organization. I have to rely on Paul Gilman, who is the Science Advisor to the Administrator, and others who do have the appropriate credentials to provide that information to me, and to the experts within the program, to make that decision.

So I think it would be inappropriate for me as a witness to make that determination. I don't have the credentials to make that determination.

Mrs. CUBIN. But you do have to make that determination in the course of your job.

Ms. NELSON. I will have to make a policy decision, but when I make that policy decision, I will want to do so based on input that comes from people like our Science Advisory Board, like Paul Gilman, who is the science advisor to the Agency, as well as staff within the organization who are credentialed to do that.

Mrs. CUBIN. So at this point in time, having seen the studies that have been done and the opinions that have been made, are you saying you don't have an opinion on that? I mean, with the job you're in, and the information you have access to, it is difficult for me to believe that you don't have an opinion on that.

Ms. NELSON. What I'm saying is that there are many, many opinions out there on this particular issue. This is a highly controversial issue.

Mrs. CUBIN. Right. That's why we're here.

Ms. NELSON. Frankly, when we deal with the issue of lead, the one thing I am certain of is, as I sit here as a mother with two small children, we know that lead, even in the smallest amounts, is highly dangerous. Lead can have serious consequences on children, serious consequences on fetuses and small developing children. We know that. There is evidence to that effect.

How we use and how we make assessments about metals within the Agency is not something I should be sitting here testifying about today. When that is done by the Science Advisory Board, I will take that information and we will apply that; and I will have the people with the right credentials in the organization apply that information from the Science Advisory Board, that new framework to our TRI program. If it means we come up with different answers regarding lead or other substances that are currently covered in the TRI program, then we will make the appropriate policy decisions. I can commit to you that.

Mrs. CUBIN. I think it's safe to say that no one wants children, whether you're the mother of children or whether you're not, no one wants lead to adversely affect young children. However, lead is, as are other metals, a naturally occurring element in the environment. The balance is what we seek to achieve.

Mr. Gibbons.

Mr. GIBBONS. Thank you, Madam Chairman.

In listening to your comments there, I am reminded of the fact that too many times we allow emotion to override our intellectual and scientific analysis of many issues. For example, take the issue of lead that you have just talked about.

I'm a father of three children and I do not want my children poisoned by lead, either. However, I know that my children aren't going to be poisoned by this piece of lead that I have sitting right here. It's galena. It's a lead sulfite. It is not toxic. Now, you could eat it perhaps and maybe consume it and make it toxic, but it would be tough to chew and it's tough to ingest, I'll guarantee you. It's not a very attractive thing.

But in its natural state, in the state that it sits right here on my desk, it is nontoxic. But the emotion, just as I've heard in your voice, says everything dealing with lead is toxic. That's the problem we've got. We have an emotional attitude that overrides science and common sense.

Miss Nelson, when did you come to the EPA?

Ms. NELSON. I have been at EPA in my position a little less than 2 years, sir.

Mr. GIBBONS. And before that where were you?

Ms. NELSON. Before that I was with the Commonwealth of Pennsylvania for 22 years in State government.

Mr. GIBBONS. Doing what?

Ms. NELSON. The last 14 years I spent in the State Department of Environmental Protection.

Mr. GIBBONS. Doing what in that job?

Ms. NELSON. As Executive Deputy Secretary, as the Chief Information Officer, as director of some programs.

Mr. GIBBONS. So you've been in your current position within the Federal EPA for less than 2 years?

Ms. NELSON. Less than 2 years, that is correct.

Mr. GIBBONS. So you came in 2001.

Ms. NELSON. That is correct.

Mr. GIBBONS. When were you nominated for the job?

Ms. NELSON. I was nominated that summer, of 2001.

Mr. GIBBONS. You should know what the EPA's position is if you're an Assistant Administrator. Even though you may not have an opinion and you have to rely on scientists within your organization, you should, as Assistant Administrator, know what the opinion of the EPA is.

Ms. NELSON. Yes, sir.

Mr. GIBBONS. So you couldn't answer Chairman Cubin's question——

Ms. NELSON. If you will forgive me, I thought the Chairman was asking for my personal opinion, in my position.

Mr. GIBBONS. I think she was asking for your opinion as an Assistant Administrator with the EPA, which means you're reflecting the answer in questions of the EPA rather than personal questions.

Ms. NELSON. If we may backtrack, then, for just a moment—and I will be happy to relisten to the Chairman's question in that regard.

If I may just respond to your comment, I really hope I'm not making decisions in an emotional way. I understand the issues and the concerns and all of the emotions surrounding the issues

involving naturally occurring chemicals, and the fact that these are substances that are naturally occurring and they're in the ground and we live with them every day, and how, indeed, do they then fall under a Toxic Reporting Inventory program.

Mr. GIBBONS. Miss Nelson, do you have a garden at your home?

Ms. NELSON. I do.

Mr. GIBBONS. Do you ever go out and spade your garden?

Ms. NELSON. I do.

Mr. GIBBONS. Do you know that you release toxic elements into the air every time you spade your garden?

Ms. NELSON. I do.

Mr. GIBBONS. Do you report it?

Ms. NELSON. I do not.

Mr. GIBBONS. It is the same reason that we shouldn't have to report either minerals overburden, dirt that's disturbed. We don't disturb and we do not require a Toxic Release Inventory when we build a highway.

Ms. NELSON. Right.

Mr. GIBBONS. And we're out there with bulldozers moving around great sums of dirt. We don't require a Toxic Release Inventory when we build a subdivision and we're out there moving a great deal of dirt.

Ms. NELSON. Congressman, I understand that. I would just point out the fact that when the law was originally passed by Congress, there was a list of substances that were to be included in the reports. That list did include many of those naturally occurring substances. EPA did not do this——

Mr. GIBBONS. That was a rule that came out of the EPA.

Ms. NELSON. No, I'm talking about when the law was passed by Congress. It originally included the list of chemicals to be included in the Toxic Release Inventory. Those naturally occurring substances were in the statute passed by Congress. That was not something that EPA did at its discretion.

Mr. GIBBONS. Well, let me ask another question, because my frustration and my disappointment in the EPA goes to whenever I click on EPA and I go to Toxic Release Inventory. I look at your website, and I go into the Toxic Release Inventory and the link—this is a web link that the Federal Government has, the Environmental Protection Agency—and you click on "scorecard." It takes you right to a scorecard of the Environmental Defense Fund.

Are you sanctioning the Environmental Defense Fund's scorecard by this, and if so, under what authority does the EPA have to list and cite Environmental Defense Fund data?

Ms. NELSON. The links to which you refer, there are many, many links on EPA's website. We——

Mr. GIBBONS. I can only see two.

Ms. NELSON. Well, throughout the website. When the administration changed, we did look at all of those links and actually removed a lot of those that we deemed to be inappropriate.

Mr. GIBBONS. Well, I think the Environmental Defense Fund is inappropriate. It lists Nevada as the worst State based on the mining. We have already discovered, and you have already admitted, that the overburden that is created by moving dirt from one pile to another pile should not be a Toxic Release Inventory item.

Yet, Nevada has to weigh all that. But the State of Pennsylvania doesn't have to weigh the amount of dirt it moves when it builds one of these super highways or creates a subdivision.

Is this an attempt by the EPA to do away with the mining industry in the State of Nevada or anywhere else in the western part of the country?

Ms. NELSON. No, I don't believe it is, sir.

Mr. GIBBONS. Well, the Environmental Defense Fund I would believe has that as one of their major goals, doing away with mining in this country.

Ms. NELSON. That is not a goal of EPA, sir. I came from Pennsylvania, and Pennsylvania has a strong mining heritage.

Mr. GIBBONS. I would hope so.

Ms. NELSON. It's an important part of my background. I grew up in Pennsylvania. There is a strong heritage there.

Mr. GIBBONS. Well, you can understand my concern when I type into or access into the Federal Government's website, and I come up with an Environmental Defense Fund, which in my view is an extreme environmental organization intent on eliminating mining from my State, and I see that you have linked into their site so that anybody who goes there assumes that the EPA is actually condoning or accepting what the Environmental Defense Fund is proposing or stating.

Ms. NELSON. You will see that there are two links there, also, to the right-to-know net. Part of the purpose of including those links is that there are large constituencies out there that use that information, because that information is provided in a different format than what EPA provides. We also——

Mr. GIBBONS. Well, what the Environmental Defense Fund provides is emotion versus science. I would just hope that you are able to deal with this effectively.

I disagree, and I would ask you to remove the link between the Environmental Protection Agency and these environmental sites, because it gives the impression that you're condoning and asking for the public to believe in what these other organizations present.

Ms. NELSON. I will certainly take that under consideration.

I will add as a final point here that we do also provide a link, for instance, to the American Chemistry Council. One of the issues that is of concern to the Chemistry Council is the issue of dioxin. We cooperate with that industry in terms of their ability to help us add some context to the issue of dioxin.

So I will certainly take your issue under advisement, but also say we do try to provide that information in a balanced format, so not only does the right-to-know net and others have links, but we also do have a link to the American Chemistry Council.

Mr. GIBBONS. If you would indulge me for 1 minute, Madam Chairman.

Miss Nelson, in your testimony you said that when you propose your rule, which may be several months down the road, it brings up two issues. One is time delay. It is very important for many of these mining companies to continue in existence today, and the longer the Federal Government delays its rulings, the greater the chance that companies that are important to our economy—companies that provide jobs, that aren't polluting, but yet are still under

the burden and the obligations of the currently existing Toxic Release Inventory—are going to be prejudiced for that period of time and actually may make a decision to look elsewhere. Time to a company, to a private sector company, is vastly different than to a government.

You get your paycheck on Friday whether or not the State of Pennsylvania or the Federal Government is making a penny in profit. A company that's out there trying to employ people deals vastly differently on economic issues and their success is critical to timely decisions.

That being said, you say that they "may" be eligible. What science and what standards are going to go into the determination about waste rock, just the ordinary, garden variety dirt and rock that comes out of the ground and is moved from one part to another? What is the science with regard to that? How is that going to be determined?

Ms. NELSON. With regard to a rulemaking?

Mr. GIBBONS. Yes.

Ms. NELSON. Let me say at this point in time the staff is reviewing a number of options as a result of the judge's ruling. The judge's ruling was not explicit in many different areas. What we are looking at currently is a number of different options in terms of how to interpret that ruling. There are a variety of possibilities and we're trying to examine all of those and understand the ramifications.

As we move forward, whatever we do will clearly have to be based on sound science. We know we will be held to a very high standard. We will work with the appropriate staff, with the appropriate credentials in the organization, to ensure that whatever we do in moving forward will be based on sound science.

When Governor Whitman was at EPA, that was one of her highest priorities. That's why she appointed a science advisor to the Administrator to serve in that capacity. As we move forward, I can't help but believe that any decision by EPA in the future will continue to have to be based on sound science.

I will make a commitment to you that whatever decision we make will, in fact, be made with that kind of input from the appropriate people.

Mr. GIBBONS. Let me make one suggestion for you to consider. You may laugh at this, or you may take it seriously.

If I'm a miner and I have to account for all of the waste rock as a Toxic Release Inventory that I stack up over here, I ought to be given credit for what I've removed from over here. So if I'm taking something out of the environment here and putting it over here, there ought to be a sum zero gain if I have to deal with it. So you ought to have a provision in your consideration for credit given for removing toxic materials from the environment, if you're going to ask them—because they didn't create it, they didn't mine it, but they moved it. So give them the opportunity, if you're not going to eliminate waste rock as a Toxic Release Inventory item, of having a credit for what they have removed from the inventory.

Just a thought.

Ms. NELSON. We will take that one under advisement.

Mr. GIBBONS. I figured you would.

Ms. NELSON. We will.

Mr. GIBBONS. Thank you.

Mrs. CUBIN. Thank you, Mr. Gibbons.

One comment I would like to make. I am a chemist by training. I have to say that, as far as sound science is concerned, when I look at the Environmental Defense Council link to the EPA site, I don't consider that sound science. I consider that more based on emotion rather than sound science, some of the conclusions that they make. So for that to be on the EPA website I think isn't a good thing for the EPA or whatever. I know you will take that under advisement, too.

Ms. NELSON. May I ask just a point of clarification?

Mrs. CUBIN. Sure.

Ms. NELSON. Just so there's no misinterpretation, are you asking for both of those links to be removed?

Mrs. CUBIN. You know, I'm not asking for both of those links to be removed, but I do think—well, for one thing, like I said, I'm a chemist, so I think that the Chemical Society is based on facts. It is not an environmental organization, per se.

Mr. GIBBONS. Madam Chairman, would you yield for a moment?

Mrs. CUBIN. Sure.

Mr. GIBBONS. I would like to ask that you do remove them, and I would like you to replace them with your own assessment from your own scientists in the EPA, rather than having an outside organization whose scientific data may be questionable. If this is going to be science from the EPA, then the EPA scientists ought to be responsible for identifying and assessing each individual State.

Madam Chairman, I thank you for that. I just wanted to put that out there.

Mrs. CUBIN. Certainly. Thank you.

Now I would like to recognize Mr. Udall.

Mr. TOM UDALL. Thank you, Madam Chairman.

Miss Nelson, it's good to have you here today. I want to ask you a couple of question, but just initially, it seems to me that this issue is one of trying to let the public know what the toxic releases are out there, regardless of where they come from. The reason for doing that in these right-to-know laws is that we have seen dramatic change in a variety of areas, not just this particular area that we're talking about on mining. But when the public knows what releases are, then the push is on cleaning these things up and having a healthier environment. I assume that is what the real basis is of what we're talking about.

Could you tell me what the motivating factors were behind the EPA's 1997 rulemaking to include the coal and metal mining industry in the Toxic Release Inventory? Could you tell me what that was?

Ms. NELSON. Congressman, you weren't here earlier. I have only been at EPA for 2 years, so that does predate my arrival here.

But my understanding is that at that point in time the Agency thought it was following congressional intent, and that is, Congress passed the TRI law with the manufacturing sector. It did specifically give EPA the authority to add other industrial sectors.

When the staff looked at those sectors that appeared to use, to manufacture, to somehow process those chemicals that appeared on the list, those substances that were in the original statute passed by Congress, the metal mining industry came near the top in terms of having access and using those particular chemicals that were on the original TRI list. Thus, it put that proposal out for public comment.

As a result of a full vetting of that particular proposal, EPA at that point in time added the metal mining industry and the coal mining industry.

I will add that I think there was a lot of sensitivity at EPA at the time. As I said, I was in Pennsylvania when that particular decision was reached, and worked with our mining program considerably in Pennsylvania. There was a tremendous amount of concern about what impact that would have in terms of reporting to the public. But I know the Agency went to great lengths to try to limit that burden.

For instance, there are only about 88 or 89 metal mining facilities in 88 or 89 coal mining facilities that report. That means only 7 percent of all the coal mining operations in the entire Nation report, and only 21 percent of the entire metal mining facilities report in this country. So the population that was identified were truly those operations that were large-scale operations, that were dealing with a lot of those substances that were on that original list.

Mr. TOM UDALL. You mentioned public comment after you went out. Could you tell us what the public response was?

Ms. NELSON. Again, I wasn't here and I don't have that full record at my disposal. I can go back and look at it. But I can only assume that there was a tremendous amount of support for adding those industries. Otherwise, the Agency would not have done that. Sure, there was disagreement from some sectors for adding it, but there must have been a tremendous amount of public support for adding those.

Mr. TOM UDALL. Would you let us know for the record—I know you weren't there, but I would like just a short summary, Madam Chairman, of what the public comment was, the variety of comments, how many comments, that kind of thing, because I think it's important to what we're doing here.

Mr. TOM UDALL. The court suits that you mentioned, these were associations or mining industry people that tried to be taken out of the TRI—they sued to be taken out?

Ms. NELSON. The first court decision I mentioned was the National Mining Association versus Carol Browner, the last administration. The second one was Barrick, which is a metal mining operation out west, versus Whitman, yes.

Mr. TOM UDALL. In both cases, the courts said that you were within your authority to list; they didn't exclude, they didn't follow what the plaintiffs were asking?

Ms. NELSON. Well, in both cases there were what some people might term split decisions, because there were any number of issues that were brought between the court, and in both of those cases the court ruled in favor of EPA in some instances, and in favor of the plaintiffs in some instances.

But it was only clear, It was definitely clear in both of those cases that, in fact, the court upheld EPA's authority to include the mining industry in the TRI program. In particular, it was the NMA decision where that particular issue was brought before the court.

Mr. TOM UDALL. Thank you. I see my time is up, so I will yield back at this point. Thank you very much, Miss Nelson.

Ms. NELSON. Thank you,

Mrs. CUBIN. I would like to thank you for your testimony and your answers——

Mr. GIBBONS. Madam Chairman.

Mrs. CUBIN. Mr. Gibbons.

Mr. GIBBONS. May I have a follow up with Miss Nelson?

Mrs. CUBIN. Sure.

Mr. GIBBONS. I appreciate that.

In response to my colleague, Mr. Udall's request about the public comments, could you also break it down as to what regions of the country those comments came from? In other words, two million comments from New York about the mining industry in Nevada, to me, has less impact than two million comments coming out of New York about the mining industry in New York. I would like to know how many of those comments came from various regions, whether they came from the State of Nevada and applied to the mining industry in the State of Nevada, or they came from somewhere outside the country. If you could do that, I would appreciate it.

Ms. NELSON. Yes, sir, we will do that.

Mr. GIBBONS. Also with regard to the decision of the court, about EPA's authority, there is no doubt that the EPA probably had the authority to regulate and to include those industries in the Toxic Release Inventory. I'm questioning whether or not the EPA truly believes that the simple moving around of dirt is the appropriate inclusion in a Toxic Release Inventory, versus the authority to do that.

No doubt the EPA has the authority to do a lot of things. I mean, you could come in here and probably have the authority to say that the air in Washington, D.C., is bad, no doubt about that, even though we may not have specifically said you could deal with Washington, D.C. But I do want to have an understanding that simply giving the EPA the authority to do it doesn't necessarily mean that the science requires you to do it.

With that, I want to thank you, Madam Chairman. And I thank the witness. I really do appreciate her candidness, and I know this is probably one of the first times you ever get to get up here and it's probably the last time you will want to come back.

[Laughter.]

Ms. NELSON. I wish I could say it was the first time. It's not.

Let me just say for the record that I did have the pleasure of meeting with the Chairman's staff yesterday. I do like to work in a cooperative spirit. I spent 22 years in State government, some of those in the General Assembly, as well as the executive branch. I believe it's important to work together, so I would like to believe that we can continue this dialog as we seek some solutions.

Mr. GIBBONS. Madam Chairman, I would have some written questions that I would like to submit to the committee for the

witness as well, and would hope she would be able to get those questions and the answers back to us in 10 days.

Mrs. CUBIN. The record will be held open for questions.

Mr. TOM UDALL. I also make the same request.

Mrs. CUBIN. Certainly. Other members who are not here today might also want to submit questions. So we will hold the record open for 10 days and hopefully you will be able to respond in that amount of time.

Thank you very much, Miss Nelson. We really do appreciate your being here.

Ms. NELSON. Thank you, Madam Chairman.

Mrs. CUBIN. I would now like to recognize the second panel to testify: Dr. Herbert E. Allen, Center for the Study of Metals in the Environment, University of Delaware; Peter O'Connor, Environment and Government Affairs, AngloGold North America, Inc.; Bonner R. Cohen, Ph.D., Senior Fellow at the National Center for Public Policy Research; and Meghan Purvis, Environmental Health Associate with the U.S. PRIG.

I would like to remind you all that your oral testimony is limited to 5 minutes. However, your entire written testimony will be entered into the record. So if you will abide by the clocks, we would appreciate that.

First I would like to recognize Dr. Herbert E. Allen for his testimony

STATEMENT OF HERBERT E. ALLEN, CENTER FOR THE STUDY OF METALS, UNIVERSITY OF DELAWARE

Dr. ALLEN. Good afternoon, Madam Chairman, and members of the committee.

Mining waste materials often contain metals, such as copper and lead, and metalloids, such as arsenic, that are commonly regarded as having the potential to be toxic to humans and to organisms in the environment. Whether toxicity occurs depends critically on the physical and chemical composition of the waste material and on the chemical conditions in the environment receiving the waste material.

The total concentration of a contaminant is not predictive of the toxicity observed for either humans or for other animal or plant species. Only a fraction, the bio-available fraction, causes a toxic response. Both the chemical form of a substance and interactions of the contaminants and the organism with other substances affect the bioavailability of the contaminant. In addition, there must be exposure of the organism to the contaminant before any toxic response can occur. I would like to discuss exposure and chemical effects on bioavailability as two important factors that must be considered in the evaluation of toxicity.

Toxicity data are commonly developed in the laboratory using soluble salts. This generally supplies the contaminant in its most bioavailable form. Some contaminants in soil, sediment, water and wastes are often less available than would be concluded based on the total amount present in the test. A recent panel of the National Academies recommended greater use of bioavailability in risk assessments.

To exert a toxic response, a contaminant must be able to interact with a receptor in the exposed organism. Generally, this requires that the contaminant be dissolved. This dissolution can occur either in the environment or within the body of the organism. Extractions of lead and arsenic from contaminated soils have been shown to correlate well with uptake by animal surrogates for humans. Often, less than one-half of the lead in a sample is bioavailable.

Contaminants from other solid materials are likewise poorly soluble in the acidic stomach of a mammal. A soil-dwelling organism can access only a small fraction of the metal, that which is soluble and in soil solution or is dissolved in its gut following ingestion of soil particles.

Aquatic organisms are exposed to both inorganic particles and food particles, and to dissolved forms of contaminants. Understanding bioavailability of contaminants in food is an area of active research that is being pursued by the Environmental Protection Agency and others.

Present water quality criteria address dissolved contaminants. However, the toxicity of a metal can vary over 200-fold, depending upon the chemistry of the water. The principal factors controlling the bioavailability are water hardness, acidity and the concentration of dissolved natural organic matter. A new generation of water quality criteria for metals that incorporate these factors for the protection of aquatic life is being readied for release by EPA. Toxicity is accurately predicted by a model called the Biotic Ligand Model that accounts for the interaction of metals with substances that modify their toxicity and by substances in the water that modify the response of organisms to metals.

Currently, EPA is developing a framework for assessment hazards and risks of metals and metal compounds. The goal is to develop a cross-Agency framework describing the basic principles that need to be considered in assessing the hazards and risks posed by metals. It will present a consistent approach for making these assessments.

The EPA Science Advisory Board panelists who reviewed the Agency's plan for the development of the framework stressed the importance of environmental chemistry and its relevance to the assessment of both inorganic and organo-metallic compounds. They also pointed out the importance of bioavailability in assessment of risks and hazards posed by metals.

The Agency should be encouraged to apply the best science available as they complete the framework. This would emphasize the key roles of incorporating exposure and bioavailability in the assessment of risk of metals.

Thank you again for this opportunity to address the committee. I would be pleased to answer your questions.

[The prepared statement of Dr. Allen follows:]

Statement of Dr. Herbert E. Allen, Center for the Study of Metals in the Environment, University of Delaware

Good afternoon, Madam Chairman, Mr. Kind, and members of the Committee: Mining waste materials often contain metals, such as copper and lead, and metalloids, such as arsenic, that are commonly regarded as having the potential to be toxic to humans and to organisms in the environment. Whether toxicity occurs

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To exert a toxic response, a contaminant must be able to interact with a receptor in the exposed organism. Generally, this requires that the contaminant be dissolved. This can occur in the environment or within the body of the organism. Extractions of lead and arsenic from contaminated soils have been shown to correlate well with uptake by animal surrogates for humans. Often, less than one-half of the lead in a sample is bioavailable. Contaminants from other solid materials are likewise poorly soluble in the acidic stomach of a mammal. A soil-dwelling organism can access only a small fraction of the metal, that which is soluble and in soil solution or is dissolved in its gut following ingestion of soil particles.

Aquatic organisms are exposed to both inorganic particles and food particles, and to dissolved forms of contaminants. Understanding bioavailability of contaminants in food is an area of active research that is being pursued by the Environmental Protection Agency (EPA) and others. Present water quality criteria address dissolved contaminants. However, the toxicity of a metal can vary over 200-fold depending on the chemistry of the water. The principal factors controlling the bioavailability are water hardness, acidity and the concentration of dissolved natural organic matter. A new generation of water quality criteria for metals that incorporate these factors for the protection of aquatic life is being readied for release by EPA. Toxicity is accurately predicted by a model called the Biotic Ligand Model that accounts for the interaction of metals with substances that modify their toxicity and by substances in the water that modify the response of organisms to metals.

Currently EPA is developing a Framework for Assessing Hazards and Risks of Metals and Metal Compounds. The goal is to develop a cross-Agency framework describing the basic principles that need to be considered in assessing the hazards and risks posed by metals. It will present a consistent approach for making these assessments. The EPA Science Advisory Board panelists who reviewed the Agency's plans for development of the Framework stressed the importance of environmental chemistry and its relevance to the assessment of both inorganic and organometallic compounds. They also pointed out the importance of bioavailability in assessment of risks and hazards posed by metals. The Agency should be encouraged to apply the best science available as they complete the Framework. This would emphasize the key roles of incorporating exposure and bioavailability in the assessment of risk of metals.

Thank you again for this opportunity to address the Committee. I would be pleased to answer your questions.

Mrs. CUBIN. Thank you, Dr. Allen.

Now I would like to introduce Peter O'Connor for 5 minutes.

STATEMENT OF PETER O'CONNOR, ASSISTANT GENERAL COUNSEL AND DIRECTOR, ENVIRONMENT AND GOVERNMENT AFFAIRS, ANGLOGOLD NORTH AMERICA, INC

Mr. O'CONNOR. Good afternoon, Madam Chair, and members of the Committee.

On behalf of the National Mining Association, we have prepared some lengthy written testimony that I plan to summarize here.

I appreciate this opportunity on behalf of NMA to provide these comments on the TRI program as it is being applied to the metal

and coal mining industry. EPA imposed the TRI program on these two sectors in a 1997 rulemaking.

While my focus today is on the relationship of the TRI program to metal and coal mining facilities, it should be recognized that the TRI program is but one of a host of statutory and regulatory requirements applicable to the mining industry.

Among these many programs, EPA's TRI program unfortunately stands out as the one that provides the public with a highly distorted picture of the mining industry.

As a quick background, in 1986 Congress enacted EPCRA, including Section 313, which gives rise to the TRI program. At that time, Congress was responding to serious domestic and international manufacturing plant chemical accidents for which the emergency response was either unavailable or ill-prepared and about which neighboring communities had little information. EPCRA and, more specifically, TRI were intended to allow government agencies, the private sector, and the public to make informed decisions about managing or responding to chemical releases.

The list of chemicals subject to the TRI program contain over 600 substances, including many metals and metal compounds. While sometimes manufactured by man, these compounds also occur naturally throughout the rock and dirt that makes up the earth. In 1997, EPA took the position that all TRI chemicals, man-made or naturally occurring, had to be reported. In particular, EPA required that any dirt or rock that is moved at a mine was subject to TRI reporting as a "release to land"—despite the fact that such dirt and rock had been in the land for millions of years.

The slides found on page 4 of our written testimony help to illustrate what I mean. The slides show a progression of activities at a surface mine from mining to reclamation. Note that release, as that term is defined under TRI, is what is occurring in Slides 2, 3 and 4. That is the movement of rock from a surface mine to an approved engineered rock disposal area at a mine site.

The vast majority of what coal and metal mining reports, about 85 to 99 percent, depending upon the facility, consists of naturally occurring substances in the dirt and rock we move and manage at our facilities. EPA has recognized, for example, with respect to the calendar year 2001 reports, that over 99 percent of the metal mining sectors reported releases were releases to land; that is, the movement and management of dirt and rock contained in these naturally occurring metals and metal compounds.

The mining industry is not the only one that is concerned about the TRI program. In 2002, the Western Governors Association readopted a resolution recognizing that, with the 1997 expansion of TRI to new industry sectors, there was a heightened need to ensure that the reported data are communicated to the public in an understandable manner that includes a description of how these materials are managed so that actual releases to the environment where public exposure may actually occur are minimized.

In short, what is needed and what the public sought when TRI originally was passed by Congress is a rational, common sense reporting program.

In the last several years, two major Federal Court decisions have imposed on the TRI-mining relationship a degree of rationality missing in EPA's approach.

Where do the two court decisions leave us? Mining facilities remain subject to TRI reporting requirements. Certainly, as TRI chemicals that mines "otherwise use," such as cyanide, sulfuric acid and other man-made TRI chemicals used onsite, mines have continued to report under TRI and are committed to providing the public with information about our use and management of these chemicals. In addition, to the extent that extraction and beneficiation operations at metal mines and beneficiation operations at coal mines might manufacture TRI chemicals, those chemicals also are subject to reporting.

Naturally occurring TRI chemicals that the mines do not manufacture and, thus, cannot process, however, should no longer be subject to TRI reporting. Removing these huge numbers of naturally occurring chemicals entrained in dirt and rock should provide the public a clearer picture of TRI listed chemicals at mines with which we understand the public has more interest.

In conclusion, EPA needs to adopt regulations and policies to implement these court decisions. EPA and industry should work together so that the TRI data are communicated to the public in an understandable manner, as specifically suggested by the WGA. It is unfair to the public for the Agency to continue its annual dump of TRI data without providing adequate explanation and accurate context for the data.

For mining facilities, where large numbers have been the norm, the misleading implications have been that the mines are indiscriminately, and without any regulatory oversight, dumping vast quantities of toxic chemicals into the environment when, in fact, they have been placed in dirt and rock in permitted and engineered materials management facilities.

Thank you again for the opportunity to testify.

[The prepared statement of Mr. O'Connor follows:]

Statement of Peter O'Connor, Assistant General Counsel and Director, Environment and Government Affairs, AngloGold North America Inc., and Chairman, National Mining Association TRI Work Group

Good afternoon, Madame Chair and members of the Subcommittee.

My name is Peter O'Connor. I am Assistant General Counsel and Director, Environment and Government Affairs for AngloGold North America Inc. AngloGold is a gold mining company with mining operations and exploration activities in Alaska, Colorado and Nevada.

I am also Chair of National Mining Association's (NMA) TRI Work Group. NMA is an industry association representing the producers of most of the Nation's coal, metals, industrial and agricultural minerals; the manufacturers of mining and mineral processing machinery, equipment, and supplies; and the engineering and consulting firms, financial institutions, and other firms serving the mining industry.

I appreciate the opportunity on behalf of NMA to provide these oral comments and submit written testimony on the Toxics Release Inventory (TRI) program as it is being applied to the metal and coal mining industry. EPA imposed the TRI program on these two sectors (SIC Codes 10 and 12, respectively) in a 1997 rulemaking.

Overview

The mining industry supports the public's right to know useful information about materials and chemicals that may affect their health or the environment. However, the manner in which EPA has applied the TRI program to metal and coal mines

has resulted in the dissemination of data that is not useful or meaningful to the communities surrounding our operations or to the general public.

This distortion of Congressional intent has occurred because EPA continues to treat naturally-occurring metals and metal compounds in dirt and rock that are moved and deposited at a mine site the same as releases of man-made chemicals from an industrial plant. That approach leads to enormous reported numbers which give the public an inaccurate and misleading picture of chemical releases in their community. It also discourages recycling and pollution prevention at mine sites.

The public and the industry deserve a better reporting program. The courts have recognized that naturally-occurring chemicals in dirt and rock are not the same as releases of man-made chemicals. These court decisions have imposed some rationality on how TRI relates to mining. EPA needs to conform its regulations and policies to those court decisions without further delay.

EPA and the industry must work together to provide the public with accurate and understandable information. This information should include specifics on how these chemicals are managed. In this way, the public (as well as EPA) would have meaningful information about the true level of releases in their communities. Additionally, in the unlikely event of a release that may be of concern, the release would be more readily understood and steps could be taken to minimize it.

Introduction

My focus today is on the relationship of the TRI program to metal and coal mining facilities. The TRI program is one of a host of statutory and regulatory requirements applicable to the mining industry. The industry is subject, for example, to numerous federal environmental requirements, including the Clean Air Act (CAA); the Clean Water Act (CWA); the Safe Drinking Water Act; the Solid Waste Disposal Act, as modified by the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation and Liability Act; the Endangered Species Act; and the National Historic Preservation Act. Mining projects typically are subject to review under the National Environmental Policy Act (NEPA). Coal mining operations are regulated under provisions of the Surface Mining Control and Reclamation Act (SMCRA). Metal mining operations are subject to state mining and reclamation requirements and, if conducted on federal lands, to the mining and reclamation requirements imposed by the federal Bureau of Land Management and/or the U.S. Forest Service. [1] Under these programs, the mining industry has provided a wide range of information to state and federal agencies, and this information is publicly accessible.

Among these many regulatory programs, EPA's TRI program unfortunately stands out as the one that provides the public with a highly distorted picture of the mining industry. Allow me to explain.

TRI Background

In 1986, Congress enacted the Emergency Planning and Community Right-to-Know Act (EPCRA), including section 313 which gives rise to the TRI program. At that time, Congress was responding to very serious domestic and international manufacturing plant chemical accidents for which emergency response was either unavailable or ill-prepared and about which neighboring communities had little information. EPCRA, and more specifically TRI, were meant to provide the public with meaningful information on chemical releases. This information was intended to allow government agencies, the private sector, and the public to make informed decisions about managing or responding to chemical releases. Congress mandated that TRI reports be filed annually by facilities in SIC Codes 20-39, the traditional manufacturing sector of the American economy and the program was designed with these industries in mind. In 1990, Congress expanded the TRI reporting obligations to create incentives for pollution prevention.

EPA's approach to implementing TRI, however, has added some problematic twists to the program. For instance, TRI data reported to the public as chemical releases do not address risk or human exposure to chemicals or the level of toxicity of a chemical. [2] Additionally, the CAA, for example, is designed to regulate emissions to ambient air, typically the property boundary; whereas, in TRI that same determination occurs wherever on the property a listed chemical is found. Thus, a TRI "release" includes the placement of material into an on-site, engineered facility such

[1] This list is not all-inclusive; it does not, for example, take into account a myriad of local ordinances and requirements (e.g., land use requirements) that can affect mining operations.

[2] For example, TRI takes no account of the concentration of a listed chemical once triggered for reporting, e.g., the program makes no distinction between the reporting of a pound of pure cobalt versus that same pound tied up in hundreds or thousands of pounds of a rock matrix.

as a permitted rock disposal facility at a mine or shipment of material off-site to an approved RCRA Subtitle C hazardous waste management facility.

All non-accidental releases reported under TRI are specifically approved under other environmental laws, such as air emissions under the CAA or water discharges under the CWA. One result is that TRI too often gives the public a distorted and misleading picture of reporting facilities' environmental record and practices. This result was compounded many times over when EPA applied the TRI program to coal and metal mines in 1997.

Perversely, should there subsequently be an actual release of a TRI chemical from the facility into the environment, TRI does not account for that subsequent real release on the theory that since everything placed in that unit has already been counted as a release, counting the subsequent release would amount to double counting. Thus, what the public is most often concerned about is not revealed by TRI although the industry may report such releases under other programs.

Mining and TRI

The list of over 600 substances that must be reported under TRI chemicals includes many metals and metal compounds. While sometimes manufactured by man these metals and metal compounds also occur naturally throughout the rock and dirt that makes up the Earth. EPA had made no distinction between man-made and naturally-occurring forms of these metals and metal compounds. However, the agency took the position in its 1997 rule (expanding the TRI program by the addition of seven new industries, including coal and metal mining) that all TRI chemicals, man-made or naturally-occurring, had to be reported. In particular, EPA required that any dirt or rock that is moved at a mine was subject to TRI reporting as a "release to the land" despite the fact that such dirt and rock had been in the land at the site for millions of years.

The slides attached to the written testimony help to illustrate what I mean by the movement and management of dirt and rock. These slides provide a progression of mining activities at a metal mine from surface excavation activities through the reclamation process.

A typical surface mine moves millions of tons of rock and dirt to provide the energy and materials society requires for national and economic security. The result of this counter-intuitive TRI reporting approach is to make mining the nation's largest reporter (usually mischaracterized as "polluter") of TRI-listed chemicals. For calendar year (CY) 2001, this program resulted in the reporting of 2.78 billion pounds of TRI "releases" or 45 percent of the total reported TRI releases for the year. TRI has erroneously turned states with any significant mining industry into the nation's so called "dirtiest" states. Nevada, for example, went from 44th for TRI "releases"[3] in CY 1997 to 1st in CY 1998 and thereafter, including the most recent reporting period.[4]

What should be made clear is that the vast majority of what mining reports—from 85 to 99 percent—consists of naturally-occurring substances in the dirt and rock we must move and manage at our facilities. In CY 2001, for example, even EPA recognized that over 99 percent of the metal mining sector's reported releases were "releases to land,"[5] i.e., the movement and management of dirt and rock containing these naturally-occurring metals and metal compounds. When asked, EPA made this clarification.

Unfortunately, many chose not to ask. For example, in a September 23, 2003, press release, the Mineral Policy Center (MPC) characterized EPA's current approach as follows: "Families and communities gain invaluable public information from TRI about potentially dangerous chemicals released into their **water and air**" (emphasis added). They went on to say that resolutions adopted by the Western Governors Association (WGA) calling upon EPA to make its reports more meaningful, "would prevent the public from knowing about chemical releases that have severe human health impacts." In both cases, the MPC has mischaracterized the TRI data—and more importantly, its significance to the public. The simple fact is that the vast majority of naturally-occurring chemicals in dirt and rock never enter the air or water. It should be noted, however, the current reporting regime contributes significantly to that mischaracterization.

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[3] The top three states for TRI releases based on EPA's most recent TRI data release in July 2003 were Nevada, Utah and Arizona, in that order. All have very significant mining operations.

[4] For example, the total reported releases for the state of Nevada in 1997 were 4.4 million pounds that resulted in the state being ranked #44; the total reported releases for Nevada in 2001 were 783,494,630 million pounds that resulted in the state being ranked #1. 2001 TRI Public Data Release, Executive Summary, Table ES-2, page ES-4. EPA, July 2003.

[5] 2001 TRI Public Data Release, Executive Summary, page ES-5. EPA, July 2003.

As this example demonstrates, EPA's policy frustrates public understanding about mining operations. Information on the management and the precautions taken in the handling of substances of potentially more interest to the public—e.g., cyanide used in gold production or sulfuric acid in copper production—are lost in the "noise" created by reporting large numbers of naturally-occurring substances.

TRI Discourages Pollution Prevention and Recycling at Mining Facilities

EPA's implementation of TRI discourages recycling at mining facilities by treating recycling as "waste management." For example, pad material at gold operations may be suitable for other uses once precious metal recovery operations have been completed. But if that pad material after appropriate detoxification and full approval by the appropriate regulatory agencies is used as a substitute for commercial-grade road bed materials (i.e., gravel), EPA does not recognize this as recycling. Rather, EPA views this as a waste management activity and a facility must report such reuse as disposal under the "otherwise use" threshold activity.[6]

Another example: state and federal regulatory programs recognize that coal combustion products (often termed "CCPs") can have many beneficial uses at mine sites (e.g., as roadbed material, soil amendments, buffering to prevent or eliminate acid mine drainage, in cement to seal mine openings and shafts, and to assist in returning coal mine site to approximate original contour as required by SMCRA). In each case, the CCPs provide an environmental as well as an economic benefit. Yet under EPA's approach to TRI, all of these beneficial uses must be reported as waste management, sometimes causing the double reporting of the same CCPs (first by the generating utility and second by the mine). Despite such uses being permitted and encouraged by state and federal regulatory programs—including other EPA programs—EPA's approach to TRI tells the public that CCPs used in this manner are being disposed of as waste.[7] On this point NMA strongly endorses the testimony offered today by Mr. Richard Bye on behalf of Texas Genco, the Edison Electric Institute, and the Utility Solid Waste Activities Group.

EPA has consistently tried to use the TRI program to support pollution prevention (P2) program efforts. For example, EPA annually analyzes the amount of reported TRI releases to identify trends and, hopefully, reductions in chemicals released, changes that could occur as a result of modifications to production systems or reductions in the amount of TRI-listed chemicals used. EPA also has noted that "[c]ommunities use TRI data to begin dialogues with local facilities and to encourage them to reduce their emissions, develop [P2] plans, and to improve safety measures."[8]

Mining, however, is unique. Other industrial facilities may elect to modify their raw materials or even substitute a completely different raw material as a means of reducing or eliminating a listed chemical. A mine, however, cannot control the amount of naturally-occurring TRI chemicals in the rock and dirt. Since the vast majority of mining's reported TRI releases are naturally-occurring substances in the dirt and rock moved and managed at a mine site, the typical P2 chemical reduction process that has occurred in other industries does not apply to mining. While companies have increased recycling and pollution prevention activities, EPA's approach to TRI obscures the progress made by mining companies in protecting public health and the environment. Under EPA's approach to TRI, the public must go elsewhere to learn about such matters.

For example, four Nevada mining companies worked with the state of Nevada to develop and implement a voluntary program[9] to achieve significant, permanent, and rapid reductions in mercury air emissions. While this program has been recognized by EPA, the companies' success in reducing their mercury air emissions is nevertheless obscured by the facilities' overall reports of naturally-occurring TRI chemicals in dirt and rock.

In another example, the Colorado Mining Association and the Colorado Pollution Prevention Advisory Board recognized the incongruity of the standard P2 program and the mining industry, and developed an industry-specific P2 program identifying

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[6] Were a mine to purchase gravel for use on-site, the facility would be entitled to a reporting exemption for any TRI chemicals present in the gravel at de minimis levels; however, EPA refuses to accord the de minimis exemption to leach pad material that is a substitute for commercially purchased gravel.

[7] In another frustrating example, EPA requires that mines leasing reclaimed mine land to farmers must file reports on TRI chemicals in the agricultural chemicals the farmers apply to the reclaimed mine land to help grow crops.

[8] See How Are the Toxics Release Inventory Data Used?—government, business, academic and citizen uses. EPA Report No. EPA-260-R-002-004 (May 2003) at p. 1.

[9] See State of Nevada Mining Operations—Voluntary Mercury Air Emissions Reduction Program—Guidance Document, NDEP (Feb.2002). See also Attachment A to this testimony.

good management practices.[10] While this program, too, has been recognized by EPA, it is not a standard "P2" program and had to be conceived outside the rubric of EPA's TRI program.

The mining industry is not the only one concerned about the TRI program. In 2002, as previously referenced, the WGA readopted[11] a resolution recognizing that, with the 1997 expansion of TRI to new industry sectors, there was a heightened need "to ensure that the reported data are communicated to the public in an understandable manner that includes a description of how these materials are managed so that actual releases to the environment, where public exposure may actually occur, are minimized."[12]

In short, what is needed and what the public sought when TRI originally was passed by Congress is a rational, common-sense reporting program.

Courts Imposing Rationality on TRI-Mining Relationship

In the last several years, two major federal court decisions have imposed on the TRI-mining relationship a degree of rationality missing in EPA's approach. The decisions have upheld EPA's imposition of the TRI program on mining but have scaled back the scope of what mining facilities must report. In doing so, these decisions have recognized the public's legitimate right-to-know about the presence of man-made TRI chemicals at mining sites. The agency needs to conform its reporting regulations and policies to the court decisions to ensure that future TRI reports from mining facilities will give the public a clearer picture of chemicals of legitimate concern.

NMA v. Browner[13]

By operation of the EPCRA statute, TRI chemicals must be "manufactured" before they can be "processed". When EPA imposed the TRI program on metal and coal mines in 1997, the agency declared that nature "manufactured" the naturally-occurring TRI substances and that the mines "processed" those naturally-occurring TRI chemicals, thereby triggering mines' TRI reporting obligations.

In 2001, the U.S. District Court for the District of Colorado upheld EPA's imposition of TRI regulations on metal and coal mines. But the court found that EPCRA contemplates a human activity in the act of "manufacturing" TRI chemicals. Thus, naturally-occurring TRI chemicals in the ore were not "manufactured" for TRI purposes by nature as EPA had contended. Since the EPCRA statute requires that a substance be "manufactured" before it can be "processed", the court enjoined EPA from applying the definition of "processing" to extraction and beneficiation of ores and minerals.

While the court thus limited the scope of mining facilities' TRI reporting obligations, the agency in a series of letters shortly after this 2001 decision took the position that the industry still needed to report as before and that facilities had to decide for themselves whether they were "manufacturing" or "processing" TRI chemicals (recall that this is for an industry not specified in statute but brought into the program via EPA's regulations). While the letters were, at best, no more than questionable guidance (and not rulemaking), they ignored the court's order and injunction and created confusion as to what information mining facilities actually did have to report.

Barrick Goldstrike Mines v. Whitman[14]

In a separate lawsuit, Barrick Goldstrike Mines challenged EPA's imposition of TRI reporting requirements via guidance documents and letters. In April 2003, the U.S. District Court for the District of Columbia issued its opinion, holding for the company on several key matters. First, the court struck down EPA's interpretation that the TRI de minimis exemption did not apply to mines' waste (i.e., development) rock. Since many naturally-occurring TRI chemicals can be found at very low concentrations in such rock, this holding will help to reduce some of the "noise" created

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[10] For additional information on the Colorado Good Management Practices program, see A Code of Pollution Prevention Practices for the Mining Industry in the State of Colorado with Good Management Practices (CMA, May 2003), and Attachment B to this testimony.

[11] The Western Governors Association originally adopted on June 19, 1999, Policy Resolution 99-003 related to TRI.

[12] Policy Resolution 02-19, Western Governors Association, June 25, 2002.

[13] No.97-2665, Order and Memorandum of Decision (D.CO, Jan. 16, 2001) and Order of Clarification (Mar.30, 2001)

[14] No.99-958(TPJ) (DDC, April 2, 2003)

by mines' reporting large numbers of naturally-occurring chemicals in dirt and rock. [15]

Second, the court found that naturally-occurring metals and metal compounds that remained unchanged in Barrick Goldstrike's dore [16] had not been "processed" as EPA asserted. The court looked to the NMA v. Browner decision—which EPA told the court it had accepted—and found that the naturally-occurring metals and metal compounds in the dore had not been "manufactured". Thus, again by operation of EPCRA section 313, these substances could not have been "processed".

Where do the two court decisions leave us?

Mining facilities remain subject to TRI reporting requirements. Certainly as to TRI chemicals that mines "otherwise use"—such as cyanide, sulfuric acid, and other man-made TRI chemicals used on-site—mines have continued to report under TRI and are committed to providing the public with information about our use and management of these chemicals. In addition, to the extent that extraction and beneficiation operations at metal mines and beneficiation operations at coal mines might manufacture TRI chemicals, those chemicals also are subject to reporting.

Naturally-occurring TRI chemicals that the mines do not manufacture and thus cannot process, however, should no longer be subject to TRI reporting. Removing these huge numbers of naturally-occurring chemicals entrained in dirt and rock should provide the public a clearer picture of TRI-listed chemicals at mines with which we understand the public has more interest. Application of the de minimis exemption to TRI chemicals in waste rock is a good starting point to achieve this goal.

Next Steps

Thus far, EPA appears to be committed to making TRI—by rule, guidance, and other administrative action [17]—generate the largest possible "release" numbers, thereby providing the public a distorted view of the Nation's mining industry.

Since 2001, EPA has asserted that it would engage in rulemaking to "clarify" mining facilities' TRI reporting obligations in light of the NMA v. Browner decision. Based on the record, however, including agency letters and website postings, there is clear evidence that by "clarification" EPA unfortunately may mean "restoration" of the same TRI reporting obligations for mining sites that the courts have rejected, including the reporting of large amounts of naturally-occurring TRI chemicals in dirt and rock.

The agency also has announced its intent to "re-visit" (i.e., apparently narrow) a number of reporting exemptions that have operated to impose a degree of rationality on TRI reporting. Many of these exemptions have been in place since EPA promulgated the original TRI regulations in 1988; all of these exemptions were put in place to reduce the burden on reporting facilities. Some examples of the exemptions include one for TRI chemicals used in the maintenance of fleets of vehicles, and one to exempt TRI chemicals involved in coal extraction activities.

When EPA engages in further rulemaking, the agency's first obligation must be to align its regulations and policies with the results in the NMA v. Browner and Barrick Goldstrike decisions—decisions the agency specifically decided not to appeal. The agency must not engage in rulemaking either to reinstate reporting obligations the courts have struck down or to eliminate burden-reducing exemptions.

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[15] However, this specific aspect of the Barrick Goldstrike decision, as to the applicability of the de minimis exemption to waste rock, may not apply where naturally-occurring TRI-listed chemicals are above de minimis thresholds. As such, significant naturally-occurring TRI-listed chemicals in rock and dirt may continue to be reported notwithstanding this very appropriate Barrick Goldstrike decision.

[16] Dore is a gold-silver mixture shipped for further refining (separation) into gold and silver metals for the commercial market. The dore contains naturally-occurring metals and metal compounds that the facilities do not remove prior to shipment; EPA took the position that Barrick had "processed" those metals and metal compounds and thus they were subject to reporting for TRI purposes.

[17] In a separate action last year, the agency denied NMA's petition to modify the TRI definition of "overburden" to conform to the generally-accepted definition of that term. EPA's decision meant the continuance of an unreasonably narrow exemption for TRI chemicals in overburden, i.e., metal mines had to continue to report naturally-occurring TRI chemicals in dirt and rock. EPA defined overburden to include only "unconsolidated" materials. See 40 CFR §372.3. Where overburden is defined in recognized dictionaries or other federal programs, it is defined to include both unconsolidated as well as consolidated materials. See e.g., Dictionary of Mining, Mineral and Related Terms (Amer. Geological Inst. 1997); EPA Clean Water Act regulations 40 CFR 122.26(b)(10); Mine Safety & Health Administration regulations 30 CFR 56.2 and 57.2; Office of Surface Mining regulations 30 CFR 701.5; Bureau of Land Management Reclamation Handbook (1992); Bureau of Indian Affairs regulations 25 CFR 216.3(c).

At a broader level, EPA and industry should work together so that TRI data are communicated to the public in an understandable manner, as specifically suggested by the WGA. It is unfair to the public for the agency to continue its annual "dump" of TRI data without providing adequate explanation and accurate context for the data. For mining facilities, where large numbers have been the norm, the misleading implications have been that mines are, indiscriminately and without any regulatory oversight, dumping vast quantities of toxic chemicals into the environment when, in fact, they have been placing dirt and rock in permitted and engineered materials management facilities. [18]

ATTACHMENT A

MERCURY REDUCTION PROGRAM AT MINES—A NEVADA VOLUNTARY PROGRAM

A Toxics Release Inventory (TRI) chemical reported by several hard rock mine sites in Nevada in exceedingly small quantities in relation to the total "releases" reported is air releases of mercury. Mercury is a metal that occurs naturally in the Earth's crust, and is prevalent in the basin/range geologic province of Nevada where gold is found. There are no specific federal or state requirements for the control of mercury air emissions from hard rock mine facilities. Prior to 1995, Nevada's air regulatory program required that any source emitting greater than one pound per hour of any hazardous or toxic pollutant needed to install best available control technology; this requirement was deleted in 1995 but sites voluntarily continued to control such emissions, including mercury emissions. Even with these voluntary controls, hard rock sites in Nevada with thermal units reported about seven tons of mercury air emissions. These emissions were not included in the Environmental Protection Agency's ("EPA") December 1997 "Mercury Study Report to Congress." See Mercury Study Report to Congress. Volume II: An Inventory of Anthropogenic Mercury Emissions in the United States. EPA Report No. 452/R-97-004 (Dec. 1997). If these emissions were included in that report, the emissions reported for the Nevada mine sites would have made up slightly over four percent of the total mercury air emissions in the United States. As such, these reported releases raised questions by the State of Nevada and EPA Region IX on the potential human health and environmental impacts, and the need, if any, for additional emission controls.

The Nevada Division of Environmental Protection (NDEP) has been delegated authority over various federal environmental laws, including the Clean Air Act, as well as administers Nevada's hard rock mining and reclamation law. NDEP conducted a study on the potential human health and environmental impacts in light of the reported mercury air releases. NDEP determined, in a report issued in November 2000, "that there is currently no imminent and substantial public health threat associated with mercury emissions in the region." See Mercury Emissions From Major Mining Operations In Nevada, NDEP (Nov. 2000). Notwithstanding this report and its findings, NDEP entered into discussions with the four primary gold mining companies in the State about the possibility of a voluntary mercury reduction program (VMRP).

NDEP eventually developed, in concert with four mining companies, a VMRP that was released in final form in February 2002. The VMRP is a State-sponsored voluntary initiative to provide maximum flexibility to obtain significant, permanent, and rapid decreases in mercury air emissions from precious metal sites in Nevada with thermal units. The program contains two approaches for reducing mercury emissions: (1) "MACT Equivalent Track" (encourage companies to install certain identified controls that have been determined by EPA to be maximum available control technology equivalent); or (2) "Process Modification Track" (certain activities instituted to reduce mercury air emissions by 33% and 50% of an identified baseline by 2003 and 2005, respectively). Both EPA Region IX and EPA Headquarters have concurred in the VMRP, with EPA Headquarters specifying in a May 6, 2002, memo that "[t]he program is consistent with the Agency's commitment to finding innovative approaches to managing air quality."

EPA Region IX recently recognized this voluntary program to reduce mercury air emissions. On April 22, 2003, Region IX awarded its 2003 Environmental Achievement Award to NDEP and the four mining companies that volunteered for the program in recognition of the exceptional work and commitment to the environment.

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[18] One straightforward step would be to modify the TRI program to conform to other federal environmental programs. "Release" should be defined consistently with how that term is employed in other environmental programs, i.e., if a substance does not escape the facility boundaries, or at least the boundaries of the containment unit, it is not a release to the environment. NMA recognizes this would require a statutory change, which is outside the context of this testimony.

As such, a chemical reported under the TRI program that was identified by the federal and state government as of potential concern has been dealt with voluntarily and swiftly by the mining industry.

ATTACHMENT B

TRI, MINING AND POLLUTION PREVENTION ("P2")

EPA has consistently tried to use the Toxics Release Inventory (TRI) program to support pollution prevention (P2) program efforts. For example, EPA annually analyzes the amount of TRI releases reported to identify trends and reductions in chemicals as a result of reporting facilities undertaking modifications or other actions to systems or procedures to reduce the amount of TRI listed chemicals reported annually. EPA also has noted that "[c]ommunities use TRI data to begin dialogues with local facilities and to encourage them to reduce their emissions, develop pollution prevention (P2) plans, and to improve safety measures." [19]

The mining industry is unique in that the vast majority of reported TRI listed chemicals are naturally occurring substances in the rock, dirt, and other earthen material that is moved around a mine site, which does not lend itself to the typical P2 chemical reduction process that has occurred from other industries that report under the TRI program. A mine site cannot control the amount of naturally occurring TRI listed chemicals in the rock. It follows that only very limited opportunities exist for reducing reported chemicals unless mining operations switch from surface to underground (thereby reducing the amount of rock moved, but mine economics limit the availability of this option) or stop operations (thereby not moving any rock and eliminating any TRI reporting, not true P2 but a comparable outcome). Moreover, modifications in the type of chemicals brought onto a mine site and the concomitant reduction in the amount of reported "releases" typically is subsumed in the reported release of listed TRI chemicals naturally occurring in rock.

The Colorado Mining Association (CMA) and the Colorado Department of Public Health and Environment's Pollution Prevention Advisory Board recognized the incongruity of the standard P2 program and the mining industry. The Pollution Prevention Advisory Board also wanted to recognize the activities already instituted by many mining companies as part of individually crafted P2 programs (e.g., change from hazardous to non-hazardous solvents based on review of material safety data sheets (MSDS)). As such, the Pollution Prevention Advisory Board in 2001 awarded CMA a grant from the Pollution Prevention Fund to develop a tailored P2 program specific to the coal and hard rock mining industry in Colorado.

Based on various investigations, including questionnaires to determine P2 practices already instituted at mine sites, a Code of Practice was developed and ultimately finalized in May 2002. See A Code of Pollution Prevention Practices for the Mining Industry in the State of Colorado with Good Management Practices, CMA (May 2002). The Code of Practice identified good management practices in four areas: hazardous chemicals; container management; conservation, recycling, and reuse; and closure and reclamation. The goal is for Colorado mining companies to voluntarily develop and implement (or document already instituted) customized site-specific management systems for the elimination of pollution.

EPA Region VIII recently recognized this voluntary industry specific P2 program. On September 11, 2003, Region VIII awarded CMA its prestigious Friend of EPA Award. Regional Administrator Robbie Roberts presented the award, which according to EPA "directly supports and assists EPA in performing its mission to protect public health and the environment" and champions environmental protection in a proactive manner. As such, a specialized P2 program has been developed and implemented in recognition of the unique aspects of mining activities.

Mrs. CUBIN. Thank you, Mr. O'Connor.

It's now my privilege to introduce Bonner Cohen. Dr. Cohen.

[19] See How Are the Toxics Release Inventory Data Used?—government, business, academic and citizen uses. EPA Report No. EPA-260-R-002-004 (May 2003) at p.1.

STATEMENT OF BONNER R. COHEN, PH.D., SENIOR FELLOW, NATIONAL CENTER FOR PUBLIC POLICY RESEARCH

Dr. COHEN. Thank you very much, Chairman Cubin. Thank you very much for giving me the opportunity to testify here this afternoon.

When considering the impact of the TRI on the mining of minerals industries, I want to focus my attention this afternoon on two aspects. The substance of the TRI and EPA's implementation of the EPCRA law.

Regarding the substance of the TRI, it is important to bear in mind that the TRI is a volume-based inventory of releases into the environment. As such, it tells us very little about the actual possible human effects of human exposure to these trace elements of chemicals listed in the TRI.

When the mining industry was added to the TRI by EPA in 1997, problems surfaced. Those problems have their root in the unique aspects of the mining industry. As pointed out by the Chairman in her opening remarks, over 85 percent of the TRI listed metals that pertain to the mining industry are naturally occurring. When the EPA reports this, unfortunately the impression can come about that the greater public is being exposed to these toxic chemicals.

When the court decisions in the year 2001 were handed down—specifically, the National Mining Association versus Browner—it was pointed out that the law does not require TRI reports of—and I quote—"naturally occurring compounds from mining operations."

Unfortunately, EPA has yet to make appropriate adjustments to its TRI reporting to conform with the court's decision. It was encouraging to hear the representative of EPA on the first panel say that the Agency is working on this. But the Agency has had 2 years to work on this and we still have information being released by EPA which is misleading. Indeed, according to the Western Governors Association, the information being released by EPA continues to be, and I quote, "misrepresented, mischaracterized, and reported out of context, causing widespread and unnecessary concerns in States and local communities."

The resulting misleading picture is not what Congress had in mind when it initially passed the law in 1986. Indeed, I think it's important to put this in a larger context and recognize how misleading the TRI can be in other respects. Let me very briefly cite the example of dioxin.

Dioxin is, albeit in trace amounts, ubiquitous in the environment. It is the result of combustion, uncontrolled burning, and certain industrial processes. As a result of Federal regulations and vast improvements in technology, emissions of dioxin have been reduced, according to EPA's own data, by 92 percent since 1987.

Indeed, as a result of the progress that has been made in reducing dioxin emissions from the industrial sector, it turns out that the largest source of dioxin in the United States today is forest fires.

The second largest source of dioxin in the United States is the largely unregulated practice of trash burning, backyard trash burning, prevalent in rural areas of the United States. While industrial sources are continued under the TRI, or to be required to report their emissions, their declining emissions to EPA, somehow the

public does not seem to have a right to know about the real sources of dioxin emissions in the United States, indeed, the largest sources of dioxin emissions.

It seems that, if we're looking at this program, there is considerable room for improvement on the part of EPA's implementation of this statute. The EPA should be a body which disseminates information, not designed to spread unnecessary fear to local communities. The EPA should be disseminating information that provides the kind of data on which people living near facilities covered under the TRI can base their decisions.

By failing 2 years after the court decision of 2001 to conform its TRI information to the court's directive, EPA has not served the public interest. I do not think it is good public policy to have an agency disseminating the kind of data that could only be misinterpreted and, indeed, can lead, in the case of the mining industry, to the demonization not just of an industry but in a whole part of the country where that industry is centered.

Thank you very much. I would be happy to answer any questions later on.

[The prepared statement of Dr. Cohen follows:]

Statement of Bonner R. Cohen, Ph.D., Senior Fellow, National Center for Public Policy Research

I want to take this opportunity to thank Chairman Cubin for the privilege of addressing the important issue before us this afternoon.

In approving the Emergency Planning and Community Right-to-Know Act (EPCRA) in 1986, Congress intended to provide the public with general information on the amount of a particular chemical "released" into the land, air, water, or those transferred off-site for treatment or disposal. Such data are contained in an annual report published by the U.S. Environmental Protection Agency (EPA) under the name "Toxic Release Inventory" (TRI). At present, some 650 chemicals and substances are covered under the TRI, and industries falling under the statute's jurisdiction are required to report releases by facility to EPA.

In this regard, it is important to keep in mind what the TRI is and what it is not. The TRI is a volume-based inventory that tells us nothing about risk resulting from human exposure to the trace elements of chemicals contained in the report. Furthermore, the TRI does not distinguish between actual releases to the environment and substances managed at facilities. This leads to the emergence of a very misleading picture of the "releases" at industrial facilities, including those of the mining industry.

In 1997, EPA expanded the TRI to seven new industry sectors, including the electric utility, coal and mineral mining industries—all of which have large volumes of materials. Over 85 percent of the volume of all materials reported by mining operations are trace amounts of TRI-listed metals that occur naturally in the soil and rock involved in exploration, excavation and other activities. These materials are managed on site and remain within the boundaries of the facility. As such, mining, as well as utility, operations do not create the kind of public exposure to substances TRI reporting was intended to address.

In 2001, the U.S. District Court for the District of Columbia found in National Mining Association V. Browner that the EPCRA does not require TRI reports of "naturally occurring compounds" from mining operations. However, to date, EPA has failed to conform the TRI program to the court's directives. As a result, EPA's published data on the TRI releases of the mining and utility industries do not inform the public, they mislead it.

Indeed, according to the Western Governors Association, EPA's TRI reporting of naturally occurring compounds and substances that are managed and controlled by multiple state and federal regulatory programs "continues to be misrepresented, mischaracterized, and reported out of context causing widespread and unnecessary concern in states and local communities." This, the WGA notes, "has resulted unfairly in Western states being characterized as badly 'polluted'."

How misleading the TRI can be can be seen in the example of dioxin. Dioxin, albeit in trace amounts, is ubiquitous in the environment. It is the inevitable

byproduct of incineration, uncontrolled burning, and certain industrial processes. Regulatory restrictions on emissions, coupled with dramatic strides in industrial technology, have led to sharp declines in dioxin in the environment. EPA's own data show a 92 percent reduction in dioxin emissions since 1987. While industrial sources of dioxin continue to report their releases to EPA for the TRI, it should be noted that the greatest source of dioxin in the United States is—forest fires. The giant infernos cutting a swath of death, destruction, and environmental degradation across the West are also putting substantial amounts of dioxin into the environment.

The nation's second biggest source of dioxin is the largely unregulated practice of backyard trash burning. Yet, somehow, the public doses not seem to have a "right to know" about these non-industrial emissions of a TRI-listed substance.

Given EPA's refusal to conform the TRI to the court's directives in National Mining Association V. Browner, and in the related case of Barrick V. Whitman, it is imperative that Congress exercise its oversight responsibilities and direct the agency to make appropriate changes in its TRI reporting. EPA should not be engaged in disseminating misleading information that needlessly causes concern to the public. The agency should take immediate steps to improve its implementation of the EPCRA and ensure that the public discourse on environmental policy is not itself polluted.

Thank you very much.

Mrs. CUBIN. Thank you, Dr. Cohen.

Now I would like to recognize Meghan Purvis.

STATEMENT OF MEGHAN PURVIS, ENVIRONMENTAL HEALTH ASSOCIATE, U.S. PUBLIC INTEREST RESEARCH GROUP

Ms. PURVIS. Thank you for the opportunity to testify today on the Toxic Release Inventory program and the mining industry.

My name is Meghan Purvis, and I am an Environmental Health Associate for U.S. Public Interest Research Group, the Federal advocacy office for the State PIRGs. State PIRGs are nonpartisan, nonprofit, State-based public interest advocacy groups with a strong stake and history in advocating for the public right to know.

Today, I will summarize my written testimony previously submitted to the Subcommittee.

The public debate around TRI should be focused on the public's right to know and not on the complaints of the potential burden to the worst industry in the program, an industry that releases billions of pounds of chemicals linked to cancer, neurological and developmental problems, chemicals such as mercury, arsenic and lead.

The State PIRGs are here today to address the strong public support for the TRI program and make the point that the purpose of the TRI program is to allow citizens access to information about the toxic chemicals released into their environment that could potentially have a devastating effect on their health.

First I would like to debunk the myth that we've heard today, that mining industries merely move rock and dirt and do not affect any of the naturally occurring toxins in that rock. Disposal of waste rock and subsequent releases of toxic chemicals can be compared to the everyday example of making coffee. If whole beans are used, the coffee in the pot is very weak. When these same beans are ground up, however, the resulting coffee is much stronger.

Unfortunately, the mining industry creates a toxic brew by grinding up waste rock that contains billions of pounds of toxic chemicals. Chemicals like arsenic, lead and mercury become bioavailable during the mining process. These chemicals have been linked with

serious health effects and the public should always know about their releases.

Since the inception of the TRI program, the public has expressed overwhelming support. From the Christ the Servant Lutheran Church in Nevada, to SEIU Local 100 in Louisiana, a wide range of constituencies see and have recognized the importance behind the public's right to know. In fact, over 700 groups have spoken out about the importance of right-to-know and have expressed their support for the TRI program.

The TRI program is often considered one of the most successful programs at the EPA and has been credited with initiating a decrease of nearly 50 percent in toxic releases reported by original industries since 1986. Much of this decrease has come from voluntary reductions by industry in response to public outcry over Toxic Release Inventory data.

This decrease of releases may have a positive effect on our Nation's health. More science is emerging linking the growing rates of chronic disease in our country to environmental exposures to toxic chemicals. A ground-breaking 2000 study found that the environment played the principal role in causing sporadic cancer. This same study attributed 25 percent of the causation of breast cancer to the environment.

We hope that the mining industry follows the lead of other industries and looks for ways to reduce their releases of carcinogens, neurological and developmental toxicants. Three of the primary toxic chemicals released by the mining industry are arsenic, mercury and lead. In 2001, the mining industry released 335 million pounds of arsenic, a readily recognized poison, known human carcinogen, and developmental toxicant. Workers exposed to arsenic in mines have an elevated risk of developing lung cancer, as do people who live near waste sites that contain arsenic.

Also in 2001, 4 million pounds of mercury, a potent neurological toxicant, were released by the mining industry. Mercury from mines can contaminate groundwater, making its way into fish, which is the primary root of human exposure. In fact, in this country, one out of every twelve women of child-bearing age has mercury blood levels high enough to trigger an increased risk of neurological damage to any child that she has in the future.

The dangers of another neurotoxicant, lead, have been known for decades, and the metal mining industry is a leader, releasing 335 million pounds of lead in 2001. According to biomonitoring reports, some children already have blood lead levels that are associated with a greatly increased risk of neurocognitive disorders. The CDC has previously reported that there is no safe level of lead.

The TRI program has been praised by a variety of stakeholders, and so it is rather surprising to hear today the criticisms of the mining industry representatives of the TRI program. The chemical industry in particular has publicly praised the success and intention of the program. In 1990, Tom Ward, a representative of Monsanto Corporation, was quoted in Iowa recognizing that the law is having an incredible effect on industries to reduce emissions, and that's good. There is not a chief executive officer around who wants to be the biggest polluter in Iowa.

In conclusion, the issue today is really not that complicated. As the EPA launches into a proposed rulemaking surrounding the mining industry and its continued challenges to TRI, it is critical to continue to hold forthright the main purpose of the TRI program. The program and the public debate surrounding TRI should be about the public's right to know about the large amounts of toxic chemicals released by the worst industry in the country.

The State PIRGs urge the Subcommittee to emphasize how EPA and Congress can further the public's right to know, and not focus on the complaints by the leading releaser of toxic chemicals.

Thank you.

[The prepared statement of Ms. Purvis follows:]

Statement of Meghan Purvis, Environmental Health Associate, U.S. Public Interest Research Group (U.S. PIRG)

Thank you for the opportunity to testify today on the Toxic Release Inventory program and the mining industry. My name is Meghan Purvis, and I am an Environmental Health Associate for U.S. Public Interest Research Group. U.S. PIRG is the federal advocacy office for the State PIRGs. State PIRGs are nonpartisan, nonprofit, state-based public interest advocacy groups with a strong stake and history in advocating for public Right-to-Know issues.

We support the subcommittee's attention to expose the mining industry's continued efforts to claim exemption from the TRI program. Their schemes would keep the public in the dark about the billions of pounds of pollution the mining industry is responsible for every year. Despite the fact that in the year 2000, mining companies released 3.4 billion pounds of toxic chemicals into the environment, or nearly half of all the releases reported to the TRI program, the companies and industry organizations have time and again fought to claim exemption from one of the nation's most successful public information programs.

BACKGROUND OF TRI

Congress established the Toxics Release Inventory program in 1986 as a part of the Emergency Planning and Community Right-to-Know Act (EPCRA). The TRI requires industries to disclose releases of toxic compounds into the air, water and land, as well as provide the public with information about toxic chemicals in their community on an annual basis. According to the Conference Report from the passage of EPCRA, Congress intended to "provide the public with important information on hazardous chemicals in their communities."[1] Clearly, the purpose of the TRI program is to allow citizens access to information about the toxic chemicals being released into their environments that could potentially have a devastating effect on their public health.

The mining industry was added late to the TRI program, and has been required to report their releases since 1998. Since then, however, the mining industry has quickly established themselves as the nation's biggest source of reportable toxic releases, releasing 2.8 billion pounds of toxic chemicals in 2001. The mining industry was one of the top industrial polluters of lead, mercury and arsenic in 2001. In addition, according to the TRI program, the top ten worst polluting facilities for all releases were all from the mining industry.

STRONG PUBLIC SUPPORT FOR TRI

Since the inception of the TRI program, the public has expressed overwhelming support both for the program itself as well as the general principal of community right-to-know. From the Christ the Servant Lutheran Church in Nevada, to the Gray Panthers of Wisconsin, to the SEIU Local 100 in Louisiana, a wide range of constituencies have recognized the importance behind the public's right to know about toxic chemicals released into their air, water and land. In fact, when legislation was introduced in Congress in 1997 to greatly expand the right-to-know program to include consumer products, chemicals in the workplace, and the impact of toxics on children, more than 700 groups in total spoke out about the importance of right-to-know and expressed their support of the TRI program.

[1] H.R. Conf. Rep. No. 962, 99th Cong., 2dSESS. (1986), "Joint explanatory statement of the Committee of Conference."

In addition, the public readily believes in their right to know about toxic releases in their communities. In public opinion research conducted by the Pew Charitable Trusts, respondents articulated they felt strongly about their right to pollution information. One man from Carson City, Nevada, reported: "I think that I would just like to be informed about things that could be potential problems, so that at least I would have the knowledge to make a decision to do something about it or not...I would just like to have information about what the government is doing, just so I can make my own decision."[2]

HIGH SUCCESS OF THE TRI PROGRAM

The TRI program is often considered one of the most successful programs at the Environmental Protection Agency. This is a model piece of legislation for states and cities that wish to expand their citizens' right-to-know about toxic chemical releases. The TRI program has been credited with initiating a voluntary decrease in toxic releases reported to the program, may have subsequently protected public health, and has been praised by public interest advocacy groups and industry leaders alike.

PROTECTING PUBLIC HEALTH

The dramatic drop in releases reported to TRI should have a positive impact on the health of the American public. More science is emerging every day linking the growing rates of chronic disease in this country with environmental exposures to toxic chemicals. A groundbreaking 2000 study, for example, published in the New England Journal of Medicine, found that the environment played "the principal role in causing sporadic cancer." This same study attributed 25% of the causation of breast cancer to the environment. In addition, the National Academy of Sciences found that toxic exposures cause at least 3% of all developmental disorders and learning disabilities facing our nation's children, and may play a role in an additional 25%.

According to a U.S. PIRG Education Fund study of TRI data released, releases to air and water by the original TRI industries (not including the mining industry) of carcinogenic chemicals listed over that entire period declined by 41 percent between 1995 and 2000. Developmental toxicant releases were down by 47 percent, reproductive toxicant releases by 49 percent, releases of suspected neurological toxicants by 31 percent and releases of suspected respiratory toxicants by 23 percent.[3]

Unfortunately, once the mining industry began reporting the public heard of the large amounts of harmful chemicals it has been releasing into the environment that have been linked to cancer, developmental and reproductive problems, and neurological problems. Three of the primary toxic chemicals released by the mining industry, according to their reports to TRI, are arsenic, mercury and lead. These chemicals are highly toxic, with well-proven ties to harming human health. We hope that the mining industry could follow the lead of other industries that report to TRI and eventually find ways to reduce the amount of its releases.

In 2001, the mining industry released 335 million pounds of arsenic, a readily recognized poison, known human carcinogen, and developmental toxicant, into the environment. Some arsenic compounds readily dissolve in water, and easily contaminate rivers and lakes. The Agency for Toxic Substances Disease Registry warns that soil around mining sites contains elevated levels of arsenic, and that people that live near elevated soil levels may be exposed to arsenic through their drinking water.[4]

Arsenic can cause a range of illnesses and even death if exposure is in a high dosage. In lower continuous exposures, as is often the case with releases over time due to hard rock mining, arsenic can damage the circulatory and peripheral nervous systems. The Department of Health and Human Services, EPA, and National Toxicology Program have all found that arsenic is a known human carcinogen. Arsenic has been linked to cancer of the skin, bladder, and lungs, and may be linked to cancers of the liver, kidney, and colon. Workers that are exposed to arsenic in mines have an elevated risk of developing lung cancer, as do people who live near waste sites that contain arsenic. Arsenic can also cross the placenta of a pregnant woman, causing exposure and harm to the fetus.

Also in 2001, 4 million pounds of mercury were released by the mining industry. Mercury is a potent neurological toxicant, and, if present in the blood of a pregnant mother, can harm the development of a fetus. Mercury from mines can contaminate groundwater, making its way into fish, where it accumulates in the fat tissue. The

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[2] "Public Opinion Research on Public Health, Environmental Health, and the Country's Public Health Capacity to Adequately Address Environmental Health Problems," conducted for the Pew Charitable Trusts by the Mellman Group, Inc. and Public Opinion Strategies, Inc, May 1999.

[3] "Toxic Releases and Health," U.S. PIRG Education Fund, January 2003.

[4] Agency for Toxic Substances and Disease Registry, "Public Health Statement for Arsenic," September 2000.

primary route of human exposure to mercury is through eating contaminated fish. According to a report by U.S. PIRG and Environmental Working Group, if an American woman ate 12 ounces of fish a week, recommended by the Food and Drug Administration, they would expose nearly one-fourth of all babies born each year to potentially harmful levels of mercury.[5] In addition, one out of every twelve women of childbearing age in the United States already has mercury blood levels high enough to trigger an increased risk of neurological damage to any children they may have.[6]

The dangers of another neurotoxicant, lead, have been known for centuries, and the metal mining industry is a leader in lead releases. The mining industry released 335 million pounds of lead in 2001. Exposure to lead has been linked to reduced IQ and cognitive development in children, as well as behavior alterations, even at extremely low levels. Children are both more vulnerable to lead exposure as well as more sensitive to the effects of lead than adults.[7]

Lead has been found at elevated levels in the blood of humans through the tool of biomonitoring. The Second National Report on Human Exposure to Environmental Chemicals, released by the Centers for Disease Control and Prevention in January of 2003, reported that 2.2% of children ages 1-5 had blood lead levels that exceed the CDC recommendations. These blood levels are associated with an increased risk for neurocognitive disorders. Blood lead levels of 1-5 year olds were the highest of any other age group in the U.S. population, although among adults, blood lead levels do increase with age.[8] Most of the lead in the human body accumulates in bone tissue, where it can remain for several decades after exposure.[9]

Some communities are all too familiar with the negative health consequences of the mining industry. Libby, Montana, is a community plagued with negative health effects due to vermiculite mining activities near their town. The vermiculite deposits in Libby contained asbestos, which was released during the vermiculite mining process. Inhalation of asbestos fibers has been linked to the development of a variety of lung diseases, including asbestosis, mesothelioma, and cancer.[10] In fact, community activists report that an overwhelming number of people that live in the town suffer from lung abnormalities, and called for a government health study.[11] ATSDR conducted a mortality study of the community from 1979 to 1998, and found the residents had an increased mortality rate resulting from asbestosis of approximately 40 to 60 times higher than expected.[12] Clearly the community of Libby, Montana, knows firsthand the devastating impacts of the mining industry on human health.

By continuing to include all of the releases the mining industry is responsible for in the TRI program, the public will continue to be better informed as to how to protect their own health.

TOXICS USE REDUCTION

Since the establishment of the program in 1986, toxic emissions continuously reported since that time has dropped by nearly 50%. There are many reasons that could explain this reduction in toxics released to the environment, including the fact that between 1995 and 1998, for example, the number of companies reporting releases to TRI declined by nearly 6 percent.[13] An even greater impact, illustrated by numerous examples, is the fact that companies and industries have bowed to public pressure and begun to actually reduce their releases. For this reason, the mining industry cannot be let off the hook and evade its public responsibility to let the communities know what it is releasing into our environment.

Many corporations and facilities have responded positively to their inclusion in the TRI program. AK Steel Company's Butler Works plant is a perfect example of the power of public information. In 1999, PennPIRG released a report that highlighted the high levels of nitrate compounds in the Connoquenessing Creek in

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[5] U.S. PIRG and Environmental Working Group, "Brain Food: What Women Should Know About Mercury Contamination in Fish," April, 2001.

[6] Centers for Disease Control, "Second National Report on Human Exposure to Environmental Chemicals," January 2003.

[7] ATSDR, "Public Health Statement for Lead," August 1997.

[8] Centers for Disease Control and Prevention, "Second National Report on Human Exposure to Environmental Chemicals," January 2003.

[9] ATSDR, "Public Health Statement for Lead," August 1997.

[10] ATSDR, "Vermiculite Overview," available at http://www.atsdr.cdc.gov/asbestos/vermiculite—overview.html.

[11] Benefield, Gayla, Lincoln County Asbestos Victim's Relief Organization. Reply to questionnaire solicited by Meghan Purvis, 4 November, 2002.

[12] ATSDR, "Health Consultation: Mortality from Asbestosis in Libby, Montana, 1979-1988," available at http://www.atsdr.cdc.gov/HAC/PHA/libby/lib—p1.html.

[13] EPA, Summary of 1998 Toxics Release Inventory Data, downloaded from www.epa.gov/tridata/tri98/data/1998datasumm.pdf, 15 October, 2002.

Pennsylvania, by using data made available by TRI.[14] In 2000, the Butler plant was reportedly the worst water polluter in the country. As a result of its appearance at the top of the charts in the TRI data, and public pressure, however, AK Steel changed its processes to restrict the use of nitric acid, and reduced its nitrate discharges by 72.9 percent. Within one year, the facility dropped from first to third on the list of the nation's largest water polluters.[15] Even more remarkable is the fact that this change by a single actor caused releases in water in Pennsylvania to drop by over 58 percent from 2000 to 2001. In the case of AK Steel, the TRI provided the incentive to clean up, greatly reducing the amount of toxic chemicals released in Pennsylvania, and protecting public health.

INDUSTRY SUPPORT AND PRAISE

Time and again, leaders in other industries that are required to report their emissions to TRI have publicly spoken out in support of the TRI program. The chemical industry in particular has praised the success and intention of the program. In 1990, Tom Ward, a representative of Monsanto Corporation, was quoted in Iowa recognizing that "the law is having an incredible effect on industries to reduce emissions, and that's good. There's not a chief executive officer around who wants to be the biggest polluter in Iowa."[16]

Other executives have recognized the positive impact the TRI program has had for their businesses. Ciba Geigy's Corporate Environmental Report released in 1993 reported that: "The initial demand for environmental reporting came from the public. But in responding, we have discovered that the information is extremely useful to our own management. We have learned about our successes, our inadequacies and the gaps in our knowledge. It's a good example of the way in which external pressures ultimately prove to benefit both the environment and the industry."[17] Randy Hinton, of Vinings Industries in Marietta, Georgia, even admitted in 1991 "in the long run it [the TRI program] has saved us money."[18]

In addition, many companies use their progress in toxics use reduction documented in the TRI program as a public relations tool. Many companies now include an environmental report on their websites, as they recognize the positive image and public popularity a good environmental record brings them. Boeing Company includes TRI data on its website, reporting how overall releases have been declining. Boeing then makes a pledge to "invest and innovate in pollution prevention programs," and lead the progress of all industry in the reduction of pollution.[19] Whether this statement is true, or not, is not the point. Rather, many corporations recognize and highlight the success of the TRI program and their part in it.

It is rather surprising, then, that the mining industry has taken the opposite reaction to their inclusion in the program of other polluting industries. Instead of working to reduce their emissions and recognizing the benefits the program could have to their businesses, specific companies and industry representatives have challenged the basis of the program itself, through lawsuits and other public records. In 1998, the National Mining Association challenged the TRI program in a lawsuit against EPA, and in 1999 Barrick Goldstrike Mines Inc. sued Administrator Whitman in an attempt to limit the amount of toxic release information the public can access.

Instead of claiming the program provides a burden to the industry, mining companies should be looking for ways the program provides benefits to their industry. Mining companies should stop fighting these popular right-to-know initiatives, and instead recognize the public approval they could win by complying with the law.

THE TRI PROGRAM AS A COMMUNITY TOOL

Communities across the country have been able to use the information provided through the TRI program to protect their own health from toxic pollution. In 1994, the Working Group on Community Right-to-Know published a list of nearly 200 published reports using TRI data, most released by community groups.[20]

In Louisiana, community members have used TRI data to highlight potential health risks in two regions of the state: the Mississippi River corridor, known as

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[14] "Protecting Pennsylvania's Waterways," Pennsylvania Public Interest Research Group, 1999.
[15] Roebuck, Karen, "AK Steel cleans up pollution record," Pittsburgh Tribune-Review, July 14, 2003.
[16] Ward, Tom, Monsanto Corporation; Quad City Times (Iowa), June 8, 1990.
[17] Ciba Geigy, Corporate Environmental Report, 1993.
[18] Hinton, Randy, Vinings Industries; The Atlanta Constitution, August 22, 1991.
[19] Boeing Company, "People Reaching Solutions: Measures and Results: Boeing Company Facts" available at http://www.boeing.com/aboutus/environment/eval—results.htm.
[20] Working Group on Community Right-to-Know, "Reports Using Toxic Release Inventory Data," July 1, 1994.

"cancer alley," and the Lake Charles region. A collection of small community organizations in these two regions have been able to employ the data to confront industries and companies responsible for the health-threatening pollution. In 2000, some of these community groups released a report entitled Breathing Poison: The Toxic Costs of Industries in Calcasieu Parish, Louisiana. Without access to this information, these community organizations would be unable to study potential causes of health problems in their communities. [21]

In Massachusetts, Massachusetts Public Interest Research Group (MASSPIRG) used the TRI program to launch a public accountability campaign in 1990 against Raytheon Corporation. TRI data reported that Raytheon was responsible for releasing the largest amounts of CFCs and methyl chloroform in Massachusetts. Later, Raytheon promised MASSPIRG it would switch the chemicals it used to those options less harmful to the environment and to public health.

PAINTING A BETTER PICTURE: THE LEAD RULE

In January 2001, the EPA lowered reporting thresholds for lead and lead compounds. In response to the potential dangers lead poses as a substance to the environment and human health, the EPA lowered the reporting threshold from using 25,000 pounds to releases 100 pounds. In 2001, 443 million pounds of lead were reported released by every industry (the mining industry released 335 million pounds, or 76 percent of all lead releases), up from 374 million pounds in 2000. Lowering the lead rule triggered more facilities to report their lead releases, informing more people of the issue of lead released in their community.

Many industry groups, however, have complained about the "burden" of the lead rule, and claim it puts too much of a strain on their companies to comply with the lowered reporting threshold. The EPA and the NMA are currently involved in a rulemaking dialogue about the burden of various changes in reporting requirements, with the NMA claiming the burden reduction proposed by the EPA is actually an "increase in burden." [22] It is often difficult for public interest groups to quantify in dollars the benefit the public gains from something as abstract as the direct impact of the lead rule. It may be pertinent to point out, however, that while NMA claims the ICR renewal is underestimated, and will cost industry more than the $7.56 million the EPA has estimated it will cost, health care costs for many of chronic diseases linked to chemicals reported in the TRI program are soaring. The Center for Disease Control and Prevention reports that health care for chronic diseases costs the nation $750 billion annually. [23]

CONCERN OVER THE MINING INDUSTRY

It is with great concern that we watch individual mining companies and the mining industry overall challenge the public's right to information about the environment that could have major impacts on their health.

The mining industry has a long history of attempting to reduce this overwhelmingly popular Right-to-Know program, and has repeatedly sued EPA over their inclusion in the program. Specifically, and perhaps most alarmingly, the National Mining Association has submitted comments on the Information Collection Request renewals challenging EPCRA's definition of what constitutes a release of toxic chemicals. NMA, despite vast scientific proof of its impact on public health, wants to exclude land releases from EPA's proposed definition of uncontained releases. [24]

Mining officials will constantly tell you, they merely "move rock," and do not change any of the naturally occurring toxins in that rock. This simple "movement," however, initiates a release into the environment of toxic chemicals that would have never been exposed to our waterways or the air if it had not been for the process of mining. The disposal of waste rock and subsequent release of toxic chemicals can be compared to the everyday example of making coffee. If whole coffee beans are used, the coffee in the pot is very weak. If these same beans are ground up in a grinder, however, and the grounds are used in the same process, the resulting coffee is much stronger. Unfortunately, however, the mining industry does not leak coffee from its ground-up waste rock. Instead toxic chemicals like arsenic, lead, mercury, iron, copper, aluminum, and cadmium are all exposed during the grinding process and subsequently become bioavailable. These chemicals have been linked with serious health effects, and the public should always know about their releases.

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[21] TRI Program Division, EPA, "How Are the Toxics Release Inventory Data Used?" May 2003, 8.

[22] NMA Written Comments RE: Docket ID No. OEI-2003-0025, September 2, 2003.

[23] Center for Disease Control and Prevention, "Chronic Disease Overview," August 30, 2002, http://www.cdc.gov/nccdphp/overview.htm.

[24] NMA Written Comments RE: Docket ID No. OEI-2003-0025, September 2, 2003.

SUGGESTIONS FOR RULEMAKING

As the EPA launches into a proposed rulemaking surrounding the mining industry and its continued challenges to TRI, it is critical to continue to hold to the goal of the TRI program: to "empower citizens, through information, to hold companies and local governments accountable in terms of how toxic chemicals are managed."[25] The issues at stake should not be focused on the complaints of the "burden" of the reporting program by the worst industry included in the program; the issues are about the public's right-to-know what is released in their communities and the burden that mining pollution imposes on.

Specifically, two key points must be addressed by the EPA rulemaking later this year: first, the EPA must clarify that the "de minimis" exemption does not apply to chemicals that add up to large quantities, as is the case with the chemicals the mining industry releases. Hundreds of millions of pounds of some of the most toxic chemicals known to science is hardly a trivial matter, and the mining industry must report every pound of these immense amounts.

Second, every section of the process of mining must be included in the activity that is covered under EPCRA. As previously stated, disposing of waste rock causes the release of toxic chemicals not previously available to escape into the environment, and into our communities. Every action the mining industry takes in its mining process disturbs the environment, and potentially causes harm to those living around it. Because of this, the communities that surround mines have an explicit right to know about every chemical the mining industry is responsible for causing the release of, and the TRI program applies to every action the mining industry takes.

CONCLUSION

In conclusion, the issue we are here to discuss today is really not complicated. Even though many witnesses will argue about procedural details, and complain about burdens to industry, it is important to hold forthright the main purpose of the TRI program. The program, and this hearing, should be about the public's right-to-know about the toxic chemicals released by the worst polluting industry in the country.

The mining industry has led the country's polluters in releases reported to TRI for four years in a row. Clearly, this is not an accomplishment the industry is proud of. The mining industry, however, should look for ways to protect public health and reduce its releases, instead of spend endless energy and resources in fighting the TRI program.

In addition, the TRI program must continue to inform the public about toxic releases in communities across the country. EPA has worked to expand the program to give the public, citizen groups, environmental organizations, industry, the press, regulators, the government, and international bodies pertinent information about their communities. EPA and Congress must work to continue to protect the public, and expand the TRI program at every level.

Mrs. CUBIN. I want to make a couple of comments before I ask a question. I just have to respond to the statement the "worst industry in the country." I think that type of speech is exactly what we are opposed to. It misrepresents facts and it's a plea to everyone's emotions. As a matter of fact, it seems like—I'm sorry, Miss Purvis, but most everything that you said in your testimony tends to just rile up emotions.

I believe that people have a right to know, but I believe people have a right to know accurate information. I believe that they have a right to have a picture of the entire process that we're talking about, not just, as Dr. Cohen stated, these toxic are measured by volume. So the fact that they're measured by volume and interaction with people, it really doesn't represent an accurate picture.

I guess what this reminds me of is the public's right to know accurate information. What TRI has evolved into is typical of the

[25] EPA, "What is the Toxic Release Inventory Program?" available at http://www.epa.gov/tri/whatis.htm, June 2002.

EPA, unfortunately, in my opinion, that if it's worth doing, it's worth overdoing. That's exactly what seems to be happening here.

I guess I'm just a little bit speechless about the last testimony, because I find it inaccurate and misleading, and I'm sure others of you can approach that issue better.

I would like to ask Dr. Allen, have you examined the draft issue papers on metals released by the EPA this week?

Dr. ALLEN. I have started to look at them. I have not looked at all of them yet.

Mrs. CUBIN. According to what you have looked at, can you give your impressions on the soundness of the science in those papers so far?

Dr. ALLEN. For the most part, what I have seen in those and in other similar things has been very good. It's a step forward into understanding and putting forth that bioavailability and the potential toxicity need to be taken into account when setting up programs, the various programs that EPA does.

Mrs. CUBIN. When talking about the worst industry in the country—and it's called that because of the amount of dirt that it moves—I wonder how farming relates in the State of Iowa. Just because it isn't moved from one pile to another, certainly you're moving the dirt. That's just a little observation.

Mr. O'Connor, it's my understanding that the mining industry is not asking EPA to remove mining sites from TRI; is that correct?

Mr. O'CONNOR. Madam Chairman, you are correct. What we are asking for—and we do support the public's right to know, but it's the right to know chemicals and provide to them information on man-made chemicals and materials on our sites that they truly have a right to know about, and then can make appropriate decisions thereof.

Mrs. CUBIN. I know if the public knew that, when we were talking about the volume of toxic materials that are just moved from the mine to another pile, I know for sure they wouldn't feel that their health is at risk as much as they feel it is now, just based on the bits and pieces of information that are put out as the truth. Well, when you just put little bits of information out, it can actually be the antithesis of the truth. I think that's the case with what we've heard today.

Dr. Cohen, are there any other examples of programs or rules where you think the EPA has misused science?

Dr. COHEN. One comes to mind. EPA adopted, in 1993, a rule allowing—a policy, actually—allowing so-called municipal sludge—it's the 501(3) rule—to be used as fertilizer on farmland, forests, and for mine reclamation. Municipal sludge is a polite term for human waste and other unmentionables, if you will. It has been used as fertilizer.

EPA scientists looked at what the Agency was proposing to do and raised many questions. The questions they raised were very interesting. They asked themselves, is this actually going to harm public health because of the composition of this material? Could certain segments of the population, if it came in contact with this, once this stuff has been put down, if a wind comes along and blows it, if people come near it and inhale it, will they be affected by this?

These scientists then asked the Agency, before it promulgated the policy, to carry out a risk assessment. The Agency never carried out that risk assessment and, indeed, promulgated the policy in the mid-1990s.

Over the course of the last several years, there have been reports of hundreds of people having been taken ill, two deaths, one of which was in Pennsylvania, the case of a young boy, 8 years old, who rode a three-wheeler across a field which had just been covered with so-called Class B sludge. He died 3 years later. I had the very unpleasant experience of meeting his parents around a year ago, when they were here in Washington trying to draw EPA's and Congress' attention to the death of their son.

Hundreds of counties across the United States have banned the use of this municipal sludge. They have banned the use of a product that EPA still maintains is safe. Clearly, there is a problem here, and it is a problem where EPA scientists said one thing but EPA, for the lack of a better term, bureaucrats, officials, in the headquarters here in Washington, D.C., did something else.

Even worse, the Agency has undertaken incredible measures to silence its critics, both internally and externally. Internally, the scientist, Dr. David Lewis, who raised the concerns about allowing municipal sludge to be spread close to communities, is no longer with EPA. He was effectively terminated in May of this year.

Externally, EPA officials, including the gentleman who was the most largely responsible for developing the sludge program, actually sent a death threat to a woman in California, a dairy farmer, handwritten, concluding that "For whom the bell tolls"—the woman's name was Jane. "Jane, for whom the bell tolls, it tolls for thee." This gentleman, by the way, is still on the payroll of the U.S. Environmental Protection Agency, even after his message to this woman had been printed in Time Magazine about 2 years ago.

So that is one example of the misuse of science at EPA. It is something, by the way, that transcends whichever administration happens to be in power, whether it's the current one, the preceding one, or the one before that.

EPA needs to pay much closer attention to its scientists. It needs to pay much closer attention to the criticisms that have been leveled at the Agency from its Science Advisory Board. Our environmental policies should be based on sound science, and when that is not the case, the public suffers. And in the case of the 501(3) sludge rule, hundreds of people, as I say, have been taken ill. Livestock have died and two or three people have actually died as a result.

Mrs. CUBIN. Thank you.

Miss Purvis, just a yes or no answer. Would you like to see all mining in the United States eliminated?

Ms. PURVIS. No.

Mrs. CUBIN. Thank you.

Mr. Gibbons.

Mr. GIBBONS. Thank you very much, Madam Chairman.

I actually am very pleased to hear the witnesses today sort of debunk the emotional nonsense that came out of the U.S. Public Information Research Group.

First of all, let me ask Mr. O'Connor here, does the mining industry have to comply with environmental rules with regard to air quality, water quality, dust standards, et cetera, at a mine?

Mr. O'CONNOR. Madam Chairman, Representative Gibbons, yes, sir, we do. All of the plethora of Federal environmental statutes that are on the books we have to comply with. On top of that, you have State counterparts and you also have State mining and reclamation laws that we have to comply with.

On top of that, if activities are being conducted on either the Bureau of Land Management administered lands or U.S. Forest Service administered lands, you have yet another series of requirements that you must comply with.

Mr. GIBBONS. So really, the claim that it's releasing all of this material into the environment is really a fallacy because it's controlled, it's in a controlled environment, it's in a contained area, whether it's waste rock, mill tailings, or standard chemicals that are used by a mine?

Mr. O'CONNOR. You are correct, Representative Gibbons.

Mr. GIBBONS. Dr. Cohen, according to your testimony, the worst industry in the United States then would be the sewer and sludge industry and not the mining industry, because obviously people have died from that.

Dr. COHEN. I don't know whether it's the worst industry or not, but it would certainly be an industry which has developed, shall we say, a very cozy relationship with the Environmental Protection Agency, something that I would love to see a congressional committee look into. Because I can assure you, as someone who has been following this issue for some time, what they will discover between the career officials at EPA and the sludge industry will turn your stomach.

I can also assure you—and I'm privy to some information here—that this coming Sunday, in 20 newspapers around the country, there will be an article reporting both on the misuse of science at EPA regarding sludge, the abuse of an EPA scientist by career officials in the Agency who tried to shut him up when he brought this issue to their and to the public's attention, and the consequences of this policy around the country. It is going to throw a very unflattering light on EPA. As somebody who has followed and written about this issue for some time, it is long overdue. It is probably the biggest scandal that the Agency has ever been involved in.

Mr. GIBBONS. Dr. Cohen, you have been published and have written extensively about environmental issues in this country. Is it your opinion that the millions of people that have been affected and have disease due to high lead standards or arsenic standards are all due to the mining industry?

Dr. COHEN. Oh, no. Human exposures to all sorts of things come from all sorts of sources.

Mr. GIBBONS. So a blanket assertion that two million people with high lead content in their blood related to the mining industry is simply a fallacy?

Dr. COHEN. As a matter of fact, the biggest source of lead in the blood, of course, comes from lead-based paint in older buildings in older parts of the country. We have known this for a long, long time.

The most sensible policy here, of course, is to remove the lead-based paint and the people, mostly children in this case, who have been exposed to that. That's the most sensible way to do this, rather than simply condemn a particular industry which in the process of excavation or exploration moves some rock around. Without a doubt, the biggest exposure to lead is lead-based paint in older buildings, particularly residential units.

Mr. GIBBONS. Dr. Allen, looking at moving waste rock around and putting it in a confined environmental situation, whether it's lined in a tailings pond or lined in a rock waste area controlled environment, do you see that removal of waste rock at a mining site as a serious problem to the environmental conditions of this planet?

Dr. ALLEN. Certainly there are significant effects on the environment with mining. The most serious ones are likely not the release of metals from those materials but other factors, other environmental——

Mr. GIBBONS. Mine seepage?

Dr. ALLEN. Mine seepage.

Mr. GIBBONS. Water coming out of the ground that is——

Dr. ALLEN. Most of the releases from that, in a modern facility, can be controlled.

Mr. GIBBONS. Right. So it's the older facilities, for the most part?

Dr. ALLEN. A lot of it is the older facilities. There will be some release, I think, from all materials from my back yard, from the soil in my back yard. Every time it rains, there are metals carried off in that rainwater from that soil.

Mr. GIBBONS. How about highway construction? I mean, I'm looking at 495 right out here. I have yet to hear the U.S. Public Information Research Group complain about this highway moving all of this dirt that's right next to the Potomac, which in the Potomac has endangered species, the Atlantic sturgeon and a number of other species, they don't complain about that. They don't list the highway and the road construction industry, which moves multiple times the amount of dirt around in this environment without putting it in a contained environment, as one of the toxic release villains of this country.

Dr. ALLEN. We get concerned about the sediment loads released from that. The sediment loads can be an important problem in itself. But the release of metals and other contaminants or other materials naturally contained in the soil and roadway are not of major concern to anyone. They aren't even looked at.

Mr. GIBBONS. Madam Chairman, my time is up, but I would assume that if we took the highway construction industry and the farming industry of this Nation and put them under the same restrictions and requirements of the mining industry, we could put this country into a Third World Nation status.

Thank you.

Mrs. CUBIN. Thank you, Mr. Gibbons.

Mr. Udall.

Mr. TOM UDALL. Thank you, Madam Chair, and I thank the members of the panel.

Dr. Allen, in your testimony you put forth that only bioavailable chemicals may "cause a toxic response." Does the process the

mining industry uses to grind up and dispose of waste rock make the chemicals in that rock more or less bioavailable than they were when the rock was in the ground?

Dr. ALLEN. It increases the bioavailability. However, only a small fraction of all of the rock that is moved or processed becomes bioavailable. So to say that all of the material that is mined or is left over from the mining operation is toxic is not correct.

Mr. TOM UDALL. But it does become more bioavailable by the grinding and exposing it to the surface?

Dr. ALLEN. Yes. In general, it increases it.

Mr. TOM UDALL. I think the thrust of the testimony here is that in certain cases these chemicals, or these toxic substances, be it mercury, lead or arsenic, escape from the areas where they're mined. I mean, there is a good example of mining companies and lead pollution in the Coeur d'Alene-Spokane River in Idaho and Washington, where virtually 179 children living within an area of an abandoned mine, the Bunker Hill silver mine up there, were found to have brain-impairing levels of lead in their blood. So that's the kind of thing I think there's a concern about. And you acknowledge that?

Dr. ALLEN. Yes.

Mr. TOM UDALL. Mr. O'Connor, in your testimony you said it is somehow unfair to the public that they get all the information that the TRI has been providing without, as you describe it, "context."

Are you saying the mining industry rather than citizens themselves should determine what is and what is not a risk to public health?

Mr. O'CONNOR. Mr. Chair, Mr. Udall, no, sir. What I am indicating is one of putting the numbers into context such that the public understands them. We at most of the mines have outreach programs for which we have discussed our mining activities, be it from exploration through closure.

Those outreach programs have been very beneficial. The communities that we work in have been very appreciative of those types of outreach programs.

When the TRI numbers came out, a number of the same public that we have been engaged with and had dialog with came back and were concerned, because they're very proud of the areas they live in and were exceedingly concerned over the large quantities of numbers that were being reported, given the fact that some of them actually did recall way back to 1986 when the law was enacted and the basis for it, given chemical plant problems, et cetera.

So we continue the dialog and explain that what we're reporting is the naturally occurring substances in the rock that we move around a site, how it's tied up in the matrix of the rock, and therefore the exposure to them is nowhere near the exposure, or even at all the exposure that you would have from a chemical plant disaster.

Once we were able to provide them additional information that the EPA's annual putting out of the numbers doesn't address, it provided a context for those numbers and provided the public a better understanding of what is occurring in their communities, such that again they can figure out how different things are impacting or not impacting them where they live.

Mr. TOM UDALL. Clearly, it is important that the public understand the full ramifications, but I do not think there is any doubt that private citizens are fully capable of understanding the impacts of chemicals like arsenic, mercury, and lead. I think the public is well aware that there are many studies and very tragic circumstances, one of which I named here earlier, this Bunker Hill Silver Mine, which is a Superfund site. They are capable of making the connection that if these chemicals are out there and they escape from these mine sites, you can have some pretty serious damage.

You mentioned in your testimony that the mining companies have to comply with environmental requirements. But I do not see that that means a lot when, in fact, we have 87 Superfund sites that are former mines and you have the Superfund sites which have been designated, they are considered a hazard, they are having to be cleaned up. And so they complied at the time, I guess, with environmental requirements, but we today look back and see these Superfund sites, and we think that they ought to be cleaned up.

Seeing my time is up, I yield back to Mr. Gibbons, who is now our Chairman. Thank you, Mr. Gibbons.

Mr. GIBBONS. [Presiding.] Thank you, Mr. Udall. And may I say also that there is no doubt that the mining industry historically has had some bad practices. I do not think you can label the operation and practices of the past, the current operation and practices of today, and the future mining of this country. They are totally different. Mining companies today are far more responsible. And speaking of the Bunker Hill and the release of that arsenic, I can say that there is probably more arsenic being released today by Yellowstone National Park and the geysers into the water system there, yet we do not require the National Park System or Mother Nature to file a Toxic Release Inventory for that, even though it is contaminating the water as well. And that is a naturally occurring situation.

Mr. TOM UDALL. Just to correct the record, it is lead we were talking about on Bunker Hill that is in the kids' bodies, not arsenic.

Mr. GIBBONS. And that was actually from the smelter that was produced right there, which is no longer in operation today.

With that, I want to thank our panel again for their time here before us. We have to call up the third panel, and I want to again thank each of the members of our panel for presenting their testimony today.

Mr. GIBBONS. The next panel we will call up is Panel 3: Mr. Richard Bye, who is the Director, Environmental, Safety and Industrial Health, Texas Genco L.P.; Fern Abrams, Director of Environmental Policy, IPC, the Association Connecting Electronics Industries; and Lexi Shultz, Mineral Policy Center.

I want to thank all of you for your presence here today. I look forward to your testimony, as does the rest of the committee, and we will start with Mr. Richard Bye, Director of Environmental, Safety and Industrial Health, Texas Genco.

STATEMENT OF RICHARD T. BYE, DIRECTOR, ENVIRONMENTAL, SAFETY AND INDUSTRIAL HEALTH, TEXAS GENCO L.P.

Mr. BYE. Thank you, Mr. Chairman, Representative Udall. Good afternoon. My name is Richard Bye, and I am here on behalf of Texas Genco, the Utility Solid Waste Activities Group, and the Edison Electric Institute. Thank you for inviting me here to testify on this important issue.

Electric utilities have been subject to TRI reporting since 1999. We have learned in that time that through the use of creative definitions, the TRI information provided to the public is often highly misleading and results in undue public concern about activities that are safe, legal, and often promoted as environmentally beneficial by other parts of EPA and many State agencies.

The TRI program sorely needs a truth-in-reporting standard in which words are given the meaning used by ordinary citizens in everyday communication. Let me give you two examples of EPA's word games.

Our industry generates large volumes of nonhazardous byproducts from the combustion of coal and other fossil fuels at our electric generating facilities. In 2001, we generated about 118 million tons of coal combustion byproducts, of which roughly one-third were beneficially used. These coal combustion products, or CCPs, are the byproducts that are diverted from disposal for use in a variety of commercial applications. CCPs that are not beneficially used are managed as a waste in landfills or surface impoundments.

EPA requires that the entire volume of each TRI reportable chemical that is properly managed in a waste management unit be reported as a release into environmental media. This use of the term "release" to describe successful waste management connotes that the waste is not contained by the engineered and regulated structure. The message the public receives is that the entire volume of waste has somehow escaped to the environment, much like an oil spill. In effect, the message EPA has been sending to the public implies a total structural failure of the disposal unit. Thus, the EPA data of land releases is actually a report on quantities of waste successfully managed within a disposal unit while any migration of waste out of the disposal unit and into the environment, if that were to occur, is not reported and disclosed to the public because those quantities were already reported as being released when they were placed into the disposal unit. This means that the TRI form fails to collect data on issues that might be of concern to the community, while providing misleading data about well-managed facilities and suggests an environmental problem when none exists.

My second example of creative definitions relates to the definition of "beneficial use." In this case, EPA equates recycling and beneficial use of secondary materials with waste disposal rather than with processing a product for distribution in commerce. That means when we use CCPs for soil stabilization, for construction fills, for mine reclamation, and highway construction, EPA takes the position that this is waste management, subject to TRI reporting as releases. However, if the user were to substitute virgin material containing the same TRI chemicals found in CCPs, they

would not have to report. So instead of receiving a pat on the back from EPA for practicing good environmental stewardship, utilities are subjected to burdensome TRI reporting that unfairly places a waste stigma on CCPs that inhibits beneficial use of these materials.

This position is in complete contradiction to pro-beneficial use policies adopted by other parts of EPA and other agencies. For example, this past year, as part of its resource conservation challenge, EPA established an initiative called the "Coal Combustion Products Partnership," or C2P2, with a goal of diverting CCPs from land disposal and reducing greenhouse gas emissions by increasing the beneficial use of CCPs. The TRI Program's characterization of CCP beneficial use applications as waste management, with all of the regulatory burdens attached, is one of the largest regulatory barriers to increased CCP utilization.

In conclusion, we urge the Subcommittee to send a clear signal to EPA that all parts of the Agency, including the TRI Program, should get on board with the Agency's commitment to increase beneficial use of CCPs and thereby minimize the volume of those materials that require waste disposal. We will do our part to achieve greater beneficial use of CCPs, but that goal is far more difficult to achieve when the TRI Program plays the word games that I have described. All we ask is that CCPs be subject to the same reporting rules that apply to competing products.

Thank you very much.

[The prepared statement of Mr. Bye follows:]

Statement of Richard T. Bye, Director of Environmental Safety and Industrial Health, Texas Genco, Edison Electric Institute, and Chair, Ash Management & Solid Waste Committee, Utility Solid Waste Activities Group

My name is Richard T. Bye and I am the Director of Environmental Safety and Industrial Health for Texas Genco. I am pleased to present a statement on behalf of Texas Genco, the Edison Electric Institute ("EEI"), and the Utility Solid Waste Activities Group (commonly known as "USWAG"), where I serve as Chair of the Ash Management & Solid Waste Committee.

EEI is an association of U.S. shareholder-owned electric companies, international affiliates and industry associates worldwide. Our U.S. members serve roughly 90 percent of the ultimate customers in the shareholder-owned segment of the industry, nearly 70 percent of all electric utility ultimate customers in the nation, and generate nearly 70 percent of the electricity produced in the United States.

USWAG is a consortium of EEI, the American Public Power Association ("APPA"), the National Rural Electric Cooperative Association ("NRECA"), and approximately 80 electric utility operating companies located throughout the country. APPA is the national association of publicly owned electric utilities. NRECA is the national association of rural electric cooperatives. Together, USWAG members represent more than 85 percent of the total electric generating capacity of the United States and service more than 95 percent of the nation's consumers of electricity.

Let me first commend the Subcommittee for holding this oversight hearing on the TRI Program. TRI is a program that has been in existence for more than a dozen years, although electric utilities did not become subject to TRI reporting until 1999. Our industry has long supported the aims of the TRI Program. We believe that the communities in which we operate should be informed about the chemicals we handle at our plants that affect the environment. However, what has troubled us about the TRI Program is the way in which EPA publishes inaccurate information to the public by distorting the plain meaning of words found on the TRI reporting form. Through the use of "creative" definitions, TRI information received by the public is often highly misleading and results in undue public concern about activities that are safe, legal and promoted as environmentally-beneficial by other parts of EPA and many state environmental agencies. What the TRI Program sorely needs is a "Truth

in Reporting" standard in which English words are given the meaning used by ordinary citizens in everyday communication.

Let me give you one example. Our industry generates large volumes of byproducts from the combustion of coal and other fossil fuels at our electric generating facilities. In 2001, we generated approximately 118 million tons of coal combustion byproducts. Of this amount, approximately 32% were beneficially used as coal combustion products, also known as "CCPs." CCPs are the byproducts that are diverted from disposal for use in a variety of commercial applications, such as cement and concrete production, road base material, snow and ice control, construction fills, wallboard production, waste stabilization and solidification, and agricultural soil amendment. CCPs that are not beneficially used must be managed as a waste—typically in a dedicated landfill or in a surface impoundment on utility property.

Under TRI, we are required to report the total volume of coal combustion byproducts placed in engineered waste management units as a "release" that is "entering" the environment, even though those units are designed, regulated, and properly operated to prevent the release and migration of constituents to soil and groundwater. Even when such waste byproducts are transferred to off-site commercial facilities for disposal in engineered waste management units, EPA requires the utility to report such a transfer as an off-site "release," giving the false impression that constituents in the materials are in some way escaping from the disposal unit.

EPA's use of the term "release" to describe successful waste management in an engineered unit connotes that the waste material is not contained by the engineered and regulated structure. In fact, the current EPA requirement is that the entire volume of each TRI reportable chemical that is properly managed in land disposal waste management unit must be reported as a "release" into environmental media. The message the public receives when it hears the word "release" is that the entire volume of waste has somehow escaped to the environment—like an oil spill. In effect, the message EPA has been sending to the public when it publishes its annual Public Data Release implies a total structural failure of the disposal unit.

What is strange about the current TRI reporting system is that the regulated community is expected to report as a "release" the total quantity of TRI chemicals successfully managed within a land disposal unit. But if the landfill were to have a structural defect and constituents in the waste were to migrate out of the unit into adjacent soil or groundwater—what most would call a "release" in every day English—those chemicals that escape from the unit would not be reported because they have already been reported along with the volumes that remain safely within the disposal unit. Thus, the current TRI form fails to collect data on issues of plausible concern to the community while providing misleading data about well-managed facilities that suggest the existence of an environmental problem when none exists.

Let me acknowledge that EPA recently took a small step in the direction of correcting this problem. On July 1, 2003, EPA proposed to amend the reporting form to distinguish between "contained disposal" and "uncontained releases." 68 Fed. Reg. 39074. While this proposed change is a step in the right direction, it simply does not go far enough to cure public misperceptions. Instead of allowing the regulated community to base its reporting of the TRI chemicals managed in waste disposal units on whether the chemicals, in fact, were being contained or whether they were migrating out of the unit, EPA made advance categorical judgments as to the types of waste management units that qualify as "contained disposal" and those units that require reporting of the contents as "uncontained releases." EPA decided that all landfills and all underground injection wells qualify as "contained disposal", while the coal combustion byproducts placed in surface impoundments and "other land disposal" units, whether or not the waste is actually contained, must be reported as "uncontained releases." This makes no sense. If a facility is designed and constructed to contain the TRI chemicals in waste disposed at that facility and has successfully done so, why should that disposal be classified by EPA and reported to the public as an "uncontained release"?

The definition of "release" is not the only word game played by EPA in administering the TRI Program. A second example involves EPA's interpretation of beneficial use to equate recycling and beneficial use of secondary materials with waste disposal rather than with processing a product for distribution in commerce. Although the industry has successfully diverted about 32% of CCPs generated from waste disposal for use in such commercial applications as cement and concrete production, soil stabilization, structural fill, mine reclamation, and highway construction, the TRI Program interprets such activities as waste management subject to TRI reporting as "releases". At the same time, however, if a company chooses not to use CCPs in these applications, but rather uses virgin material containing the same TRI chemicals, it is subject to much less stringent reporting requirements. The TRI Program, therefore, is discouraging the beneficial commercial applications of

CCPs by requiring such applications to be reported as a "release" into environmental media. So instead of receiving a "pat on the back" from EPA for practicing good environmental stewardship in diverting what would otherwise require waste disposal into a well-established beneficial use application, utilities are subjected to burdensome TRI reporting that unfairly places a "waste stigma" on CCPs that inhibits increased beneficial use of these materials.

When Congress enacted the Resource Conservation and Recovery Act in 1976 (popularly known as RCRA), it established as national policy a mandate for EPA to "maximize the utilization of valuable resources including energy and materials which are recoverable from solid waste and to encourage resource conservation." RCRA § 4001, 42 U.S.C. § 6941. As part of its implementation of the Bevill Amendment to RCRA, EPA addressed the subject of beneficial use of CCPs on several occasions. In 1993, EPA announced that the "Agency encourages utilization of coal combustion byproducts and supports State efforts to promote utilization in an environmentally beneficial manner." 58 Fed. Reg. 42466, 42490 (Aug. 9. 1993). In May of 2000, EPA announced that it wished to avoid "unnecessary barriers on the beneficial use of fossil fuel combustion wastes so that they can be used in applications that conserve natural resources and reduce disposal costs." 65 Fed. Reg. 32214 (May 22, 2003).

Rather than build on these policies to promote beneficial use, the TRI Program has done the opposite. First, by affixing the "waste management" label to long-established and environmentally safe beneficial use applications, the TRI Program imposes a regulatory burden on the marketing of CCPs that immediately places CCPs at a competitive disadvantage vis-a-vis competing materials. In a 1994 Report to Congress, the U.S. Department of Energy identified the "waste" label as one of the most significant impediments to increased beneficial use of CCPs. See U.S. Dept. of Energy, Report to Congress, Barriers to the Increased Utilization of Coal Combustion/ Desulfurization Byproducts by Governmental and Commercial Sectors, p. 17 (July 1994). In addition, because the beneficial use activity is classified as "waste management" rather than "processing for distribution in commerce" (the label typically applied to management of a product containing TRI chemicals destined for commercial distribution), EPA's de minimis rule does not apply. This rule, in effect, exempts products (but not wastes) from TRI reporting if the concentrations of the TRI chemicals in the product (other than certain carcinogens) are below 1%.

EPA's strange interpretation rewards the unnecessary use of virgin materials with an interpretation that avoids TRI reporting, while penalizing the environmentally protective use of CCPs by subjecting them to TRI reporting. The virgin material and CCPs are used in the same way and they often contain the same or similar TRI chemicals. But under TRI, only the application of CCPs are classified as waste management and subject to full reporting. This is a classic case of one part of EPA working at cross purposes with other parts of the Agency.

On a positive note, EPA has taken several additional steps to implement its commitment to increased utilization of CCPs. EPA has used its authority under section 6002 of the Resource Conservation and Recovery Act to promote government procurement of products containing CCPs such as cement and concrete containing coal fly ash (47 C.F.R. § 247.12(c)), flowable fill containing coal fly ash (id. § 247.12(i)), railroad grade crossing surfaces containing coal fly ash (id. § 247.12(j)), parking stops made from concrete containing coal fly ash (id. § 247.13(b)), and has proposed adding blasting grit made with coal slag and bottom ash and concrete and cement made with fly ash cenospheres to the list. 66 Fed. Reg. 45256 (Aug. 28, 2001).

As part of its broader Resource Conservation Challenge, EPA recently established an initiative called the Coal Combustion Products Partnership or C2P2, which is aimed at diverting CCPs from land disposal and reducing greenhouse gas emissions by increasing the beneficial use of CCPs through a series of coordinated public and private efforts. C2P2 involves two main areas of activity: (1) a Challenge Program directed at potential users of CCPs, informing them of the attributes and beneficial uses of CCPs and encouraging them to increase the use of CCPs; and (2) Barrier-Breaking Activities, designed to better understand obstacles to beneficial uses of CCPs and to identify both government and private initiatives to address those obstacles. The TRI Program's characterization of CCP beneficial use applications as waste management, with all the regulatory burdens that follow from that characterization, is one of the largest regulatory barriers to increased CCP utilization.

Through its CCP policy statements and initiatives, EPA has demonstrated its strong commitment to reduce the unnecessary disposal of CCPs by actively promoting and removing the barriers to CCP beneficial use. These positive efforts, however, are undermined by the TRI Program's improper characterization of CCP beneficial use applications as "waste management."

In conclusion, let me urge the Subcommittee to send a clear signal to EPA that all parts of the Agency, including the TRI Program, should "get on board" with the Agency's commitment to increase beneficial use of CCPs and thereby minimize the volume of those materials that require waste disposal. We will do our part to achieve greater beneficial use of CCPs, but that goal is far more difficult to achieve when the TRI Program plays word games by describing beneficial use as another form of waste disposal and then applies waste reporting requirements to CCP uses that do not apply to competing products. All we ask is that CCPs be subject to the same reporting rules that apply to competing products.

Mr. GIBBONS. Thank you very much, Mr. Bye.

We will turn now to Ms. Abrams. You are welcome before the committee. The floor is yours.

STATEMENT OF FERN ABRAMS, DIRECTOR OF ENVIRONMENTAL POLICY, IPC—THE ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES

Ms. ABRAMS. Thank you. My name is Fern Abrams. I am the Director of Environmental Policy for IPC, which is the trade association for the electronic interconnection industry. Our members use lead solder to manufacture and assemble printed circuit boards, the backbone of our Nation's high-tech industries, including consumer, industrial, and defense electronics.

IPC members support cost-effective environmental regulations which are based upon sound scientific and economic analysis. Environmental regulations that are not based on such analysis often create unnecessary burdens while failing to achieve their goal of environmental protection. And as we have heard today and I am going to highlight, there are some concerns that the TRI Program has morphed into such a regulation.

EPA's regulation lowering the TRI reporting threshold for lead from 25,000 pounds down to just 100 pounds took effect on April 17, 2001, and it included an unprecedented retroactive application of the reporting requirements back to January 1, 2001. Equally unprecedented was EPA's decision to put the proverbial cart before the horse by basing the regulations on the questionable application of inappropriate scientific criteria, promising to conduct an ex post facto Science Advisory Board review after the rule had been promulgated.

The lowered reporting thresholds have imposed significant burdens. According to EPA's own analysis, which is likely underestimated, the cost of compliance for new reporters in the electronics industry was $7,400 per facility in the first year alone. This is a significant sum of money for U.S. manufacturers facing fierce global competition. According to EPA, the information collected and subsequently distributed through EPA outreach and awareness programs is provided at a relatively low cost compared to the value it represents to the general public.

Examination of the data will cause even the casual observer to question this statement. The lowered reporting threshold for lead significantly increased the reporting burden, but has resulted in little useful data. In 2001, over 8,000 TRI forms were filed for lead and lead compounds. Of these, 3,000 facilities reported zero releases of lead to the environment. Many more reported negligible amounts.

In the electronics sector, which I represent, 54 percent of the TRI forms filed for lead reported zero pounds released. Surely, this cannot be EPA's idea of a cost-effective regulation.

Concerns regarding the enormous burdens of the TRI lead rule have been repeatedly raised, both before and after its adoption. In the 2-1/2 years since, EPA has repeatedly failed to reduce the burden of compliance. In a May 2001 letter, EPA promised to help reduce burdens by developing a guidance document. Unfortunately, EPA did not finalize the guidance document until the end of January 2002, after the entire first reporting year had passed.

Last June, your colleague, the Honorable Mike Pence, chaired a hearing examining the burden this regulation placed upon small businesses. Following the hearing, Chairman Pence asked EPA Assistant Administrator Kim Nelson what steps EPA would take to reduce reporting burdens prior to the next reporting deadline. The Assistant Administrator wrote back saying, "EPA will continue to provide compliance assistance on the lead rule targeted to small business, such as developing a Small Business TRI Lead Rule Hotline, sponsoring more workshops specifically for the lead rule, etc....EPA is committed to working with small business sectors to try to streamline the reporting." This is similar to the promises she made earlier today.

I am saddened to report the July 2003 reporting deadline has come and gone without EPA having established the hotline, conducted additional training, or streamlining reporting in any way whatsoever.

In January 2003, the rising burden of TRI on all businesses—and I have a graph up. I guess the audience cannot see it. I am sorry—prompted OMB to approve EPA's TRI forms with a shorter-than-usual clearance in order to provide EPA an opportunity to examine in more detail the TRI burden estimates and opportunities for reducing the burden. Despite OMB's encouragement, EPA has failed to take any actions that would significantly reduce reporting burdens.

Our members take their responsibility to environmental stewardship seriously. As business owners, they and their families live, work, and play in the communities where their businesses operate. The TRI reporting requirements for lead burden America's businesses as they struggle to continue providing jobs in their communities.

In conclusion, I ask you to consider whether it is reasonable to require thousands of businesses to incur substantial regulatory burden imposed by TRI in order to report insignificant or nonexistent releases. EPA should immediately undertake serious and expeditious efforts to streamline TRI reporting and refocus the program on significant environmental releases.

Thank you again for the opportunity to express our concerns, and I welcome any questions.

[The prepared statement of Ms. Abrams follows:]

Statement of Fern Abrams, Director of Environmental Policy, IPC—The Association Connecting Electronics Industries

Good morning Madame Chairman, Ranking Member Kind and members of the Committee. My name is Fern Abrams and I am the Director of Environmental Policy for IPC, the trade association for the electronic interconnection industry. IPC's

2,200 members manufacture and assemble printed circuit boards, the backbone of our nation's high tech industries, including consumer, industrial, and defense electronics. While some of these are large, name brand, international companies, sixty percent of IPC members are small businesses. On behalf of IPC and our member companies, I'd like to thank you and your staff for organizing this hearing.

IPC members support cost-effective environmental regulations which are based upon sound scientific and economic analysis. Environmental regulations that are not based on such analysis often create unnecessary burdens while failing to achieve their goal of environmental protection. My testimony today will focus on one such rule, the Environmental Protection Agency's (EPA's) lowered reporting threshold for lead under the Toxic Release Inventory (TRI) program.

EPA's regulation lowering the TRI reporting threshold for lead and lead compounds from 25,000 lbs to 100 lbs. took effect on April 17, 2001, and included an unprecedented retroactive application of the reporting requirements to January 1, 2001. Equally unprecedented was EPA's decision to put the proverbial cart before the horse by basing the regulation on the questionable application of persistent, bioaccumulative and toxic ("PBT") criteria which were developed for the evaluation of synthetic organic compounds, while promising, in the final regulation, to conduct an ex-post facto Science Advisory Board review of critical assumptions on which EPA's rule was based. [1]

In July 2000, the House Science Committee Chairman, Subcommittee Chairmen and Ranking Members sent a letter to EPA stating that "questions have arisen regarding the scientific validity of applying the PBT criteria to metals and inorganic metal compounds, and that this specific issue has not received the benefit of SAB [Science Advisory Board] or other independent scientific peer review."

Two-and-a half years later, a panel of independent experts appointed by EPA has just concluded that the principal theoretical features of the model used by EPA in evaluating the bio-accumulative portion of the PBT criteria that make it applicable to the neutral organic substances also "make it inapplicable to inorganic metal substances." [2]

IPC members, along with many other industries affected by the rule, have repeatedly voiced our concerns that the burden of this rule upon business, especially small businesses, has been significantly underestimated by EPA. During the development of the rule, EPA chose not to convene a Small Business Advocacy Review Panel as required under the Small Business Regulatory Enforcement and Fairness Act (SBREFA), deciding instead to certify the proposed and final rules as having no significant economic impacts on a substantial number of small entities. Yet, EPA admitted that its assessment was inadequate, stating that there were other industries "that may be affected by the rule, but for which existing data are inadequate to make a quantitative estimate of additional reporting," and thus excusing their omission from the cost assessment. [3] On April 24, 2001, the Senate Committee on Small Business held a hearing on the effectiveness of SBREFA, with the GAO testifying that EPA's assertion that the rule would not have a "significant impact" on small entities ignored more than 30 industry groups' concerns about the rule. Early outreach to small businesses could have helped EPA determine the number of small companies that would be significantly impacted by the rule.

Compliance with the lowered reporting thresholds has imposed a large and significant burden on affected businesses, including IPC members. For a small business, the job of interpreting and complying with the agency's instructions and guidance for the TRI is a substantial source of burden. The reporting forms, instructions, and guidance for complying with the reporting requirements for lead and lead compounds together total 746 pages, not including twelve industry specific guides, which, after two years, still have not been updated to include the lowered reporting thresholds. According to EPA's own estimates, the cost of compliance for new reporters in the electronics industry was $7,400 per facility in the first year alone. [4] We believe this underestimates the actual costs, but in any event it is a significant sum of money when you consider those costs must come entirely from profits in an industry with ever decreasing customer prices and in many cases paper-thin margins.

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[1] 66 Fed. Reg. 4500, 4518 (Jan. 17. 2001)("external peer review [will address] the issue of how lead and other, as yet, unclassified metals such as cadmium, should be evaluated using the PBT chemical framework, including which types of data (and which species) are most suitable for these determinations).

[2] Issue Paper on the Bioavailability and Bioaccumulation of Metals, Draft, August 2003, p. 32.

[3] Lead and Lead Compounds; Lowering of Reporting Thresholds; Community Right-to-Know Toxic Chemical Release Reporting, 66 FR 4534 January 17, 2001.

[4] Ibid.

In the supporting documentation for the TRI reporting forms, EPA states that, "According to many, the TRI program is one of the most effective environmental programs ever legislated by Congress and administered by EPA. The information collected under Emergency Planning and Community Right-To-Know Act (EPCRA) Section 313, and subsequently distributed through EPA outreach and awareness programs, is provided at relatively low cost compared to the value it represents to the general public."[5]

Examination of the data collected under the lowered reporting threshold for lead will cause even the casual observer to question this statement. The lowered reporting threshold for lead significantly increased the reporting burden on industry, but has resulted in little data. In 2001, the most recent year for which reporting data is available and the first reporting year under the lowered reporting threshold for lead, 8,561 Form Rs were filed for lead and lead compounds. Forty percent of new reporters under the TRI lead rule reported zero releases, while the median reported release of lead to the environment is one pound. To put this in context, the average automobile battery contains seven pounds of lead.

In the electronics and electrical equipment manufacturing sector (SIC 36), 1,252 Form Rs were filed for lead and lead compounds. The total releases reported by this sector amount to less than 0.1% of all lead releases. Fifty-four percent of all electronics sector Form Rs for lead and lead compounds reported zero pounds of lead released to the environment. Surely, this cannot be EPA's idea of a cost-effective regulation.

In the two years since the regulation was finalized, EPA has repeatedly failed to reduce the burden of compliance through simplification of reporting, or at a minimum the provision of effective compliance assistance. During the time the rule was under consideration and after its adoption, many concerns were raised about the enormous burdens it would impose on small businesses throughout the country. We were pleased when in April, 2001 President Bush recognized this problem, and directed EPA to help small businesses.[6] In a May 2001 letter to 73 concerned trade associations, the EPA's Office of Environmental Information (OEI) reiterated this point by promising to help reduce the burdens imposed on small businesses by developing a final guidance document by October 2001.[7] Unfortunately, EPA did not finalize the promised guidance document until the end of January 2002, after the entire first reporting year had passed.

Last summer, your colleague, the Honorable Mike Pence, chaired a hearing which examined the burden this regulation placed upon small businesses by a rulemaking process that had not included adequate review. Following his June 2002 hearing, Chairman Pence asked EPA Administrator Kim Nelson what steps EPA would take to ensure reduced burden and reduced compliance costs for the TRI July 2003 reporting deadline. Assistant Administrator Nelson wrote in response that, "EPA will continue to provide compliance assistance on the lead rule targeted to small business, such as developing a Small Business TRI Lead Rule Hotline, sponsoring more workshops specifically for the lead rule, etc." Assistant Administrator Nelson went on to promise, "EPA is committed to working with small business sectors to try to streamline their reporting..."[8] I'm saddened to report that the July 2003 deadline has come and gone without EPA having established the promised hotline, conducted additional training, or streamlined reporting in any way.

In January 2003, the Office of Management and Budget (OMB), noting significant industry concern with the rising TRI burden of compliance, approved EPA's TRI Information Collection Request (ICR), "with a shorter than usual clearance in order to provide the EPA an opportunity to examine in more detail the TRI burden estimates and opportunities for reducing burden and enhancing the practical utility of the data."[9] Despite OMB's encouragement, EPA has failed to take any actions that would significantly reduce reporting burdens. Instead, EPA's new ICR relies on inadequate data and flawed assumptions in order to derive imaginary reduced burden estimates.

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[5] Toxic Chemical Release Inventory, Toxic Chemical Release Reporting, Information Collection Request Supporting Statement, OMB Control Number 2070-0093 EPA ICR#1363.13 June 2003, pg 6.

[6] Statement by the President, White House Office of the Press Secretary, April 17, 2001.

[7] Letter from Margaret N. Schneider, Acting Assistant Administrator, Office of Environmental Information, to Jane C. Luxton, King & Spalding, May 25, 2001. Ms. Schneider's letter responded to a letter sent to EPA by seventy-three associations, including many small business groups, that had written to the Agency expressing concerns about the rule.

[8] Letter from EPA Assistant Administrator Kim Nelson to the Honorable Mike Pence, July 24, 2002.

[9] 68 FR 39074 July 1, 2003

Our members take their responsibility to environmental stewardship very seriously. As small business owners they and their families live, work and play in the communities where their businesses operate. The TRI reporting requirements for lead are just one of many burdensome, unjustified regulations that plague America's businesses daily as they struggle to continue providing jobs in their communities.

In conclusion, I ask you to consider whether it is reasonable to require thousands of small businesses to continue to incur the substantial regulatory burden imposed by TRI in order to report insignificant or nonexistent releases. We believe EPA should immediately undertake serious efforts to streamline TRI reporting and refocus the program on significant environmental releases.

Thank you again, Madame Chairman for giving IPC the opportunity to express our concerns and I welcome any questions.

Mr. GIBBONS. Thank you very much, Ms. Abrams, for your very helpful testimony.

We will turn now to Ms. Shultz, or should I say "Dr. Shultz"?

STATEMENT OF LEXI SHULTZ, MINERAL POLICY CENTER

Ms. SHULTZ. I am an attorney and I have a chemistry undergraduate, but I am not a doctor.

My name is Lexi Shultz——

Mr. GIBBONS. Well, welcome to the committee, regardless of the fact you are an attorney.

[Laughter.]

Ms. SHULTZ. And I appreciate the chance to testify here with a view that is obviously somewhat different than what I think you would like to hear. But my name is Lexi Shultz. I am the legislative director for the Mineral Policy Center, which is a nonprofit, nonpartisan group that works to protect communities and the environment from some of the impacts of mining pollution.

My testimony today focuses on the fact that the public has a right to full, unfiltered information about the billions of pounds of toxic chemicals that the mining operations in the U.S. release into the environment every year. This information will ensure that the public, and not just the mining industry, gets to determine whether or not sites pose a risk and whether or not they should be concerned about their communities and their health.

As Governor Christie Whitman stated on May 23, 2002, "The Toxics Release Inventory is a powerful tool to help citizens assess local environmental conditions and to help them make decisions about protecting their environment."

The mining industry has only reported toxic releases for 4 years, and for each of those years, it has topped the list as the Nation's largest polluter. And since that time, the mining industry in various forums has been fighting to deny the public access to the information. We have already heard about the two lawsuits, and, in fact, in 1998, the National Mining Association did sue to exclude mining from TRI reporting, although I am certainly glad to hear Mr. O'Connor express support for the program today.

There are many excuses and reasons that the mining industry uses to justify its attempts to exclude this information from the public. For one, we have heard that they say mining operations do not harm the environment and that toxic waste is safely managed and contained onsite. But modern mining operations are far from benign. According to the EPA, mine waste has contaminated more than 40 percent of the headwaters of Western watersheds. Not all

of that is historic. According to the EPA's online Enforcement and Compliance data base, 26 major mine facilities in Regions 8, 9, and 10 violated the Clean Water Act just in the last 2 years.

Kennecott's Bingham Canyon Mine in Utah is just one example. This mine has polluted 72 square miles of groundwater and violated the Clean Water Act six times in the last 2 years, including once when they released toxic mercury at levels 900 percent over their permitted levels.

Another thing we have heard is that the TRI does not determine risk and somehow because of that the information is not useful to the public. It is true that the TRI itself does not determine whether a site is dangerous. But it provides information so that communities can make that determination. And this type of information, had the TRI existed, could have proved very useful to the citizens of Libby, Montana, where 192 people died of asbestosis because of airborne asbestos from a W.R. Grace vermiculite mine. W.R. Grace withheld information from the public, essentially substituting its judgment for those of the townspeople. And that is what the TRI is trying to prevent now.

Another claim we have heard is that mining waste is just rock and that because the chemicals are naturally occurring, they should not be reported to the TRI. But the only material that is reported are the toxics in rock, and when the toxic chemicals are released into the environment, that does not happen naturally. Mining operations add chemicals directly, such as cyanide and sulfuric acid. But the chemicals that are found naturally in rock would not necessarily have been released into the environment were it not for the actions of the industry. We are talking about the grinding and crushing of huge amounts of rock and the consequent formation of acid mine drainage, and both actions can release toxic chemicals into waterways.

At one mine in New Mexico run by Molycorp, widespread acid mine drainage and heavy metal contamination were leached out of a waste rock pile, the specific type of waste that we have heard Mr. O'Connor and others talk about, and that wiped out 8 miles of the Red River, which was once a blue-ribbon trout fishery. This is exactly the sort of pollution that the public has a need and a right to know about.

Unfortunately, it is going to become very important to defend the public's right to know because of the court cases that you have heard about. After the NMA v. EPA case, the EPA made it clear that reporting requirements were not to change until they could instigate a rulemaking. But in a July 2001 letter to the EPA, the NMA stated that it disagreed and intended to interpret the court decision on its own. That may, in fact, be what some mining operations have already been doing, is withholding information on their own. It is impossible to know without the full information.

The Barrick Gold Strike case is even more disturbing. The D.C. District Court there held that mining waste and waste rock would be exempt from public review under the EPA's de minimis rule, despite the fact that the amounts of chemicals in waste rock could potentially add up to a billion pounds. That is a guess. We do not have the information. I wish we did. But it is only a small percentage because the amount of waste rock itself is so huge. Such a

large amount of pollution was never meant to be exempt from reporting under the de minimis rule.

In conclusion, I just want to say that the EPA has always been a steadfast defender of the public's right to know. They should continue to do so. They should make it clear that the Agency's de minimis rule cannot legally apply to chemicals that add up to massive quantities and that all mining activities should be regulated under the TRI; and that when the TRI is allowed to work, the public gains an invaluable public information tool. The public does not need the mining industry to decide what is best for it.

Thank you very much.

[The prepared statement of Ms. Shultz follows:]

Statement of Lexi Shultz, Legislative Director, Mineral Policy Center

My name is Lexi Shultz, and I'm the Legislative Director for the Mineral Policy Center, a non-profit, non-partisan group created to protect communities and the environment from the impacts of mining pollution.

The Toxics Release Program Has Been Highly Popular and Useful for Communities

I want to thank the Subcommittee for the opportunity to testify on the critical importance of full mining industry reporting to the Toxics Release Inventory program, which implements the Public's Right to Know.

What I will talk about today is the fact that hardrock mining, the nation's top toxic polluter over the last four years, releases into communities and the environment potentially dangerous chemicals like arsenic, mercury and lead, and the public has a right to know about it. As such, the mining industry's efforts to hide this pollution from the public should be halted.

The Toxics Release Inventory Program, or TRI, was established in 1986 by the Emergency Planning and Community Right-to-Know Act (EPCRA) and is administered by the Environmental Protection Agency (EPA). TRI requires industrial facilities to annually disclose to the public the volume and type of pollutants they have discharged into the air, water, or land or have transferred to other sites for incineration, recycling or disposal.

The TRI gives citizens information that they can use to protect their communities and ensure that mining and other companies behave in an environmentally responsible manner. As you may be aware, the right for the public to know about toxic chemical releases enjoys widespread support among the public, its elected representatives, and even in the courts. As Governor Christie Todd Whitman stated on May 23, 2002, "The Toxics Release Inventory is a powerful tool to help citizens assess local environmental conditions and to help them make decisions about protecting their environment." [1]

TRI is a highly useful public information tool. Companies face no penalty for their reports, and are not required to take any actions to reduce their pollution. Nevertheless, some industries have voluntarily chosen to reduce their pollution because of the advantages of the resulting public good will. Moreover, the information provided to communities has helped them ascertain what steps to take to protect themselves by, for example, pushing to have environmental laws enforced against non-complying operations.

Mining—The Nation's Top Toxic Polluter for Four Years in a Row

The hardrock mining industry first started reporting its toxic releases to the EPA in 1998, and the information was first made available to the public in 2000. Since then, the TRI has shown that the hardrock mining industry is the nation's top toxic polluter. Last year alone, the hardrock mining operations reported releases of 2.8 billion pounds of waste overall for 2001—nearly half (46%) of all toxics released by all industries combined. [2] This amount included more than 335 million pounds of lead, 4 million pounds of mercury and 365 million pounds of arsenic. [3] The top ten largest polluters in the U.S. are mine sites, according to the TRI.

Of course, 1998 was not the first year that mining operations started releasing toxic chemicals into the environment. In fact, it's quite possible that the hardrock

[1] http://www.epa.gov/epahome/headline—052302.htm
[2] http://www.epa.gov/triexplorer
[3] http://www.epa.gov/triexplorer

industry was the nation's top toxic polluter for years or decades before that. But before that time citizens didn't have access to the information they could use to protect themselves from mining toxins in their communities.

Unfortunately, ever since they were first required to report to the TRI, the hardrock mining industry has been fighting to put the public back in the dark about mining toxic releases. Back in 1998, before any mining TRI report came out, the National Mining Association sued the EPA in order to block any mining pollution data from being made public.[4] The NMA challenged everything it could think to challenge, including the notion that the public right-to-know laws should apply to mining operations at all. The NMA also petitioned EPA in 1998 to exempt the bulk of mining waste from the TRI program by classifying it as "overburden." In 1999, Barrick Gold, one of the biggest mining companies, joined the NMA in suing the EPA to get out of reporting all of its pollution.

I want to emphasize that what we are talking about here is simply information—information that the public has a legal right to—but nothing more and nothing less than information. While my organization aims to help communities deal with the environmental and other impacts of hardrock mining pollution, and to work to reduce that pollution wherever possible, that is not what this hearing is about, or what the Toxics Release Inventory is about. Instead, the issue here is that mining operations release billions of pounds of toxic chemicals into the environment every year, the public has a right to know about it under the law, but the mining industry wants to hide it. What are the National Mining Association, Barrick Gold, and other like-minded operations so afraid of? Apparently, according to their testimony, they are extremely proud of their record. They have an opportunity to garner good public will by being forthright and forthcoming about their toxic release information. Instead, they are fighting it all the way.

Mining Pollution Harms the Environment

Because precious metals exist in microscopic quantities in ore, most modern mines dig enormous open pits to extract huge volumes of rock and ore, and then use toxic chemicals like cyanide to leach out the desired metals. The crushed, ground and processed rock is then dumped into enormous piles, called tailings piles, which are usually stored above ground in containment areas or ponds. Waste rock, unprocessed rocks that do not contain a high enough grade of ore, are often crushed and piled hundreds of feet high, exposing the heavy metals contained within to the elements. These waste rock piles and tailings piles contain heavy metals such as arsenic, cadmium, lead and mercury. The environmental consequences of these enormous operations are often devastated landscapes, damaged wildlife habitat, and significant amounts of water pollution.

Water Pollution

Mine waste has contaminated more than 40 percent of the headwaters of western watersheds, according to the Environmental Protection Agency.[5] While some of that contamination is from historic mining, modern mining operations continue to cause water pollution and often violate environmental laws such as the Clean Water Act. The EPA's online Enforcement and Compliance database shows that, in Regions 8, 9, and 10, twenty six major mine facilities violated the Clean Water Act in the past two years.[6]

Kennecott's Bingham Canyon Mine in Utah is a good example. The mine has polluted 72 square miles of groundwater in the Salt Lake City Area.[7] In the past two years alone, Bingham Canyon Mine has racked up 6 Clean Water Act violations at its Utah site. In one case, the mine released highly toxic mercury at levels 900 percent over permitted limits.[8] The mine also released 695 million pounds of toxic waste in 2001—including 21 million pounds of arsenic and 91 million pounds of lead—making it the largest toxic polluter in the U.S., according to the EPA.[9]

Phelps Dodge Corporation's dormant Christmas copper mine near Winkelman, Arizona, is another good example. Phelps Dodge settled with the EPA for $105,000 in fines this year, after discharging pollutants at levels harmful to aquatic life into

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[4] http://www.epa.gov/tri/lawsandregs/nma—lawsuit—fact—sheet.htm

[5] Liquid Assets 2000: America's Water Resources at a Turning Point, May 2000, Environmental Protection Agency

[6] The Environmental Protection Agency's Enforcement & Compliance History Online (ECHO) database, http://www.epa.gov/echo/

[7] http://www.epa.gov/region8/superfund/sites/ut/kennes.html

[8] The Environmental Protection Agency's Enforcement & Compliance History Online (ECHO) database, http://www.epa.gov/echo/

[9] http://www.epa.gov/triexplorer

a tributary of the Gila River. Phelps Dodge had also failed to report its discharges of copper and sulfides, in violation of their Clean Water Act discharge permit. [10]

The Cripple Creek mine in Colorado also exceeded pollution limits 22 times over a three year period from 1996 to 1999, releasing zinc, copper and cyanide into streams that feed the Arkansas River. [11] In 2002, Cripple Creek and Victor Mining Company settled with the Environmental Protection Agency, after attempting to claim that much of the pollution coming from their mine site was not the company's responsibility.

Acid Mine Drainage

Another major water pollution problem from hardrock mines is created by acid mine drainage. Acid mine drainage develops when mining operations expose sulfur-laden rock to air and water, leading to the formation of sulfuric aced. This acid is in itself harmful to water bodies and aquatic life, but it also dissolves and mobilizes many kinds of toxic chemicals that are reportable under the TRI, such as iron, copper, aluminum, cadmium, arsenic, lead and mercury. Even in trace amounts, these substances can be toxic to humans and wildlife. Carried in water, the metals can travel long distances, contaminating streams and groundwater. The streams most seriously affected by acid mine drainage and heavy metal contamination are biologically "dead."

The Gilt Edge Mine, located in the Black Hills of South Dakota, is an example of a mine with toxic pollution problems created by acid mine drainage. Acid drainage from the Ruby Gulch waste rock pile has leached pollutants like arsenic, cadmium, cobalt, copper, lead and zinc, leading to extensive groundwater contamination at the site. [12] The mine was placed on the Superfund National Priorities List on December 1, 2000, after the bankruptcy of the Dakota Mining Company.

In September of 2000, the bones and bodies of more than 100 birds were found alongside highly acidic tailings ponds during a routine inspection of the Phelps Dodge Tyrone mine, one of New Mexico's largest copper mines. The now-inactive ponds of milled waste rock or tailings tested at least as acidic as vinegar, which has a pH of three to four. State and federal officials said the bird die-off appeared to be the largest ever associated with mine-water pollution in the state. [13]

Reclamation Failures

The mining industry also touts its reclamation record—its ability to clean up closed mines, but the evidence doesn't support this claim. Currently, 87 abandoned hardrock mining sites are so polluted that they are included on the Superfund National Priorities List. Moreover, many non-Superfund mine sites remain unreclaimed even years after the mine has shut down. These sites are often left for taxpayers to clean up when mining companies wind up without the resources for full reclamation. According to the Center for Science in Public Participation, potential taxpayer liability at currently operating mines could be more than $12 billion. [14] Cleanup costs for abandoned mines could be $32 billion to $72 billion more. [15]

One example, although there are many, is the Zortman-Landusky Gold mine, owned and operated by Pegasus Gold Corp. and located in Little Rocky Mountains of north-central Montana. Pegasus Gold went bankrupt in 1998, leaving state taxpayers with millions of dollars in cleanup expenses. In 1982, irresponsible management of cyanide solution resulted in 6 separate spills and leaks, which contaminated groundwater and poisoned local drinking water sources. Today, half of all streams in the area are polluted with acids and heavy metals from the mine. [16]

Toxic Chemicals Released by Mining are Known to Be Harmful to Public Health

Toxic mine pollution contains chemicals that are known to have public health threat. Among the toxic chemicals reported by the mining industry to the TRI are cyanide, arsenic, mercury, lead and selenium. Americans have the right to know about releases of these and other chemicals so that they can determine whether

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[10] http://www.epa.gov/fedrgstr/EPA-WATER/2002/December/Day-19/w31980.htm, http://www.minesandcommunities.org/Action/press111.htm

[11] Hartman, Todd. "Mine To Pay EPA $125,000." Rocky Mountain News 13 September, 2000.

[12] Source: Summary of the Large Scale Gold Mining Industry in the Black Hills. Prepared by the South Dakota Department of Natural Resources and the Environment, 2001.

[13] September 20, 2000, Wednesday Copyright 2000 Albuquerque Journal, Santa Fe, New Mexico

[14] Kuipers, J., Putting a Price on Pollution, Center for Science in Public Participation, March 2003.

[15] Mineral Policy Center, Burden of Gilt, June 1993

[16] Final Supplemental Environmental Impact Statement for Reclamation of the Zortman and Landusky Mines, Phillips County, Montana. Prepared by Bureau of Land Management and Montana Department of Environmental Quality, December 2001.

their health or their communities may be at risk. Without such information, it would be impossible to determine such risk. Here are some of the known characteristics and potential health impacts of these chemicals:

Cyanide solutions readily bond with gold, silver and other metals, which is why the mining industry uses it to leach ore from large quantities of rock. Cyanide is also highly toxic. Cyanide poisoning can occur through inhalation, ingestion and skin or eye contact. One teaspoon of a 2% solution can kill a person. [17]

Over the years, cyanide spills have polluted rivers and streams throughout the west, damaging aquatic life and threatening public health. The defunct Grouse Creek mine in Idaho is a classic example—the Grouse Creek mine, located adjacent to the largest wilderness complex in the lower 48 states, was heralded as a "state of the art" mine when it began operations in 1994. Less than a year later, cyanide was detected in groundwater and Jordan Creek—a stream identified by the federal government as critical salmon habitat. By the time, Grouse Creek temporarily suspended operations in 1997, Hecla had 258 violations of their discharge permit. As a result of on-going violations, the Forest Service posted signs along Jordan Creek which warned, "Caution, do not drink this water." [18] In July 1999, fearing a catastrophic release of cyanide and heavy metals from the Grouse Creek tailings impoundment, the Forest Service initiated a "time critical removal action" under CERCLA. [19] Water quality problems continue at the mine today, as the federal government struggles with reclamation.

Arsenic is a powerful poison that at high oral dosages can cause severe illness and death. At lower doses, arsenic can cause pain, bleeding, nausea, vomiting, and can also damage the nerves, leading to headaches, lethargy, seizures and coma. [20] Long-time exposure to arsenic can cause abnormal heart rhythm, blood vessel damage, and liver damage. Arsenic is also a known carcinogen, according to the Department of Health and Human Services. According to a February 15, 2001, Associated Press story, border patrol agents became sick from hazardous materials including arsenic and lead after patrolling near a defunct copper smelter in Douglas, Arizona. The agents complained of nausea, headaches and difficulty breathing.

Mercury is a potent neurotoxin. Children and infants exposed to mercury often experience delays in developing motor skills like walking and talking. The EPA recently expressed concern about an increase in women with elevated blood mercury levels, as this dangerous toxin can transfer through a placenta to a developing fetus, or to a newborn through breast feeding—resulting in exposure at critical developmental ages. [21]

Lead can affect almost every organ and system in the body. [22] Breathing or swallowing lead can damage the nervous system, kidneys and especially the immune system. Exposure to lead can permanently damage a child's brain and can impede growth and cause learning difficulties, and hearing loss. For mothers, high levels of lead exposure can cause miscarriages and premature births. Lead can also cause headaches, irritability, disturbed sleep and poor memory and concentrations. A recent National Institute of Health study, published in April in the New England Journal of Medicine, suggests that there is no acceptable level of exposure to lead. According to the study, any amount of lead can cause intellectual impairment in children, and greater damage seems to occur at levels of lead that have previously been regarded as safe. Furthermore, the effects are permanent. Attempts to remove lead from children can reduce blood levels, but do nothing to restore a child's lost intelligence.

Mining companies' lead pollution has contaminated water supplies and homes throughout the Coeur d'Alene-Spokane river basin in Idaho and Washington. Virtually all of the 179 children living within a mile of the abandoned Bunker Hill silver mine (a Superfund site) were found to have brain-impairing levels of lead in their blood. [23] And according to the U.S. Geological Survey, a half-million pounds of lead-contaminated mine sediment landed in Lake Coeur d'Alene every year from 1999 to 2001, and another two dozen tons of that sediment traveled down the

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[17] Medical Toxicology, Ellenhorn & Barceloux, Elsevier Science Publishing Co., New York City, N.Y., 1988

[18] Press Release, USDA Forest Service, Salmon-Challis Forest. July 6, 2000

[19] Grouse Creek Removal Action Memorandum, Jack Blackwell, Regional Forester, USDA Forest Service Intermountain Region. July 26, 1999., Engineering Evaluation/Cost Analysis for Non Time Critical Removal Action at the Grouse Creek Mine, Custer County, Prepared by Hecla Mining Company, July 17, 2002., Hardrock and Phosphate Mining In Idaho, a report by the Idaho Conservation League and Boulder White Clouds Council, March 2002

[20] http://www.atsdr.cdc.gov/tfacts2.html

[21] http://www.epa.gov/waterscience/fishadvice/advice.html

[22] http://www.atsdr.cdc.gov/tfacts13.html

[23] http://www.atsdr.cdc.gov/testimony/testimony-1995-05-12.html

Spokane River. Local health officials have posted signs at beaches along the lake and river and have warned people that rainbow trout and mountain whitefish contain dangerous levels of lead.

Selenium is a metal commonly found combined with silver, copper and other metals. In June 2003, at an old hardrock mine in Idaho, more than 300 sheep died from selenium poisoning after grazing near the mine for a week.[24] In humans, overexposure to selenium can cause hair loss, liver damage, dizziness, fatigue, fluid in the lungs and severe bronchitis, along with painful skin rashes.[25]

These are by no means the only toxic chemicals released by the mining industry—a more complete list of toxic chemicals reported by the mining industry on the TRI, along with their characteristics and potential health impacts is attached.

Hardrock Mining Pollution: Nothing Natural About It

One myth the National Mining Association and individual mining companies like to use is that the toxic chemicals they release into the environment are "naturally occurring" and thus should not be reported on the TRI. This argument is erroneous.

Some chemicals are added to the environment by the mining industry directly—such as cyanide and sulfuric acid. Other chemicals may be found naturally in rock, but would never have been exposed to the environment if not for the actions of the mining industry. After all, there is nothing natural about an open-pit mine. Nature does not dig open pits thousands of feet deep and wide, grind and dump huge piles of rock, crush piles of ore and pour chemicals over it in order to extract metals. The rock, and the toxic chemicals therein, undergo both mechanical and chemical changes from the activities that occur during mining and the exposure of the rock to air and water.

In particular, acid mine drainage forms because mining operations expose sulfur-laden rock to the air and water. In turn, this acid can leach heavy metals and other toxins into streams, rivers, lakes and drinking water. For example, at least 8 miles of the Red River in northern New Mexico are biologically dead because of acid mine drainage at the Molycorp molybdenum mine. Over the last 30 years or so, widespread acid mine drainage and heavy metal contamination has leached out of its waste rock piles into the Red River, which was once a blue-ribbon trout fishery.[26] Since this large-scale operation began, the nearby town of Questa has seen the River turn milky blue from aluminum coating the riverbed. Copper, zinc, lead, cadmium and silver have been detected at chronic and acute levels along the twenty-mile stretch of the River below the mine. In addition to water contamination, dust containing lead and other pollutants from enormous molybdenum tailings storage ponds blows over the town of Questa. Because of contaminated dust blowing from the tailings piles onto students at a local high school, Molycorp eventually paid to have the high school relocated.[27]

It is this sort of pollution that the NMA claims is "naturally occurring" and thus would be "misleading" for the public to have information about. This is exactly the sort of pollution that never would have occurred without the mine and that the public has a right and a need to know about. That is what makes the TRI such a valuable tool.

Communities Put the TRI Information to Good Use

Throughout the country, communities learn from the information provided under the TRI and use it to improve their quality of life. In Alaska, for example, the TRI demonstrated how pollution from the Greens Creek mine is affecting the Admiralty Island National Monument. Kennecott mining company is proposing to expand its waste piles for this mine, and without the TRI, there would be no complete picture of how that could potentially further impact the National Monument. Local citizens are now seeking to enforce a bond for the mine that will be adequate to ensure full future cleanup.

In Nevada, TRI data showed that Nevada's mines emitted 13,000 pounds of mercury into the air in 1998, or 4% of the entire releases in the U.S.[28] Mercury is not a localized pollutant, but can travel and deposit into water far from its source. A local public interest group is now attempting to address this problem through the prevention of significant deterioration program under the Clean Air Act, which essentially seeks to keep air clean in rural areas of the country.

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[24] http://www.agweekly.com/commodities/sheephog/index.asp?StoryID=183
[25] http://www.atsdr.cdc.gov/tfacts92.html
[26] http://www.nmenvirolaw.org/cases/molycorp.htm
[27] http://www.amigosbravos.org/molycorpwatch/background.html
[28] http://www.epa.gov/triexplorer

The Mining Industry's Attempts to Block the Public's Right to Know

Unless steps are taken to protect the Public's Right to Know, through the EPA's proposed rule-making or other measures, this invaluable data may be lost. The mining industry may yet be successful in its attempts to use the courts to hide its pollution from the public.

In the National Mining Association 1998 case, NMA v. EPA (Civil No. 97-N-2665; D. Colo.), the NMA challenged the TRI program in three ways. First, it said that the EPA had no authority to regulate mining operations under the Public Right to Know laws. The District Court of Colorado rejected this argument, holding that mining facilities are not exempt from the law. Second, the NMA argued that mining facilities shouldn't have to report toxic chemicals released into leach pads. Again, the District Court ruled against the NMA on this point, holding that mining operations cannot get out of reporting toxic releases to land. Finally, the NMA argued against reporting toxic materials resulting from the "extraction or beneficiation" of ores—taking ore out of the ground and getting the metal out of it, essentially—because such activities aren't "processing" as that's defined under the Public Right to Know laws.

The Court initially accepted the NMA's third argument, but ultimately clarified that, while "extraction and beneficiation" may not be processing, that didn't necessarily mean that such activities weren't manufacturing or some other regulated activity under the Public Right to Know Laws. Based on that clarification, the EPA made it very clear to the NMA that there would be no changes in reporting requirements, at least until the agency could undertake a rulemaking to address the issue. But, in a July 2, 2001 letter to the EPA, the NMA stated that it intended to ignore the EPA's directives, and that it would undertake to withhold reporting information from the public according to its own interpretation of the Court's ruling.

It is the public that will suffer because of the NMA's recalcitrance. The reported mining toxic releases from the 2001 TRI were 2.8 billion pounds—but the actual pollution may have been much higher. In 2000, mining toxic releases totaled more than 3 billion pounds, and mining practices changed little in 2001.[29] In light of the National Mining Association's quarrel with the EPA's directive not to change reporting practices after the NMA v. EPA case, it is very possible that mining operations have reduced the reporting of their toxic pollution, but not reduced the toxic pollution itself.

In the 1999 Barrick Gold case, Barrick Goldstrike Mines, Inc. v. Whitman (Civ. Action No. 99-958 (D.D.C.), Barrick raised several issues, again, each one designed to limit the amount of information the public can receive about toxic mining pollution. In April 2003, the D.C. District Court rejected Barrick's arguments that toxic chemicals that change into a slightly different form shouldn't be reported, and that toxic chemicals released as part of tailings shouldn't be reported.

Disturbingly, however, the D.C. District Court agreed with Barrick on one issue—that an EPA rule—the so-called "de minimis" exemption—could apply to toxic chemicals dumped as part of waste rock. The EPA rule was written to forgive reporting for truly trivial amounts of toxic chemicals. But Barrick argued that the rule should apply to the immense amounts of toxic chemicals released as part of waste rock, simply because these poisons make up such a small percentage of the even more mammoth amounts of waste rock that is dumped. The mining industry in the U.S. releases more than 1 billion pounds of toxic chemicals as part of the hundreds of billions of pounds of waste rock it dumps every year. That is vastly more than a trivial amount of toxic pollution, and thus was not meant to be exempt from reporting under the EPA's "de minimis" rule. Unfortunately, the court looked at the language of the EPA "de minimis" rule rather than its intent, and exempted such pollution from being reported.

The implication of the Barrick case is not totally known yet, but it could mean that 1 billion pounds of toxic chemicals released by the mining industry into communities and into the environment might be hidden from public view next year. As such, Barrick's legal efforts to hide its toxic pollution from the public may be very successful.

In addition, the National Mining Association may attempt to use the Barrick decision to push the EPA to classify waste rock as "overburden," which is exempt from TRI reporting. In October 2002, EPA formally denied the NMA's previous "overburden" petition, in which the NMA had sought to expand the definition of "overburden" to include "consolidated material" such as waste rock. Because the EPA decided that "overburden" would be exempt from reporting, the NMA was seeking to exempt as much mining waste as possible from the TRI program. In denying the

[29] http://www.epa.gov/triexplorer

NMA's petition, the EPA specifically stated that waste rock would not be classified as "overburden" because there were greater than negligible amounts of toxic chemicals in waste rock. The EPA was correct—the potentially billion pounds of toxic chemicals in waste rock nationwide is far greater than negligible and should not be exempt from reporting.

Nevertheless, the NMA may use the erroneous decision in the Barrick case to reopen this petition and thus further limit the public's access to information about toxic chemicals in mining waste. Specifically, classifying waste rock as overburden would eliminate public information about Persistent Bioaccumulative Toxins such as lead and mercury. Right now, despite the Barrick decision, mining operations must report the presence of such toxic chemicals even in waste rock, because such chemicals are exempt from the EPA's "de minimis" rule. But exempting waste rock as "overburden" could put that reporting in jeopardy.

Hiding the toxic pollution from waste rock is not an academic matter. Every day, toxic chemicals leaking from waste rock pollute streams and groundwater on which families depend. For example, at the Kendall mine in the Moccasin Mountains of central Montana, waste rock piles are leaching acid and metals such as arsenic, lead, and chromium into ground water and surface water. Downstream ranching families have been forced to file suit against the mining company, Canyon Resources, for damages to their private property.[30] The Montana Department of Environmental Quality has determined that long-term water treatment will be needed. A report in November 2002 by Water and Environmental Technologies describes impacted groundwater as containing elevated concentrations of arsenic, barium, beryllium, cadmium, chromium, copper, iron, lead, nickel, selenium, silver, thallium, vanadium and zinc.[31]

The EPA Must Fix Mining Industry Efforts to Keep the Public in the Dark about Toxic Mining Pollution

It is the public that will suffer from the fact that mining operations seem more interested in hiding their pollution than reducing it. The EPA has in the past steadfastly defended the Public's right to know and must continue to do so in the future.

The EPA is drafting a proposed rulemaking for completion in 2004 that will address the issues raised in both the legal cases brought by the mining industry against the TRI program. It is vital that the EPA keep in mind, as it undergoes this rulemaking, the broad mandate of the Public Right to Know Law—EPCRA, which mandates that the public has the right to know about toxic chemicals—all toxic chemicals—that are being released into their environment.

As such, it is crucial that this rulemaking address several key points. First, the new rule should establish that all mining activities, from start to finish, constitute activity that is covered under EPCRA. There is nothing "natural" about an open-pit mine, and a hardrock mining operation is intended, from the first rock pulled from the ground to the last waste pile dumped, to produce a commercial product—gold and silver and other metals that will be sold into market. During this process, toxic chemicals are exposed to the environment that never would have been exposed otherwise. These chemicals have a real, immediate and long-lasting effect on communities. It is vital that the public has access to information about such pollution. As such, it is vital that the TRI apply to all toxic chemicals released by mining operations, whether those chemicals are released during digging, grinding, dumping, or any other mining activity or are released from waste rock piles, tailings piles, the open-pit or any other location on the mine site. The EPA rulemaking should clarify that the TRI applies broadly to all toxic mining releases.

Second, the EPA should make clear that the agency's "de minimis" rule was never intended to exclude from reporting chemicals that add up to large quantities. In fact, the only authority that the EPA has for a "de minimis" rule comes from the doctrine of "de minimis non curat lex"—which means that the law does not concern itself with trivial matters. There is no authority in EPCRA for the EPA to exempt even small amounts of pollution from reporting. If the "de minimis" rule were to be applied to vast quantities of pollution, as the court in the Barrick case held, the EPA would be beyond its legal authority. The EPA cannot allow this erroneous interpretation to stand and must clarify in its proposed rulemaking that huge amounts of toxic releases are not "trivial" enough to be exempt from reporting.

In addition, the EPA should not give in to any industry efforts to have waste rock or other mine waste exempted by reporting through a new "overburden" petition.

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[30] Extent of Contamination Investigation Little Dog Creek Drainage, Fergus County, Montana. Prepared by Water and Environmental Technologies, November 11, 2002.

[31] Ibid.

Conclusion

In conclusion, I want to emphasize that what we have been talking about here today is the public's right to have access to information about toxic chemical releases from mining that might have an impact on their communities, their livelihoods, their health. We have not been talking about reducing the pollution—that too is critically important, but is an entirely different issue.

And yet, the mining industry has repeatedly sued to ensure that the public is kept in the dark. It's time for mining companies to stop fighting the program and accept responsibility, as other industries have, for the toxic chemicals they release into the environment.

In addition, the EPA should ensure that the TRI continues to work by addressing in its rulemaking the problems that the mining industry lawsuits have created.

When allowed to work, the Toxics Release Inventory is a winning program for everyone. It gives industries a chance to voluntarily control pollution and gain public good will. And it arms the public with information that they need and can use to improve their quality of life.

[An attachment to Ms. Shultz's statement follows:]

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Health Effects Summary of the Most Commonly Released Metal Mine Chemicals

Arsenic Compounds

Arsenic compounds are naturally found in copper and lead ore. High doses of arsenic can cause severe illness or death in people due to fluid loss and the circulatory system failing. Small doses of arsenic can cause nausea, vomiting, diarrhea, and damage to the nervous system. An increased risk of lung cancer is associated with airborne arsenic. Skin cancer can also result from arsenic poisoning although it remains latent for 30 to 40 years.

Zinc compounds

Ingesting large amounts of zinc can cause pancreas damage, stomach cramps, nausea, vomiting, and anemia. Breathing large amounts of zinc dust cans cause flu like symptoms. Animal tests on rats have shown high levels of zinc to cause infertility.

Manganese compounds

Low levels of exposure to manganese can cause increased susceptibility to infection and respiratory problems. High levels of exposure can cause mental and emotional disturbances such as Parkinson's disease-like syndrome and clumsy body movements. High levels of exposure are also believed to cause sexual dysfunction.

Vanadium compounds

Exposure to high levels of vanadium can cause cold like symptoms (coughing, wheezing, chest pain, runny nose, sore throat), but no other health effects have been found in people. Animals who have drunk vanadium contaminated water have birthed young with birth defects. Other animals that have been breathed or ingested vanadium for long periods of time have had kidney and liver changes.

Copper compounds

Exposure to copper can cause growth problems, and damage to the central nervous system. Eye contact with copper particles can cause blindness and skin contact can lead to allergic reaction. When exposed to copper for long periods of time people have developed flu like symptoms, and anorexia. Repeated exposure can cause cosmetic changes in people (greenish color in skin, teeth, and hair), as well as liver and kidney damage.

Chromium compounds

Chromium is found in three forms: chromium (0), which is man made, chromium (III) and chromium (IV), which both from naturally. High levels of exposure to all forms of chromium can cause damage to the lungs, and allergic reactions on the skin. When ingested, high levels of chromium have caused ulcers, convulsions, kidney and liver damage, and death. Chromium (IV) at moderate levels of exposure causes an increased risk of a variety of lung diseases, skin ulcers, and swelling on the skin.

Barium compounds

Barium compounds do not generally dissolve well in water, but those that do pose significant risk to human health. Ingesting high levels of these compounds can lead to: difficulty breathing, high blood pressure, changes in heart rhythm, brain swelling, and damage to the liver, kidney, and spleen.

1612 K Street, NW
Suite 808
Washington, D.C.
20006

Telephone:
202.887.1872
Fax:
202.887.1875
Email:
mpc@mineralpolicy.org
Website:
www.mineralpolicy.org

Cobalt compounds

Exposure to high levels of cobalt can irritate the skin, eyes, nose, throat, and lungs. Repeated exposure to cobalt dust can cause scarring of the lungs, which can be disabling or fatal. The International Agency for Research on Cancer has determined that cobalt is a probable carcinogen.

Nickel compounds

The Department of Health and Human Services has determined the Nickel and various nickel compounds can reasonably be considered carcinogens. Direct skin contact with nickel can result in an allergic reaction. Breathing high quantities of nickel dust can cause chronic bronchitis and reduced lung function.

Antimony compounds

Prolonged exposure to antimony, at high levels, can cause heart and lung problems, stomach pain, diarrhea, vomiting, and stomach ulcers. Laboratory studies on animals have shown short-term exposure to antimony to cause heart, lung, kidney, and liver damage.

Sulfuric acid

Contact with sulfuric acid can result in permanent, sever burns. Contact with sulfuric acid fumes, depending on the level of exposure, can cause irritation to the eyes, nose, throat, lungs, and one's teeth to become pitted, or severely burn the lungs. Repeated exposure to sulfuric acid can cause bronchitis and emphysema.

Nitrate compounds

While chronic exposure to silver can lead to the skin becoming discolored, and a buildup of silver in the eyes, high levels of silver exposure can cause damage to the liver and cardiovascular system. Breathing airborne silver particles can cause stomach pains, as well as lung and throat irritation.

Ammonia

Although ammonia is not carcinogenic, when it is in the presence of certain other chemicals it may contribute to the development of cancer. Contact with ammonia, in liquid or vapor form, can severely burn the eyes and skin, can cause stomach sickness, and vomiting. Long term exposure to ammonia can cause pulmonary edemia (a buildup of fluid in the lungs), which can be fatal.

Cyanide compounds

Exposure to high levels of cyanide can severely damage the brain and heart, induce coma, or cause death. Exposure to low levels of cyanide can result in: breathing difficulties, heart pain, vomiting, blood changes, headaches, and an enlargement of the thyroid gland.

All data was collected from the Agency for Toxic Substances and Disease Registry at...
http://www.atsdr.cdc.gov/toxfaq

Mr. GIBBONS. Thank you very much, Ms. Shultz, and to all our witnesses, I want to thank you for your testimony today.

Ms. Shultz, I have looked through your testimony and do find it very interesting because some things I adamantly disagree with. For example, in your written testimony, you say that "Nature does not open pits thousands of feet deep or grind up and dump huge piles of rock," and that is a quote right out of your testimony. Is it?

Ms. SHULTZ. Yes. I have the testimony. I can check it, but it——

Mr. GIBBONS. I guarantee you, it is a quote right out of your testimony. I just read it.

Ms. SHULTZ. OK.

Mr. GIBBONS. Now, my question to you is: Can you describe for me the process of the Colorado River through the Grand Canyon grinding up rocks and making sand and sediment out of that, or the wave action of the Great Lakes, or Yellowstone with its geothermal activity bringing solutions of arsenic and other toxic minerals to the surface, or Carlsbad Caverns or how they were formed, if nature does not do the same thing that mining does? Tell me.

Ms. SHULTZ. What I am saying is that nature does not create open pit mines. If I misconstrued that through my testimony, I apologize, but what I meant to say was that nature does not create open pit mines.

Mr. GIBBONS. What is the difference between a sinkhole and a mine?

Ms. SHULTZ. The difference is that a sinkhole is not necessarily grinding the material up and allowing acid mine drainage to form, which——

Mr. GIBBONS. How did the space occur within the rocks below that created the open pit?

Ms. SHULTZ. I am also not a geologist. I have done——

Mr. GIBBONS. But you are a chemist, and I will say to you that——

Ms. SHULTZ. I am a chemist.

Mr. GIBBONS [continuing]. This is a chemical reaction to the wall rock. It is a chemical reaction of the rock——

Ms. SHULTZ. Well, the creation of a sinkhole——

Mr. GIBBONS [continuing]. Being eaten away by the water.

Ms. SHULTZ. The creation of a sinkhole I believe is geological in the sense that I think it is a shifting of the aquifers underground and then the opening up of the landscape on top.

Mr. GIBBONS. It is predominantly caused by solution dissolving the minerals in the rock, just as Carlsbad Cavern was. OK? And let me say that the amount of silt, sediment, and the chemical reaction to the rock being ground up in the Colorado River is far and away far greater than the total, sum total of mining in the United States since Columbus discovered America. Just the amount and the weight of that.

Now, what about highways? Why isn't your group going after the construction firm down here and stopping this highway construction on 495 for the amount of soil that they are moving around and the distribution of minerals and toxic elements that are naturally occurring in that soil right down here on 495?

Ms. SHULTZ. I will be very honest with you. I am not by any means saying that mining waste and mining toxic chemicals are the only things to be concerned about. My group——

Mr. GIBBONS. Well, your testimony only relates to——

Ms. SHULTZ. Well, my group is a very small group. We have several thousand members across the West. Some of our members are miners and mining engineers. We focus on hard rock mining issues because of the nature of my organization. So that is why I focus on the impacts from hard rock mining.

Mr. GIBBONS. It gives a different impression to us from your testimony, though. All right.

There is no doubt that historic mining practices have been on more than one occasion bad for the environment, and there is no doubt about it that if we are going to have a viable mining industry for the future, we have to do better with the environment. And we are doing better. And would you agree that some mines today—not all mines—do a pretty good job of dealing with the environment?

Ms. SHULTZ. I would certainly agree that some mining operations are much more environmentally aware than others, absolutely.

Mr. GIBBONS. And yet their practices do not pollute.

Ms. SHULTZ. Actually, the concern that we have is that there are many mining operations which do pollute the water and the air. Perhaps, as you stated, not all, but the trouble is that unless the public has the access to the information about the toxic chemicals, they will not know which mines at any one time they are going to pollute——

Mr. GIBBONS. Well, let me take, for example——

Ms. SHULTZ [continuing]. Or what toxic chemicals are released.

Mr. GIBBONS [continuing]. The testimony you wrote in your presentation to Congress, which lists all the citations, say, of Phelps Dodge. Now, not every one of those citations is a massive environmental disaster. But to say that the total number of quotes of violations indicates a very bad standard of practice I think is misleading.

Now, you should be very careful and say, well, maybe out of the 226 that you cite, five maybe resulted in contamination that was uncontrolled and unchecked. A violation from the EPA of some standard of control sometimes leads to a citation, but may not lead to pollution. Would you agree?

Ms. SHULTZ. I actually—there are so many different types of Clean Water Act violations, I would definitely agree that there are differences from one to the next. But right now all we are talking about is the information——

Mr. GIBBONS. But yet you listed them all in one big category as if they are the big evil company out there doing mining.

Ms. SHULTZ. I did not use that term.

Mr. GIBBONS. Well, no.

Ms. SHULTZ. What I am saying is that there is environmental damage that is caused by some mining operations.

Mr. GIBBONS. All right. Well, let me go back—you have a degree in chemistry.

Ms. SHULTZ. I do, an undergraduate degree.

Mr. GIBBONS. Yes, and that is far more than I have. I am not a chemist by any means, which the Chairman is, and she is very

bright. And you talk about cyanide periodically throughout your testimony and list the dangers of cyanide. There is no doubt about it that cyanide at certain levels is highly toxic, and you say that here. OK?

Ms. SHULTZ. Yes.

Mr. GIBBONS. But like the other things, you list cyanide as one of the evils of our world today that we should do away with.

Ms. SHULTZ. I have not said that, but——

Mr. GIBBONS. No. That was my characterization of your testimony. But you do agree that cyanide, according to your testimony, pervasively throughout your testimony, is a terrible substance no matter what form it is in.

Ms. SHULTZ. What I said in my testimony was that at certain levels, at acute levels, it can be highly toxic, and that it certainly can be damaging to aquatic life and to other wildlife.

Mr. GIBBONS. Well, I would agree. Let me ask a question. Since you have a degree in chemistry and we want to talk about cyanide just for a quick inference here, tell me some naturally occurring foods that have cyanide in it that we ingest every day.

Ms. SHULTZ. I am not a food chemist, so I do not know.

Mr. GIBBONS. Well, how about if I said lima beans? Would that surprise you?

Ms. SHULTZ. Yes, actually, it does surprise me.

Mr. GIBBONS. How about apple seeds?

Ms. SHULTZ. Yes, actually, I was aware that apple seeds have cyanide in them. That is why you are not supposed to eat the seeds.

Mr. GIBBONS. How about cassava root?

Ms. SHULTZ. Not aware of that.

Mr. GIBBONS. There is another one that would surprise you, I am sure, as well.

There are a number of foods out there that have cyanide, so cyanide in our environment is almost naturally occurring. I have been to plants that make cyanide, and unless cyanide—and you and I know—comes out in the HCN form, cyanide is not in and of itself deadly.

Ms. SHULTZ. But shouldn't the public have the right to have the access to the information?

Mr. GIBBONS. Oh, they should, but they should have the right—and I am glad you brought that up. Shouldn't they have the right to have that information listed in a scientific, representative form? When it is a pollution of the waterway, yes, they deserve to have that. But simply by moving a rock, this rock right here, which is a sample of galena, from that position there to this position right here on my desk would be considered a release under your definition because I moved it. And yet in that position right there, it is nontoxic naturally occurring. When it gets to this position right here, it may be sitting not in situ, but it is still in the same chemical form.

Ms. SHULTZ. But it is in many cases, if you are talking about a mining operation, exposed to the air and water when it wouldn't have been otherwise.

Mr. GIBBONS. So the erosion of mountains is not an exposure to air and water.

Ms. SHULTZ. Erosion of mountains itself can lead to some toxic chemicals.

Mr. GIBBONS. And as we see in Yellowstone or the Grand Canyon or all these others release enormous——

Ms. SHULTZ. But so can mining operations——

Mr. GIBBONS. Well, there is. But I think we have to put it in a representative form that is not misleading, and that is the point we are trying to get at. It is not that these mining companies, as you heard, disagree with the idea that Toxic Release Inventory shouldn't be out there. But if I move it from here and I put it over here, I have created a deficit over on this side. I should be given credit for removing it from the environment.

But what you need to do is put it in a representative form that really gives the public an idea of what that information truly means. Because when you come out and just say 4 billion tons of arsenic in rock—and that is an exaggeration, but I just threw the number out there because it was a large number. There is damage done to the public's perception of an industry that provides this world and this economy with a great deal of the basis by which we have a quality of life in this country. And it comes down to the point where these mining industries around here are starting to look elsewhere rather than mine in this country. And I guarantee you, I have been to other countries, and I have looked at those mining operations. I have looked at Phelps Dodge and its operations in Chile, South America. Yes, they go down there to get low-salary—that is part of it. But the biggest part is the permitting process. And the permitting process up here can take 10 years or longer. And if you have a $400 million investment and an environmental group comes up after you have gone through each and every step of an environmental process in the permit and sues you because of the TRI-related industry, you are going to delay that process, and they will never get their return on their investment. And you are well aware of that. You are a very smart, educated lady.

And I am saying we have to treat every industry the same. So if you are not going to go down here and attack the transportation industry for building highways and moving dirt, and you are going to attack the mining industry, you are doing a disservice because you are not doing it with fairness and equity, nor are you producing for the public meaningful information which is representative of what they have a right to know.

So if you talk about cyanide, you better talk about lima beans in the same footing as you talk about cyanide from a mine.

Ms. SHULTZ. As long as the information gets full access to—the public gets full access to that information, I would——

Mr. GIBBONS. Then it should be presented in a different light.

Ms. SHULTZ. From the perspective of our members and the folks that I represent, these are people that would prefer to be able to interpret the information themselves rather than having the mining companies or perhaps even the EPA interpret it for them. We are talking——

Mr. GIBBONS. You know, that just begs the point. I know nothing about a lot of things in this world, and if I had to interpret things based on the information I have seen in some of these publications

or that I have seen from some of the organizations that present it, I would have a completely different understanding of that than what the truth and the science might dictate. That is all I am saying. I am not trying to sit here and argue with you. I just disagree sometimes that when people say the evil mining industry out there is the worst industry in the world, but they fail to understand the real concept of why this country is as great as it is.

Mr. Udall?

Mr. TOM UDALL. Thank you, Chairman Gibbons.

I would just ask that Mr. Kind's statement be put in the record, the Ranking Member.

Mr. GIBBONS. And as long as you are dealing with that, Mr. Tom Sullivan with the Small Business Administration has submitted written testimony for the record as well, and without objection, we will enter both.

Mr. TOM UDALL. Great.

[The prepared statement of Mr. Sullivan follows:]

Statement submitted for the record by Thomas M. Sullivan, Chief Counsel for Advocacy, U.S. Small Business Administration

I am pleased to submit this written statement to assist the Subcommittee on Energy and Minerals' oversight of the U.S. Environmental Protection Agency (EPA) and my office commends your attention to the plight of small employers concerning regulatory burden. My name is Thomas M. Sullivan and I am the Chief Counsel for Advocacy at the U.S. Small Business Administration (SBA). The Office of Advocacy is an independent office charged with representing the interests of small business before state and federal lawmakers. As Chief Counsel for Advocacy, I am charged with monitoring federal agencies' compliance with the Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA). As such, the views expressed in this written statement are my own and do not necessarily reflect the views of the Administration or the SBA.

The Office of Advocacy has worked with the EPA in the development of toxics release inventory (TRI) rules since the first rule was issued in 1988. In the past sixteen years, my office has developed substantial expertise in the TRI and other right-to-know programs, and has identified several opportunities for reducing paperwork burdens while preserving the right-to-know.

A. Introduction.

The right-to-know provisions set forth by the Emergency Planning and Community Right-to-Know Act (EPCRA) are a cornerstone of modern day environmental protection. EPCRA requires facilities to provide information on toxic chemical releases, waste management activities, and chemical inventories. Under the right circumstances, the information acquired through community right-to-know requirements can lead to environmental improvements without the need to resort to the traditional prescriptive regulatory approach.

The Office of Advocacy believes that the right-to-know objectives can be achieved in a manner that is small-business friendly. Let me provide two examples where Advocacy worked with EPA to improve its right-to-know regulations, at no cost to environmental protection:

1) In 1994, EPA adopted "Form A," the short form for TRI reporting that provides significant burden reduction. Adopted as a less burdensome alternative to the "Form R," Form A saves small businesses millions of dollars annually.
2) In 1999, EPA eliminated the TRI requirement for reporting gasoline at hundreds of thousands of gasoline stations under sections 311 and 312 of EPCRA. Gas station owners convinced EPA, with Advocacy's help, that local authorities know they have gas onsite without the requirement of paperwork to document the obvious.

While we have had successes on TRI burden reduction, EPA included chemical and petroleum wholesalers under the TRI reporting requirements in 1997 despite Advocacy's opposition on the grounds that their releases to the environment were insignificant. Subsequent data releases have confirmed that releases for the chemical and petroleum industry were inconsequential. In 2001, they accounted for 8.5% of all TRI reports filed but only 0.4% of all toxic releases to the environment.

More recently, in Advocacy's September 2, 2003 comment letter to EPA Assistant Administrator for Environmental Information Kimberly Nelson (attached), Advocacy made recommendations to expand the availability of the Form A and other short form reporting.[1] Currently, the Form A is available to a narrow portion of the total TRI reports. By a small revision in the eligibility requirements for the short form, EPA could make relief available for thousands of currently ineligible facilities and tens of thousands of reports.

Since 1998, EPA has been working with the Office of Management and Budget (OMB) and Advocacy to address burden reduction for TRI reporters. EPA has yet to propose significant revisions to the reporting rules or the Form A eligibility requirements. The reporting burden has increased substantially since 1994, due to the addition of new reporting industries and the lowering of reporting thresholds for persistent bioaccumulative toxic (PBT) chemicals. EPA has been reluctant to provide additional burden relief citing concern about potential "data loss" being too large. Advocacy continues to urge EPA to define quantitatively what constitutes a significant loss of data to craft significant burden relief to thousands of facilities without data loss.

To address EPA's concerns, Advocacy recommended in our September 2 comments that EPA either substitute the Form A with a form that can be used by a larger universe of facilities or modify the Form A to provide for additional data. In other words, EPA can make use of the Form A for a much wider number of forms, or alternatively, modify the Form A to include additional details that EPA would prefer to preserve, such as the amount of chemical released to air or water. Advocacy also recommended that EPA propose a new "Form NS" denoting no significant change to a baseline report in a Form R. This option could be applied to tens of thousands of reports, or thousands of facilities, with considerable savings accruing for each year a Form NS is filed. Under this option, a facility could simply note that its production changed by, for example, less than 10% from the previous year, and a Form NS would be filed for that year. These are examples of the types of burden reduction options that Advocacy urges the EPA to consider.

Additional information is provided below on the large number of reports that involve zero or minimal releases to the environment. Advocacy believes further burden reduction is warranted because of the large number of reports compiled at great expense to the regulated facilities, without accompanying public benefit. Advocacy is encouraged that EPA is preparing an issue paper outlining burden reductions for the public to review and comment in the near future. We welcome the EPA's release of the issue paper, and will work with the EPA with the goal of achieving regulatory relief for the July 2004 reporting period.

B. Regulatory Burden Reduction is Appropriate Where TRI Reporting Imposes Significant Costs Without Significant Right-to-Know Value.

There are over 23,000 TRI reports that account for less than 0.08% of the total wastes reported (of a universe of 78,000 reports in reporting year 2000), not including the 13,000 reports submitted on Form A. It is our belief that such reports do not warrant the 110 burden hours that EPA estimates that a facility filing a report for the first time would take. As discussed below, Advocacy believes the most immediate need for burden reduction relates to EPA's reduction of the threshold for lead to 100 pounds from the current 10,000/25,000 pound thresholds for reporting year 2001.

By tightening the reporting thresholds in 2001, the revised threshold led to a greater than 400% increase in the number of lead and lead compounds reports (8,560 in 2001 from 2,025 in 2000), many of which were filed by small businesses reporting for the first time. Many of the newly affected small businesses are unfamiliar with the TRI reporting process, unlike large firms that may file multiple reports for various chemicals every year, and thus many small firms take longer to file their reports.

Since the almost 6,600 first-time reports for lead and lead compounds in 2001 were nearly all initiated due to the reporting threshold reduction, most of these new reports were from facilities that use, and likely release, relatively low levels of lead into the environment. The data on 2001 reporting reveals that the majority of the reports were for very small or zero onsite releases of lead or lead compounds into the environment (see attached Appendix A). The median reporting firm reported a total release of only 1 pound. Specifically, 38% of all reports documented zero releases to the environment, while an additional 25% of all reports were for very small

[1] The letter is also available at http://www.sba.gov/advo/laws/comments/epa03—0902.html and a Fact Sheet summarizing the letter is available at http://www.sba.gov/advo/laws/comments/factsepa03—0902.pdf.

releases to the environment, with less than 10 pounds of lead or lead compounds. Thus, 63% of all reports filed for lead and lead compounds likely would have no discernable effect on the environment. The majority of those reports were filed by small businesses, each of which devoted nearly three full weeks of staff time to generate these reports, according to EPA estimates. The total environmental releases of lead and lead compounds represented by those reports accounted for only 0.001% of all releases in 2001. Up to 500,000 staff hours were required to create these reports in 2001.

The burden of complying with TRI reporting for lead and lead compounds falls most heavily on firms in the manufacturing sector, comprising 84% of all reports in 2001. However, only a few manufacturing industry sub-sectors contributed significantly to total environmental releases (attached Appendix B shows reports and releases for all two digit Standard Industrial Classification (SIC) code industries). Overall, manufacturing produced just 5.3% of all environmental releases of lead and lead compounds, with the primary metals industry (SIC 33) accounting for 83% of all manufacturing releases and 16% of manufacturing reports. Two manufacturing industries were disproportionately burdened by lead reporting while producing only very small environmental releases: electronics manufacturing (SIC 36) and fabricated metal products (SIC 34). These two industries comprised 33% of all manufacturing reports, or 27% of all 2001 reports, but only 0.9% of manufacturing environmental releases, or just 0.05% of all releases. The predominance of small firms in these industries is evidenced by the fact that the median report in each industry had zero total releases. Consequently, the majority of firms reporting had zero or negligible releases yet still bore the same reporting burden as firms that accounted for releases that were several orders of magnitude larger. Advocacy believes EPA's commitment to reduce the reporting burden is also warranted by the large proportion of lead reports with low to zero right-to-know value.

C. EPA Did Not Properly Establish Whether Lead Was a Persistent Bioaccumulative Substance Nor Did EPA Implement the Required Peer Review Process.

In the January 17, 2001 final rule, EPA designated lead as a persistent bioaccumulative toxic (PBT) chemical and lowered the reporting threshold for lead for the TRI reporting requirement. As discussed in my June 13, 2002 written statement for the Regulatory Reform and Oversight Subcommittee of the House Committee on Small Business, Advocacy believes that EPA did not establish an adequate factual basis either for designating lead as a PBT chemical or for lowering the reporting threshold for lead to 100 pounds.[2] According to a report prepared for the Office of Advocacy, small businesses pay 60% more per employee than their larger counterparts in regulatory expenditures.[3] Advocacy, therefore, has a direct interest in agencies making sound regulatory decisions because poorly made policy will disproportionately hurt small business.

Advocacy provided our views on this issue in a letter to EPA dated April 9, 2001, which articulated that the scientific basis of the rule was not borne out in the peer-reviewed literature and ran counter to international scientific consensus documents on lead.[4] In short, Advocacy found that EPA's treatment of the bioaccumulation of metals was inappropriate scientifically. As a result, we urged, at a minimum, that EPA submit the science issues underlying this rule for peer review before promulgation. EPA has asked the EPA Science Advisory Board (SAB) to review this work, which will be addressed further below.

D. The Agency Did Not Establish a Proper Scientific Basis for the 100-Pound Lead PBT Reporting Threshold.

Advocacy's April 9, 2001 letter to EPA and our June 2002 testimony stated in detail our view that EPA failed to establish a proper scientific basis for a lead threshold determination. EPA argues that lead is a PBT substance, applying the same methodology for identifying PBTs as the methodology originally developed for organic substances. Consequently, using the methodology employed by EPA, other metals such as zinc, copper and iron would similarly be subject to the PBT reporting rule, although there is no evidence that lowering the reporting thresholds for those metals would contribute to the goals of the right-to-know program.

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[2] Advocacy's June 2002 written statement is available at http://www.sba.gov/advo/laws/test02—0613.html.

[3] The Impact of Regulatory Costs on Small Firms (SBAHQ-00-R-007) was conducted by Drs. W. Mark Crain and Thomas D. Hopkins and was published in 2001. The research report is available at http://www.sba.gov/advo/research/rs207tot.pdf.

[4] Advocacy's April 2001 letter is available at http://www.sba.gov/advo/laws/comments/epa01—0409.html.

EPA assumed that once a metal bioaccumulates, it will create a hazard. While this is valid for organic chemicals, there is no evidence that it is valid for metals. Metals can be accumulated by organisms, but there is no one bioconcentration factor (BCF) that can be used to assess the bioaccumulation potential, as is done for organic chemicals.

E. Latest Discussion of Science by External Scientists Advising EPA Reconfirms the Lack of Scientific Basis of TRI Lead Rule.

In a draft Issue Paper on the Bioavailability and Bioaccumulation of Metals (Draft Issue Paper) released by EPA on September 22, 2003,[5] a panel of independent scientists, including two EPA scientists, have reconfirmed that the TRI framework used by the agency was unsound. As discussed above, the TRI methodology relies on the determination that lead is a PBT, using a methodology that was created for analysis of organic chemicals. As part of the ongoing effort to develop an integrated framework for metals risk assessment, and part of the SAB review promised by EPA in the preamble to the January 2001 final lead rule, EPA commissioned outside experts to develop issue papers on state-of-the-art approaches in metals risk assessment for several topics.

The Draft Issue Paper addresses the state of the science and in various parts of the paper the authors assert that a single bioaccumulation factor should not be used to classify for general hazard classifications of metals, contrary to the TRI approach described above. Advocacy believes the paper refutes EPA's finding that lead is a PBT by showing that the approach taken by EPA was not scientifically sound.[6]

The Office of Advocacy is pleased that the EPA will be drafting a new metals assessment framework based on issue papers and public comment over the next few months. After the draft framework is reviewed by the EPA Science Advisory Board, EPA will redraft the final metals assessment framework, and perhaps some related guidance for agency policymakers.

F. Conclusion

Advocacy welcomes the EPA's efforts to obtain peer review of the TRI PBT methodology, and urges the EPA to take immediate steps to bring its rule into line with the state-of-the-art science. In the meantime, EPA should design burden relief for all TRI reporters, including appropriate relief for reporters of all PBT chemicals, including lead. We look forward to continuing to work with EPA on this important small business matter.

Attachments:

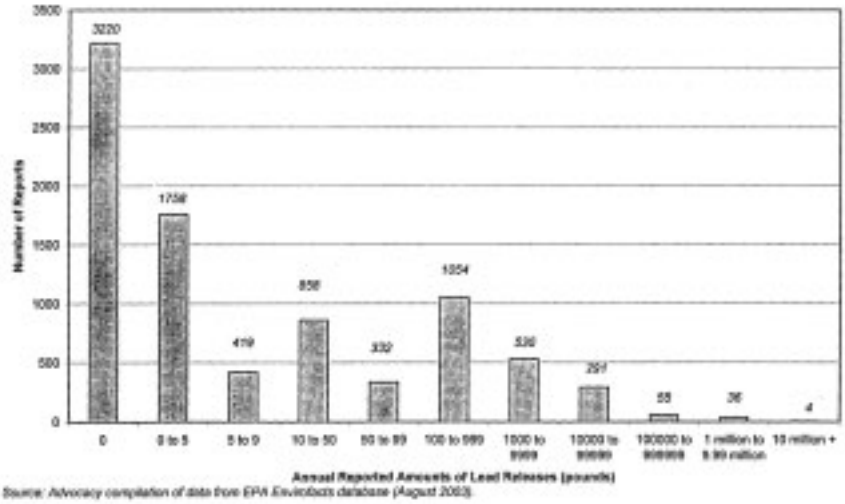
- Appendix A: 2001 Number of Toxics Release Reports: Lead and Lead Compounds: Released per Facility
- Appendix B: 2001 Toxics Release Inventory: Lead and Lead Compounds: Industry Distribution
- Appendix C: Quotes from EPA's draft Issue Paper on the Bioavailability and Bioaccumulation of Metals
- Advocacy's September 2, 2003, comment letter to EPA Assistant Administrator for Environmental Information Kimberly Nelson.

[5] Issue Paper on the Bioavailability and Bioaccumulation of Metals (Draft Issue Paper), funded by EPA through its Risk Assessment Forum under contract 68-C-98-148 to Eastern Research Group, Inc. The Metals Issue Paper is available on the EPA website at http://cfpub.epa.gov/ncea/raf/recordisplay.cfm?deid=59052.

[6] See Appendix C, attached to this statement, for relevant excerpts from the Draft Issue Paper.

Appendix A

Number of Toxics Release Reports for Lead and Lead Compounds by Annual Amount Released per Facility, 2001



Source: Advocacy compilation of data from EPA Envirofacts database (August 2003).

Appendix B

2001 Toxics Release Inventory: Lead and Lead Compounds: Industry Distribution

SIC Category*		Total On-site Releases**	Total Number of On-site Release Reports	Average On-site Release per Report**	Median On-site Release per Report**
Manufacturing					
	20	25,015	76	329.1	113.4
	22	6,678	53	126.0	4.0
	23	75	2	37.5	37.5
	24	75,212	389	193.3	7.1
	25	4,664	110	42.4	2.2
	26	351,427	259	1,356.9	186.8
	27	496	44	11.3	0
	28	1,909,807	591	3,231.5	2.2
	29	45,763	188	243.4	8.5
	30	48,788	362	134.8	0.5
	32	814,195	592	1,375.3	3.0
	33	16,941,249	1175	14,418.1	6.0
	34	130,924	1054	124.2	0
	35	29,486	327	90.2	0
	36	54,774	1283	42.7	0
	37	35,117	397	88.5	0.8
	38	10,463	174	60.1	0
	39	1,320	72	18.3	0
Mining					
	10	337,419,756	82	4,114,875.1	186,533.1
	12	1,354,759	66	20,526.6	982.1
	14	51,835	13	3,987.3	90.0
Electric Power					
	42	1	1	1.0	1.0
	45	0	1	0	0
	49	26,289,093	640	41,076.7	823.7
Wholesale					
	50	18	3	5.9	0
	51	956	281	3.4	0
Services					
	72	0	1	0	0
	73	291	81	3.6	0
	79	726	2	363.2	363.2
	82	8,003	4	2,000.7	115.0
	87	5,439	9	604.3	20.0
	89	167	1	166.6	166.6
Government					
	91	1,441	5	288.2	0
	92	107,314	4	26,828.4	15,773.0
	95	15,612	6	2,601.9	280.0
	96	9,132	10	913.2	3.2
	97	1,916,123	140	13,686.6	1,317.0
	99	136	2	68.0	68.0
	Total	**387,666,253**	**8500**	**45,607.8**	**1.0**

* Reports that included multiple SIC Codes for a single facility within a single entry were truncated to the first 4 digit code.

** In pounds.

Source: Advocacy compilation of data from EPA Envirofacts database (August 2003).

APPENDIX C

EXCERPTS FROM ISSUE PAPER ON THE BIOAVAILABILITY AND BIOACCUMULATION OF METALS FUNDED BY EPA THROUGH ITS RISK ASSESSMENT FORUM UNDER CONTRACT 68-C-98-148 TO EASTERN RESEARCH GROUP, INC.

Page 32: "It must be noted that BCFs [bioconcentration factors] for metals can be highly variable and are inversely correlated to exposure concentration [citations omitted], making representative single value BCF for a metal meaningless."

Page 78: "In these cases [the vast majority of the metals/organisms addressed], the latest scientific data on bioaccumulation does not currently support the use of BAF [bioaccumulation factors] and BCF data when applied as generic threshold criteria for the hazard potential of metals."

Page 29: "The principle [sic] theoretical features of the BAF/BCF model that make it applicable to neutral organic substances also make it inapplicable to inorganic metal substances."

Page 32: "Based on the inherent assumptions of the BCF and BAF model and on the environmental and toxicological behavior of the organic substances from which they were developed and validated, for the vast majority of inorganic metals evaluated, the scientific basis for broad application of the BAF/BCF model is lacking in the context of hazard assessment."

Page 32: "The approach of using one simplified bioaccumulation model (BCF and BAF) and applying it to inorganic metals ignores the basic physical and chemical differences between organic and inorganic substances and is not supported by theoretical and empirical weight of evidence."

SEPTEMBER 2, 2003

The Honorable Kimberly T. Nelson
Assistant Administrator for Environmental Information
U.S. Environmental Protection Agency
Ariel Rios Building, 2810A
1200 Pennsylvania Avenue, N.W.
Washington, DC 210460

Re: Toxic Chemical Release Reporting; Alternate Threshold for Low Annual Reportable Amounts; Request for Comment on Renewal Information Collection; Docket OEI-2003-0026; 68 Fed. Reg. 39071 (July 1, 2003).

Dear Assistant Administrator Nelson:

The Office of Advocacy of the U.S. Small Business Administration is submitting these comments on the Environmental Protection Agency's (EPA) above referenced continuing Information Collection Request (ICR) for the Toxic Release Inventory (TRI) Form A, the alternate threshold form provided as a substitute for the longer Form R. Advocacy encourages the EPA to take this opportunity to achieve significant paperwork burden reductions for small business reporters, and we offer specific recommendations to assist the EPA in accomplishing this important objective through Form A revision.

In 1991, the Office of Advocacy (Advocacy), by petition, initiated the rulemaking process that resulted in the promulgation of the Form A. We are pleased that EPA created this form in 1994, which the agency estimated would result in several hundred thousand hours in annual paperwork savings. However, the current Form A is only available to a very narrow proportion of the reports that could utilize the "short form," and Advocacy recommends that EPA pursue regulatory revisions to permit significant additional paperwork savings. Further, Form A is currently unavailable to the thousands of reporters of persistent bioaccumulative toxic (PBT) chemicals.

Advocacy was established pursuant to Pub. L. 94-305 to represent the views of small business before Federal agencies and Congress. Advocacy is an independent office within the U.S. Small Business Administration (SBA), so the views expressed by Advocacy do not necessarily reflect the views of the SBA or the Administration. The Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), gives small entities a voice in the rulemaking process. The RFA requires Federal agencies, such as the EPA, to con-

sider alternatives to avoid overly burdensome regulation of small entities.[1] Advocacy is also required by Section 612 of the RFA to monitor agency compliance with the RFA.[2]

On August 13, 2002, President George W. Bush signed Executive Order 13272, requiring Federal agencies to implement policies protecting small businesses when writing new rules and regulations.[3] Executive Order 13272 instructs Advocacy to provide comment on draft rules to the agency that has proposed a rule, as well as to the Office of Information and Regulatory Affairs (OIRA) of the Office of Management and Budget.[4] Executive Order 13272 also requires agencies to give every appropriate consideration to any comments provided by Advocacy. Under the Executive Order, the agency must include, in any explanation or discussion accompanying publication in the Federal Register of a final rule, the agency's response to any written comments submitted by Advocacy on the proposed rule, unless the agency certifies that the public interest is not served by doing so.[5]

Additionally, Advocacy and OIRA signed a Memorandum of Understanding to reduce unnecessary regulatory burdens for small entities. One component of the MOU is that OIRA may discuss and resolve with an agency Advocacy's concerns about an information collection requirement in a rule that OIRA is reviewing under the Paperwork Reduction Act.

I. Paperwork Regulations Require EPA To Minimize Paperwork Burdens for All Reporting Entities, Especially Small Business Reporters.

Under the Federal paperwork regulations administered by the Office of Management and Budget (OMB), EPA is directed to develop the least burdensome reporting form to achieve its statutory and regulatory purposes. Each Federal agency is required to take "all practicable steps to develop separate and simplified requirements for small businesses and other small entities."[6] In addressing this requirement, the EPA guidance instructs EPA staff to describe in the ICR justification "alternative collection procedures or other actions (e.g. a reporting exemption) that [EPA] will institute to minimize the burden for small entities." Further, OMB regulations require that the paperwork have "practical utility" to the agency.[7] In our view, reports of zero and minimal releases do not satisfy this legal requirement. OMB may disapprove, in whole or in part, any ICR if the agency has failed to initiate procedures to revise the ICR, or failed to publish a final rule, in accordance with the above paperwork requirements. In sum, EPA is required to explore all reasonable steps, including streamlined reporting requirements, particularly for small businesses, as a means to reduce paperwork burdens and ensure that the required paperwork has "practical utility."

II. EPA Must Permit Streamlined Reporting Under TRI for All Small Sources in Order to Comply with the Requirements of the Paperwork Reduction Act.

EPA must implement streamlined reporting for all small sources, not merely a small subset, to comply fully with the above described regulations and fulfill its responsibility under the Paperwork Reduction Act. First, as explained below, streamlined reporting for all small sources is a "practicable step" under §§1320.4(b)(1) and 1320.6(h) which minimizes paperwork burdens to all reporting entities, particularly to small businesses, while achieving the statutory purposes of right-to-know. Second, the current inclusion of full Form R reports from any small sources violates the requirement of §1320.4(b) that the provided data have "practical utility" to the agency because, by definition, small source reports have little environmental or health significance. Thus, streamlined reporting for small sources is not only an appropriate approach, but also a necessary approach for minimizing the reporting burden on both small and large businesses that release small quantities of TRI chemicals.

III. The Universe of Current Form A Reports is Too Narrow.

Form A currently provides the right-to-know information for only a very small universe of TRI reporters. A facility may use the Form A (certification form) only if the total wastes do not exceed 500 pounds in a single year (less than two pounds/day). In other words, the facility must count all releases, all transfers for treatment, disposal, and amounts recycled on- or off-site and amounts used for energy recovery.

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[1] Pub. L. No. 96-354, 94 Stat. 1164 (1981) (codified as amended at 5 U.S.C. §§601-612).
[2] 5 U.S.C. §612.
[3] Exec. Order No. 13,272 §1, 67 Fed. Reg. 53,461 (Aug. 13, 2002) ("E.O. 13272").
[4] E.O. 13272, at §2(c), 67 Fed. Reg. at 53,461.
[5] Id. at §3(c), 67 Fed. Reg. at 53,461.
[6] 5 C.F.R. §1320.6(h).
[7] 5 CFR §1320.5(d)(1).

In Advocacy's view, this is too restrictive for about 30% of the additional TRI reports, which also reflect small releases, and do not qualify for the Form A. Over one hundred similar comments are found in the earlier rulemaking record which led to the adoption of the Form A in 1994. In addition, Form A is unavailable to facilities that report PBT chemicals, as noted above.

Advocacy is offering a number of revisions to Form A program to expand the universe of Form A reports, reduce paperwork burdens significantly for small entities, and maintain the integrity of TRI data for right-to-know purposes. First, an expansion of the current 500 pound total reportable amount threshold for Form A eligibility to 5,000 pounds would reduce the reporting burden on small releasers. Second, EPA should institute an "Enhanced Form A" to replace the existing Form A that includes information about release and waste management amounts reported in broad ranges for small releasers. The Expanded Form A should also be made available for PBT chemicals. Advocacy believes that expanding the number of Form As and introducing the Enhanced Form A will provide burden relief to small entities and preserve all of the significant information currently collected via Form Rs. Additionally, Advocacy is presenting an alternative program of "No Substantial Revision Certification" (Form NS) that could work in conjunction with Form A revisions to offer more choices for burden reduction to different industries. Finally, Advocacy is suggesting burden relief targeted directly at reporters who would report zero releases.

IV. EPA Should Consider a Variety of Approaches to Minimize TRI Paperwork Burdens, Including Expansion of Form A Eligibility and a New Form for Nonsubstantial Revisions.

A. EPA Committed to Pursuing Paperwork Reduction Efforts in 1997.

When EPA promulgated the final rule adding seven reporting industries in April 1997, it committed to achieve meaningful paperwork reduction for all affected reporters. Indeed, it is our understanding that EPA promised to effectuate a net reduction in paperwork to offset the increased paperwork hours generated by the industry expansion rule. Since 1997, EPA has expanded paperwork burdens on a number of predominantly small business industries, particularly chemical and petroleum wholesalers from the 1997 industry expansions, whose releases are almost entirely below 1,000 pounds per year, and a wide range of industries who became first-time reporters when the threshold for lead and lead compounds reporting was dropped to 100 pounds in 2001. EPA's economic analyses showed that these industries were potentially facing significant reporting costs using Form R. With an expanded version of Form A, thousands of new reporters would achieve substantial paperwork reduction. Institution of a Form NS certification would potentially be more inclusive and bring burden relief to an even larger universe of reporters.

EPA, OMB and the Office of Advocacy produced a report for the National Advisory Council for Environmental Policy and Technology (NACEPT) Toxics Data Reporting Committee (TDRC) in 1998 that described, in detail, various alternatives for modifying Form A eligibility.[8] Unfortunately, EPA has not acted upon any of these alternatives, citing in part NACEPT's supposed rejection of the Form A alternatives. However, as discussed below, the NACEPT TDRC did not reject these alternatives. Advocacy also encourages the agency to reconsider some misconceptions about the TRI program as it considers burden reduction options, which we also address below.

B. EPA Failed to Address Issues Raised in January 2003 and Needs to Reconsider the Legal and Factual Issues Underlying the Burden of TRI Reporting.

TRI reporters filed comments in the winter of 2002/2003 during the public comment period for the prior ICR. EPA failed to respond in a substantive manner to many of the specific comments, relying primarily on its responses to the previous round's Response to Comments for Form A.[9] Although the January 2003 Response to the Office and Management and Budget's Terms of Clearance document covers much of the same ground, EPA did not respond to some critical issues, thereby im-

[8] "Analysis of Changes to the Alternate Threshold Provisions," presented to The National Advisory Council for Environmental Policy and Technology, Toxics Data Reporting Committee, May 18, 1998, prepared by representatives from the Environmental Protection Agency, Office of Management and Budget, and Small Business Administration.

[9] Response to Comments Received on the Request for Comment on Renewal Information Collection for Toxic Chemical Release Reporting for the Form A Certification Statement (EPA ICR No. 1704.06, OMB No. 2070-0143, 67 FR 44197).

peding OMB's review.[10] For example, EPA's notation of concern about "data loss" if the Form A eligibility is expanded in any fashion does not provide a substantive response, and is inconsistent with its 1994 discussion of this issue when the Form A was originally issued. EPA should carefully review its previous analyses and determinations, in light of the comments presented here and by other commenters, so that it can design lawful and meaningful relief for TRI reporters.

During the prior ICR review, EPA did not adequately address the issue of raising the total reportable amount threshold from 500 to 5,000 pounds (alternatively to 1,000 or 2,000 pounds) or the alternate threshold from 1 million to 10 million pounds. The agency stated that any expansion of the Form A eligibility could be inconsistent with the legal requirement that any revised reporting scheme must address the "substantial majority" of releases subject to the original reporting requirements. The agency appears to have overlooked the EPA's 1994 legal interpretation that certifications in Form A automatically ensure that the substantial majority requirement is being met, because the certification itself provides the information through range reporting (also allowed in Form R itself):[11]

> [The] certification statement...serves to satisfy the statutory requirement of section 313(f)(2) for reporting to be obtained on a substantial majority of releases of a chemical.[12] ... a certification statement is necessary in order to maintain public right-to-know and to meet the statutory 'substantial majority' of releases requirement. The certification statement relates to a range volume for a given chemical contained in total waste that can have multiple connections to quantitative line items as reported on Form R.... EPA believes that the category and level established in this final rule are such that replacement of full Form Rs, for these eligible reports, with certification statements provides the public with an adequate level of information.[13]

Thus, Advocacy believes EPA can meet the "substantial majority" requirement through any certification statement, as long as it retains a certification requirement which serves as a form of range reporting, as explained above. Therefore, there is no legal obstacle to changing the future eligibility requirements for Form A.

In addition, contrary to EPA's statement in the January 2003 response to Terms of Clearance, the December 1998 NACEPT report does not contain any consensus that the loss of TRI information was too great or that Form A eligibility should not be revised. It appears that some individuals favored increased eligibility for the Form A, and others opposed it. However, the report notes that the Committee did not have adequate time to reach consensus opinions. "Since time did not permit the development of recommendations by the committee on this topic [Form A options], the following paper is intended to capture the committee's discussion for use by the federal agencies."[14] Large businesses, states, and environmental interests were represented on the Committee, but no small business representatives were appointed, despite requests by those trade groups to participate. Based on our experience working with small business trade associations, we find that small businesses are the largest users of Form A. Additional small business representation very likely would have lent additional support for an increase in Form A eligibility.

In addressing the issue of raising the reportable amount threshold or excluding certain waste categories from consideration in the January 2003 Response to Terms of Clearance, EPA argued that either scenario was inapplicable because the "data loss" would be too great.[15] Table 6 in that document presents summations of data that would not be reported on Form Rs under various threshold and reportable waste category revisions.[16] EPA, however, never defines quantitatively what constitutes a significant loss of data, allowing the data loss argument to hinge solely upon the summary figures in Table 6 outside of a meaningful contextual framework in which to analyze the significance of non-reported data under various reporting regimes. In fact, the data that would no longer be reported on Form R from raising the reportable amount threshold from the current 500 pounds to 5,000 would be a mere 0.1% of total wastes for reporting year 2000. Under the status quo, 99.99%

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[10] EPA's Response to OMB's January 2003 Terms of Clearance notice for the ICR renewal of Form A. EPA 1704.06, OMB 2070-01143.

[11] Range reporting means that the reporter is permitted to report figures in broad ranges, such as 1-10 pounds, rather than as a point estimate, for very small release numbers (under 1000 pounds in the case of the Form R for non-PBT chemicals).

[12] November 1994 EPA Response to Comments Document, Establishment of Alternate Threshold, at page 52.

[13] Ibid., at page 54.

[14] NACEPT report, at page 22.

[15] January 2003 EPA's Response to OMB's January, 2001 Terms of Clearance notice for the ICR renewal of Form A (EPA 1704.06, OMB 2070-01143).

[16] Ibid., at page 7.

of all wastes are reported on Form R, and this would decline to 99.92% under a 5,000 pound threshold while over 23,000 additional reports qualified for burden relief.

EPA must recognize that data reported on Form A rather than Form R is not "lost," because Form A is a form of range reporting (as EPA explained in 1994).[17] To further the discussion of burden relief through an expansion of Form A eligibility, EPA must establish a measure for determining whether there is significant "data loss." Advocacy suggests that EPA examine the TRI environmental indicators developed by EPA over many years as one potential method for deciding which data addresses a risk to the local community as to warrant full Form R reporting. Without this type of quantitative assessment, EPA's claim of "data loss" inhibits serious consideration of meaningful burden relief for small businesses.

C. Advocacy's Suggested Revisions and Comments.

Advocacy offers five specific recommendations for burden reduction to small entities through Form A revision, which are addressed below:

1. Expansion of total reportable amount and alternate thresholds.

Advocacy urges serious consideration of the three most easily justifiable revisions to the Form A eligibility: (1) raising the level of the total reportable amount threshold from 500 to 5,000 pounds; (2) raising the alternate threshold amount from 1 million to 10 million pounds, and (3) revising the calculation of the reportable amount to remove energy recovery and recycling from consideration.

Raising the total reportable amount threshold will provide significant burden reduction for small entities. Raising the total reportable amount threshold from 500 to 5,000 pounds generates a significant amount of paperwork burden reduction by expanding eligibility from 26% to 40% of all non-PBT reports.[18] The amount of data "loss" is 0.1% of production-related wastes, compared to 0.01% for the current Form A. Furthermore, as discussed above, the data is not actually lost when reported on a Form A rather than Form R.[19] Advocacy is, however, proposing the expansion of the eligibility thresholds in conjunction with the use of an Enhanced Form A certification. The Enhanced Form A, discussed in more detail below, would institute range reporting for the waste amounts, further increasing the utility of data from Form A reporters.

Expanding the alternate threshold from 1 million to 10 million pounds would provide additional burden relief to small businesses and others who release small amounts. Many reporters that would otherwise be eligible for Form A based on waste amounts are ineligible because they use more than 1 million pounds of the chemical. Advocacy's review of Massachusetts data in 1995 revealed that about 5% additional facilities would have qualified for Form A based on a 10 million pound threshold. These facilities had total reportable amounts that met the current threshold, and could have filed Form A if not for their high use of the reported chemical. In effect, prohibiting otherwise qualified filers from using the less costly Form A sets up perverse incentives that punish the most efficient chemical users: those that use larger quantities but engage in more efficient practices to reduce releases and the need for treatment, disposal, or recycling.

Further, Advocacy recommends that EPA explore elimination of energy recovery and recycling from the calculation of the reportable amount. As explained below, there is no risk to the community that arises from this offsite activity. Also, exclusion of this activity would provide further incentives for sound environmental management as those facilities would be rewarded for increased activity in these areas. Information about this activity could be captured, alternatively, in the Enhanced Form A, as discussed below.

2. Enhanced Form A.

As an alternative to a simple expansion of Form A eligibility, Advocacy proposes consideration of an Enhanced Form A that incorporates range reporting for waste information. By implementing the Enhanced Form A alongside an upward revision of the eligibility thresholds, EPA can accomplish significant burden reduction while increasing data quality over the Form A approach. Advocacy recommends that the Enhanced Form A be available for reporters of PBT chemicals with fewer than 50

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[17] In its 1994 response to comments, EPA stated that the certification statements themselves, at least for the current Form A, provided the public with "an adequate level of information." This statement cannot be reconciled with EPA's current view that any revision of the Form A eligibility could jeopardize the appropriate level of information.

[18] Based on reporting year 2000 data.

[19] As discussed above, EPA's position in the 1994 response to comments upon introduction of the Form A was that Form A captured an "adequate level of information."

pounds of total wastes. We describe below two alternative methods for establishing eligibility for the Enhanced Form A (based on either the current reportable amount, or total onsite release).

The Enhanced Form A has the benefit of carrying burden reduction while substantially preserving the information currently reported by small reporters on Form R. The Enhanced Form A would preserve the practical utility of all reported data by allowing right-to-know users to easily assess the size of releases and waste activities without placing further undue burden on reporters that release insignificant amounts of chemical waste. Reporters would simply check the appropriate range box for each category of on- and offsite releases and each recycling, energy recovery, or transfer activity undertaken. Because those reports that qualify capture by definition small releases, the ranges provide sufficient information for data users. Furthermore, as noted above, range reporting is allowed on Form Rs under appropriate circumstances, thus range reporting in and of itself is not an impairment to data quality.

The Enhanced Form A should also be available for PBT reporters with less than 50 pounds of total annual reportable amount. As with other chemicals, many PBT reporters have total releases of either zero or an insignificant amount. While PBT chemicals may present greater risks to human health than other listed chemicals, it does not follow that an Enhanced Form A reporting option would not provide data users all of the information needed for right-to-know uses while offering burden reduction for the reporter. For example, in 2001, 47% of the nearly 8,600 reports for lead and lead compounds showed on-site releases less than 1 pound, with 37.5% of all reports containing zero on-site releases. Furthermore, 31.5% of all reports had less than 50 pounds of total waste quantities. The introduction of an enhanced Form A would provide burden reduction while maintaining all of the relevant data from these small releasers of PBTs.

A potentially more practical alternative would be to change the threshold calculation to total on-site releases (section 8.1 and 8.8 of Form R). Under this option, thresholds would be revised downward to 100 pounds for non-PBT chemicals and 10 pounds for PBT chemicals. This would offer greater burden relief by extending significantly the number of reports eligible under an Enhanced Form A. Additionally, an onsite release-only threshold actually captures more data significant to communities and right-to-know users. Under the current system, a reporter could qualify for Form A by virtue of having only 500 pounds of total wastes, even though all 500 pounds are onsite releases. Under the onsite release-only system, this reporter would be forced to file a Form R due to high onsite releases, while currently ineligible reporters with zero releases and 1,000 pounds of offsite recycling would file the Enhanced Form A.

Because the threshold determination for eligibility to file the Enhanced Form A could be based on releases rather than total production-related wastes, the primary data removed from Form R reporting is non-release data, including recycling, energy recovery, and treatment. These data, however, are not lost but rather reported over ranges on the Enhanced Form A. The data is thus preserved, and its utility left intact for all required uses. Importantly, the amount of data moved from Form R reporting to range reporting on the Enhanced Form A would be negligible under a reporting threshold of 100 pounds of on-site releases for non-PBT chemicals and 10 pounds for PBT chemicals. For instance, if an Enhanced Form A were available for lead and lead compounds reporters in 2001 who reported less than 10 pounds of on-site releases, 63% of all reports would qualify for the Enhanced Form A burden relief, with just 0.001% of on-site releases and 7% of all other wastes reported on the Enhanced Form A. Virtually all of the significant right-to-know data is preserved on Form R, releases to the environment of the local community, while data on off-site transfers and recycling related to the small releasers is largely preserved through range reporting.

3. No Substantial Change (Form NS).

An alternative to expanding Form A eligibility, or modifying the Form A, is to allow TRI reporters to file a certification of No Substantial Revision (Form NS) from a baseline Form R filing. This option would be open to both PBT and non-PBT reporters who qualify.

Advocacy estimates that the Form NS would provide burden relief for at least 50% of all reports in a given year, without any significant diminution of the right-to-know information, versus 26% of non-PBT reports currently eligible for Form A reporting. Even expanding the Form A eligibility threshold to 5000 pounds of reportable waste would only offer relief to 40% of non-PBT reporters. This option would provide relief to a wide range of PBT and non-PBT reporters over and above the relief provided by Form A since use of Form NS would relieve reporters from

reportable amount calculations (addition of Form R Sections 8.1 through 8.7) required for Form A.

Under Form NS, a facility would file a Form R in the baseline year then file a Form NS for the next consecutive four years. The following year the facility would once again be required to file Form R to re-establish the proper baseline. We anticipate that EPA would utilize the baseline Form R as the placeholder for the Form NS in the TRI database until the next Form R is provided by the facility, so that the TRI data is preserved each year the Form NS is filed, with an indicator that the Form NS was filed in that reporting year, preserving the full right-to-know data for the public.

Form NS could be used by any facility that does not modify its annual production by more than 10% AND does not change any production/treatment/disposal processes at the facility.[20] For these facilities, the baseline Form R would reasonably represent all the activities that would have been reported on a new Form R.

Because the 10% change requirement would be inappropriate for very small releases, Form NS could also be used by any facility for which the total onsite releases (Form R Section 8.1 plus 8.8) are less than 100 pounds for non-PBT chemicals and 10 pounds for PBT chemicals (except dioxins) in both the base year and the new reporting year. This would also be limited to facilities that do not change any production/treatment/disposal processes at the facility.

The small releaser stipulation has the advantages of eliminating the additional work needed to calculate the reportable amount quantities of the Form A (Form R Sections 8.1-8.7), while still retaining the Form A option for those qualified to use it, and providing burden reduction for facilities with insignificant changes from the baseline Form R. These reports are considered insubstantial revisions because the total releases fall into ranges of between 0-10 or under 100 pounds. This de minimis approach is modeled on the structure of the current range reporting available in the Form R, where releases under 1,000 pounds can be reported in ranges. Consistent with the current range reporting for Form R, the Form NS reporting range of 0-10 or under 100 would reflect the reduced need for accurate estimates in making small quantity estimates, in comparison to releases of over 1,000 pounds, where EPA requests two-digit accuracy (where feasible) on Form R. For example, in the range of 1-10 pounds on the Form R, EPA permits the report of a single range which constitutes an entire order of magnitude (less than single-digit accuracy).

Form NS targets significant burden reductions for small reporters, and there is a large overlap between small reporters and small businesses. Small businesses face higher per form reporting costs than large firms, so the use of a simpler Form NS would save each small firm proportionally more than a large firm. Furthermore, since this option is designed to produce small business burden relief while preserving the integrity of important information, Form NS would not apply to the largest releases: onsite releases (Form R Sections 8.1 and 8.8) over 10,000 pounds annually. A 10% change in production for a large quantity releaser could be a significant change to the local community.

4. Relief for Zero Reporters.

Advocacy recommends that EPA eliminate the requirement to file either Form R or Form A for reporters that would report zero onsite releases in Sections 8.1 and 8.8 on Form R. The rationale for removing the reporting requirement is that reports of zero releases provide no practical utility to data users. If data from this class of reporters is desired for purposes other than community right-to-know, a separate data collection request should be submitted to OMB for clearance.

A good illustration of the severe justification for burden relief is the situation faced by the petroleum wholesalers in the 2001 reports. One major petroleum firm with 35 terminals filed 213 Form Rs, with 78 zero release reports (37% of the total), including 16 zero lead release reports. These were not simply zero releases onsite, but represented zero releases and zero total wastes. This example alone makes a good case for total relief for zero reporters and the use of Form A for PBT filers and the Form NS.

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[20] In other words, a facility has no changes in whether or not the facility engaged in the practices reported in the elements 8.1 through 8.8 on Form R. For example, if a facility reported data only for onsite releases and offsite recycling in the baseline year Form R, it could file Form NS the following year only if its production changed by less than 10% and it again would report only onsite releases and offsite recycling. No limitation would be placed on the variation of the amounts of onsite releases and offsite recycling, but all other fields would need to remain zero to qualify for Form NS.

5. Range Reporting.

As EPA found in 1991, the option to report in ranges, rather than in point estimates provides considerable burden savings to the reporter. It estimated a 9.5 hour reduction in 1991 when it was proposing to promulgate the range reporting option.[21] Range reporting will save time if the needed precision in reporting is reduced, for example from two digit precision to one digit (as discussed above). Advocacy urges EPA to return range reporting to the pollution prevention section (section 8), so that the savings previously permitted in sections 5 and 6, the releases sections, can be captured. Currently, entries in sections 5, 6 and 8 cover the same releases, and facilities are no longer able to capture these cost savings. Advocacy also recommends that EPA restore the range reporting footnote in section 5.

In addition, Advocacy urges EPA to reconsider the elimination of range reporting relief for the PBT reporters. The PBT reporters are subject to considerable burden for reporting releases that equal or approach zero. For these reasons, we believe that the range reporting option is suitable for such reports.

V. Conclusion.

Advocacy looks forward to working with EPA to identify appropriate avenues for burden reduction for small firms, while maintaining the integrity of the TRI reporting system. Given the many thousands of zero release reports, and many more thousands of minimal release reports, we believe that it is imperative that EPA promulgate appropriate relief in time for the July 2004 reports.

Thank you for your consideration in these matters, and please do not hesitate to contact me or Kevin Bromberg (kevin.bromberg@sba.gov or 202-205-6964) of my staff.

SINCERELY,

THOMAS M. SULLIVAN
CHIEF COUNSEL FOR ADVOCACY

KEVIN BROMBERG
ASSISTANT CHIEF COUNSEL FOR ADVOCACY

cc: EPA Docket Center, EPA West, Room B102, Environmental Protection Agency, 1301 Constitution Avenue, N.W., Washington, DC 20460
Dr. John D. Graham, Administrator, Office of Information and Regulatory Affairs, Office of Management and Budget

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[The prepared statement of Mr. Kind follows:]

Statement of The Honorable Ron Kind, Ranking Democrat, Subcommittee on Energy and Mineral Resources

Today's hearing focuses on the "The Toxic Release Inventory and its Impact on Federal Minerals and Energy."

However, instead of focusing solely on the mining industry's complaints about the public knowing more about what it does, it would be a better use of the Subcommittee's time to address the public health issues caused or potentially caused by the mining industry.

Congress created the Toxic Release Inventory, as part of the Emergency Planning and Community Right-to-Know Act of 1986. Since then, the Environmental Protection Agency, which administers the program, has required industrial facilities to disclose to the public the volume and type of toxics they discharge into the environment or manage for recycling or disposal. Further, through a 1997 regulatory rulemaking, the EPA expanded the TRI to cover seven additional industry sectors, including electric utilities and coal and metal mining industries.

Since its inclusion in the TRI, the mining industry has worked to be de-listed from the inventory, asserting that the substances mining operators are required to report are "naturally occurring compounds"—entirely separate and far less toxic than man-made chemicals produced by the manufacturing industry.

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[21] 56 Fed. Reg. 1154, January 11, 1991.

However, as these compounds are unearthed and ore is ground and processed, billions of pounds of lead, arsenic, mercury, and other persistent, bioaccumulative, and toxic chemicals are released into the land, air and water.

Even if they occur naturally, these substances have been linked to cancer and reproductive and neurological problems. Clearly, the Toxic Release Inventory is a powerful tool that enables communities to encourage the reduction of toxic releases and improve local environmental quality.

It is important to note the success of the TRI in reducing toxic chemical and waste releases throughout the United States. Though the inventory imposes no penalties for poor records, it empowers communities to work with local industries to reduce toxic wastes, create pollution prevention plans, and demonstrate improvements to the environment. As a result, the total reported toxic releases by covered industries have dropped by almost 50 percent since 1986.

Still, some mining companies challenge the public right-to-know.

In 2001, the hardrock mining industry reported the production of 2.8 billion pounds of toxic waste. Moreover, a large portion of these chemicals are persistent, bioaccumulative and toxic, meaning they are not broken down by natural processes, accumulate within organisms over time and can lead to serious health degradation and even death.

During the oversight hearing held here last week, I submitted for the record a series of articles by Ben Raines of the Mobile Register that won him the 2002 John B. Oakes Award for Environmental Journalism. Mr. Raines is investigating the dilemma of methylmercury contamination in the Gulf of Mexico and paints a vivid picture of the problems associated with toxic bioaccumulation.

Mercury, in its natural liquid form, is the common element used in thermometers. Though its fumes are toxic, it is not readily absorbed by the human body. However, when mercury binds with organic molecules in the environment, it forms a highly toxic compound called methylmercury.

This chemical enters the aquatic environment through air discharges from coal-fired power plants, runoff from local industry, and the dumping of drilling fluids from offshore platforms. The chain of events begins with bacteria that live in the ocean and, through the food chain, builds in the bodies of each level of sea life as methylmercury cannot be broken down by natural biological processes.

The process of bioaccumulation eventually leads to humans when fish caught in the Gulf are offered at market or in local restaurants. Here is a quote from one of the articles that will help put this issue into perspective: "The tests commissioned by the Register indicated that a 4-ounce serving of a 10- to 20-pound redfish caught off Dixie Bar at the mouth of Mobile Bay would contain all the mercury a 158-pound adult male could safely handle in a month, under standards set by the U.S. Environmental Protection Agency. That's about half a typical restaurant serving."

This type of environmental degradation is a serious concern, not only for residents of the Gulf region, but for all Americans. The precedent of the Toxic Release Inventory should be an example of the ability for Congress to legislate environmental and community responsibility without the negativity of legal and financial penalties.

Moreover, with the many examples of environmental degradation associated with the coal and metals mining industry, the covered industries in the TRI should remain intact so that citizens of all States will be able to make sound decisions for their community, for their vicinity, and for their family.

Mr. TOM UDALL. Let me say thank you to the panel and specifically to Ms. Shultz. There are members of this committee that do want to hear your point of view, so do not feel unwelcome here.

No, she said in her testimony, Chairman Gibbons. He thought I was referring to him, but he is a thin-skinned Republican. That is OK.

[Laughter.]

Mr. GIBBONS. Well, that is better than being——

Mr. TOM UDALL. She said very dismissively——

Mr. GIBBONS [continuing]. A thick-headed Democrat.

[Laughter.]

Mr. TOM UDALL. She said very dismissively in her testimony, she said she did not think her point of view was wanted, that we want-

ed to hear it, and I wanted to assure her that many of the members of the committee definitely want to hear her testimony.

Ms. SHULTZ. I appreciate that, Congressman.

Mr. TOM UDALL. This question is directed to Ms. Shultz. Mr. O'Connor's testimony, he said—and I want to quote this: "All nonaccidental releases reported under the TRI are specifically approved under other environmental laws." Do you believe that is true?

Ms. SHULTZ. Well, there is actually an exception that I know of to that statement, which is that mining waste is exempted from control as a hazardous waste under RCRA. That was done through something called the Beville Amendment. But what it means is that, unlike other types of waste, mining waste cannot be regulated as a hazardous waste.

Mr. TOM UDALL. Now, what do you think of Ms. Abrams' assertion that "compliance with the lowered reporting thresholds has imposed a large and significant burden on affected business"?

Ms. SHULTZ. Well, I have to say that what we are talking about here is access to public information, and that should be paramount. So that is for starters.

Second of all, the EPA's estimate of the burden to comply with TRI is something on the order of $7.5 million, and the total amount of toxic releases that are reported is on the order of 6 billion pounds. So overall, we are talking about something like a tenth of a cent—I am not doing the math in my head here, but something very, very small per amount just of the toxic chemical that is released. It is a very small percentage of overall scale.

Mr. TOM UDALL. Can you please respond to the assertion in Mr. O'Connor's testimony that the TRI mischaracterizes the significance of the data to the public?

Ms. SHULTZ. Absolutely. The information that the mining operations report to the TRI are the chemicals that are in the material that they dig out of the ground and expose to the environment. This information is out there in its pure form. It is available to the public for the public to make determinations about the amount of chemicals. Has the water been polluted around a particular facility, for example? If so, is there a connection? Is there a potential for toxic chemicals to have entered into this waterway? What are my risks? What steps can I take?

What the TRI does is provide information that has not been filtered through the mining industry, so I do not think that it mischaracterizes information at all. I think it is pure data.

Mr. TOM UDALL. And the position that you have taken, your members take, is that the public should be able to know what these toxic contaminants and pollutants are and be able to evaluate it for themselves, rather than have it filtered through a government agency or through a mining company or through any other filter, for that matter?

Ms. SHULTZ. That is correct. I do not mean to say that in every case a mining facility or any other facility, for that matter, might not be forthcoming. But there have been cases such as up at Libby, which is a very unfortunate circumstance, and I do not mean to imply otherwise. But W.R. Grace has withheld information from the citizens of that town, and it was before TRI was around. If TRI

was around—airborne asbestos is a reportable toxic chemical under the TRI—it is possible that the public might have been aware of the risks and dangers at an earlier time.

Mr. TOM UDALL. Now, when we talk about the public learning from the TRI about chemicals and being able to protect their health, have you seen specific circumstances—I think you mentioned one in your testimony, but are there other circumstances that have allowed communities and the public to protect themselves as a result of a listing on the TRI?

Ms. SHULTZ. Yes, and I mentioned some of this in my written testimony as well. But there are specific cases where, based on information that has become available under the Toxics Release Inventory—and there is an example in my testimony about the Greens Creek Mine that is affecting the Admiralty Island National Monument. Before the TRI came out, there was no information about how toxic chemicals could be potentially affecting the National Monument. Based on the TRI information that came out, the group looked at this very, very popular site—it is a recreation site—and has decided to try to enforce a higher bond. This is the money that a mining company posts ahead of time in order to pay for clean-up to ensure that clean-up can actually address the full scope and scale of the mining operation.

It is just one example of a situation where without the information, certainly the pollution still would have been there, but there might not have been any actions taken to help address the problem.

Mr. TOM UDALL. I think you also mentioned the circumstance in the Silver Bullet Mine up in——

Ms. SHULTZ. Silver Valley?

Mr. TOM UDALL. Yes. And children there had brain-impairing levels of lead as a result of the smelter. Is that correct?

Ms. SHULTZ. That is correct. And it is the reason that it became a Superfund site. Some of that contamination happened before the TRI Program was put into place. Certainly, you know, once TRI is put in place, that is exactly the type of information that becomes available to the public, and it is exactly where the public can determine for itself whether or not a site is safe to build their homes on or schools on.

There have been recent studies that have shown—there is an NIH study, I think it was published in April, that says that there is no safe level of lead. So once you have any lead contamination whatsoever, if it is available, if it is in the environment, then it may not be—you may not want to build your home there or your school there.

Mr. TOM UDALL. Is it your sense that if we had had a TRI in place at an earlier point in time, we would have been able to prevent many of these Superfund sites, been able to prevent other health hazards that have flowed from them?

Ms. SHULTZ. It is possible in the sense that if we had had the information ahead of time, steps could have been taken to reduce or eliminate pollution at the source, and I am talking about steps that the mining operation itself could have taken or that communities could have taken to enforce environmental laws that might not have been complied with, and perhaps not chosen to live near

a site, which, unfortunately, is a lot of reason why sites do become Superfund sites, is because there is, you know, a human health exposure.

Mr. TOM UDALL. Thank you, and thank you to all the members of the panel. And I yield back to the Chairman.

Mr. GIBBONS. Well, thank you very much, and to Mr. Bye and Ms. Abrams, we apologize for not directing any questions at you, but I hope you feel not slighted by that. But your testimony was very valuable to us as well.

Mr. BYE. Thank you.

Mr. GIBBONS. We will have an opportunity, of course, to send each of you written questions that may be a little more focused on the issues that we would like to hear from you, and if you could get those back to us within 10 days, the record will remain open for 10 days so that we can enter those questions as part of your testimony.

With that, I want to thank our witnesses today. It has been a very enlightening, very helpful hearing on the Toxic Release Inventory, and we will call this hearing at an end, and thank you very much.

[Whereupon, at 4:12 p.m., the Subcommittee was adjourned.]