H.R. 2262, HARDROCK MINING AND RECLAMATION ACT OF 2007

LEGISLATIVE HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

OF THE

COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

Tuesday, October 2, 2007

Serial No. 110-46

Printed for the use of the Committee on Natural Resources

Available via the World Wide Web: http://www.gpoaccess.gov/congress/index.html
or
Committee address: http://resourcescommittee.house.gov

U.S. GOVERNMENT PRINTING OFFICE

38-137 PDF WASHINGTON : 2008

For sale by the Superintendent of Documents, U.S. Government Printing Office
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Tuesday, October 2, 2007
U.S. House of Representatives
Subcommittee on Energy and Mineral Resources
Committee on Natural Resources
Washington, D.C.

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

Present: Representatives Costa, Pearce, Rahall, Gohmert, Heller, Sali, Young, and Udall.

STATEMENT OF THE HONORABLE JIM COSTA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. COSTA. The Subcommittee on Energy and Minerals will now come to order. This is the third or fourth legislative hearing that we have held on the issue of the Hardrock Mining and Reclamation Act of 2007, reflecting Chairman Rahall's legislation that he introduced, third or fourth, depending on whether or not you count the Tucson meeting earlier this year. Neither Congressman Pearce nor I were able to attend that meeting, but regardless, this is an area that the Subcommittee has focused on as it relates to the issue before us.

I need to dispense with some preliminary items to begin with, and then we will get going with our first panel.

This legislative hearing, of course, has come to order. The Subcommittee is meeting today to hear testimony on H.R. 2262, the Hardrock Mining and Reclamation Act of 2007. Under Rule 4[g] the Chairman and Ranking Minority Member may make opening statements. If any other member has other statements, they may be included in the record under unanimous consent, and we are very good about granting unanimous consent for those purposes.

Additionally, under Committee Rule 4[h] additional material for the record should be submitted by members or witnesses within 10 days after the hearing. We urge witnesses to try to expedite that effort to help our staff, and so your cooperation, obviously, to any questions that we submit in writing is appreciated.

Because this is one of a series of hearings that we have held and it is my understanding the Chairman anticipates a markup some time before the end of the year on his bill, we thought it was appropriate today to focus on the issue of royalties, and what I must say at the outset is that there has been an enormous amount of cooperation and collaboration between all of the interests involved on this issue, and I want to thank you for those efforts.

For those members who are not able to join Congressman Heller and myself in Nevada, I want you to know that he is a very hospitable host, as is Senator Reid. It was a two-day field hearing that I found to be very informative, and in which we received a great deal of input in.

I have come to the conclusion that there is, I think, a broad consensus that reform is necessary, and I think, as they say, the question is or the devil is in the details in terms of how we bring that reform about. Therefore, we are looking for the expertise of the witnesses to testify this afternoon in Panel No. I and Panel No. II as it relates to the issue of royalty.

Obviously, it has been a source of contention as to what are the various forms of royalty that would be applicable, that would be appropriate, that would be reasonable, and that would be fair, and would be, in my view as just a farm boy from Fresno, workable. I mean, at the end of the day and we have, I think, a number of examples on the Federal level of, notwithstanding good ideas, being very complicated and very difficult to implement. So when I have a choice, I always like to err on the side of simplicity because I think that is easier for all to try to deal with.

At the same time when we talk about administrative efforts as it relates to the Federal government and to make sure that we are good partners with the private sector, we also have to talk about the balancing act that, of course, is part of the charge of this Subcommittee, and I talk about it often. Certainly we want to ensure industry competitiveness. This is an international global market that we live in. Hardrock minerals compete in that international global market, and many of the experts and those that we saw in Nevada not only do business there, but they do business in many other parts of the world.

So we are also interested today to learn about those experiences in other parts of the world in terms of experiences that may be applicable here in the United States. So obviously that is something that we will listen to carefully.

In addition, one of the other major issues that is a concern of this Subcommittee as we do the balancing act between ensuring competitiveness but ensuring that these are public lands and that the U.S. taxpayers get a fair rate of return, and that fair rate of return is not just to benefit the American treasury, but sadly, we have a significant number, in my view, of abandoned mines throughout the country that go back to practices that no longer conform with today's standards.

Nonetheless, those abandoned mines in many, many instances—I know in California, in my own state, health and safety hazards, and therefore the first priority in the call on this money, if we can work out these details, will be to address those funds to clean up those abandoned mines to ensure that we protect both health and safety as it relates to issues of water quality and other impacts that these abandoned mines and hazards may pose, and of course, we have a number of witnesses in the second panel that will give us a better snapshot, as I like to say, the size of that breadbox.

Just as an example, Members of the Committee, in California there are 47,000 hardrock abandoned mines, and the majority of them are on public lands. More than 20,000 of them possess safety hazards, and the state is able to address about 65 of those sites per year, but there is, of course, no dedicated funding to protect public health and safety from those sites, let alone to address potential areas of pollution. Eleven percent of the abandoned mines in California, we believe, create environmental impacts, especially to our waters, which are precious.

So those are the kind of the perspectives that we want to get today from our two panels: one on the area of how we come to some consensus on the issue of a payment, in lieu payment, royalty payment, whatever you choose to call it, and the experts in the first panel will focus on that, and the second panel will try to get an idea about where those monies would go once we hopefully get agreement at some point in time as this legislation moves forward on how we prioritize, how we collaborate with states who are already aggressively out there doing things, like in Nevada, like in California, and elsewhere, and how we combine resources.

So with that understood, I would like to defer to my colleague, the gentleman from New Mexico, for an opening statement.

STATEMENT OF THE HONORABLE STEVAN PEARCE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW MEXICO

Mr. PEARCE. Thank you, Mr. Chairman. Appreciate your plan through SIC. We don't often get much appreciation up here, and I think people do work in all circumstances, so I appreciate you being here today. You did say three words that really caused an alarm in your first opening statement when you used the term "simple farm boy from Fresno". That puts alarm into my thinking. The only thing you could have said that would have caused a greater fright would be "simple country lawyer".

[Laughter.]

You also used the term "simplicity" as it relates to the Federal government. I am sorry, but our mantra in the Federal government, if it ain't broke, fix it until it is, and that doesn't go along with simplicity. So other than those two things, I appreciated your opening statement. Like you said, it is either the third or fourth, depending on if you are using Olympic standards or just world standards for this hearing sequence that we are in, and it is an extraordinarily important thing that we are talking about.

The Federal royalty program, the abandoned hardrock mine problem is one that needs solutions. I think that even with this hearing we are going to need follow-up hearings. One of the key

recommendations included in the World Bank's report on mining royalties is for governments that impose a royalty or impose a change in the royalty structure, for them to consult with the industry in order to assess the impacts that such changes will have on the mineral sector.

While industry is in the process of evaluating exactly what the impacts of the royalty recommendations, and Chairman Rahall's bill will be on the industry, that assessment is not yet complete, and we should meet after they make the decision on that. There were three analyses that were issued—three separate economic analyses that were issued on the Rahall proposals back in 1993. Those all said that there was going to be a loss of employment in the mining sector, and also a loss of revenue to Federal and state treasuries. I have copies of these analyses with me here today, and I ask unanimous consent that they be entered into the record.

Mr. COSTA. Without objection.

[NOTE: The analyses submitted for the record have been retained in the Committee's official files.]

Mr. PEARCE. Thank you. The World Bank report also recommends that the country seeking to establish a royalty evaluate the impact that royalty will have on attracting investment, and if the royalty will make the Nation less competitive with other industries. The United States is already at a competitive disadvantage for investment in hardrock mineral exploration. As you well know, back in 1993, the U.S. had 21 percent of the world's exploration budget and today that is down to eight percent in 2007. Again, we have the charts that will show the relative change in the U.S. share of the world mining market, and our dependence on foreign sources of minerals is increasing. Today, we are 100 percent import dependent on 17 critical non-fuel minerals, and more than 50 percent import dependent on another 28 non-fuel minerals. Again we have the chart that begins to show your increasing dependence on foreign countries.

In 1986, we were 100 percent import dependent for five non-fuel minerals, and more than 50 percent dependent on 16 non-fuel minerals, again further encouragement to export the mining industry is the wrong direction and those USGS charts would show that we are moving in the wrong direction.

Care should be taken in establishing an appropriate Federal royalty so that it does not adversely impact additional investments in the development of the nation's mineral resources or affect state and local revenues already paid by the mining companies.

I also believe that we could spend more time looking at the existing Federal and state abandoned hardrock mine land programs and identify a better and more streamlined approach to coordinate these programs. I believe that there is more going on in addressing this issue than we may be aware of.

For example, last week the Forest Service and the BLM jointly issued a report on the 10-year anniversary of their hardrock abandoned mine land program. While committee staff was aware of these agency programs, and the Army Corps of Engineers restoration of abandoned mine sites program, they were unaware that this report was in the works until it was complete.

In addition to these important issues we will begin to discuss today, there are two National Research Council reports looking at aspects of our national mineral policy that are scheduled for release later this week regarding securing minerals for the 21st Century and military-critical minerals in the U.S. economy. We may need additional hearings, and I would recommend that we have one in Silver City, New Mexico. We have reserved a spot on the 19th of October, if the Chairman would be susceptible to that.

But as we move forward, I think that we will need additional mining hearings on this mining law reform to ensure that we are pursuing appropriate policy and not just punishing a modern industry for their ancestor's actions of 100 years ago.

I thank the witnesses on both panels for their testimony and I look forward to hearing from you, and would yield back. Thank you, Mr. Chairman.

Mr. COSTA. I appreciate the gentleman from New Mexico's comments. I do believe one of the areas that we are going to need to examine closer is the current efforts and the collaboration between states and the Federal government because I am aware of some, I think, positive efforts that are taking place and we certainly want to encourage those and build on those. So hopefully we will have an opportunity to do that.

We are blessed with the presence of the Chairman of the committee who has a statement to make or he may be using that as a ruse to simply come and watch us. But in either case, he is quite welcome to—this is a gentleman who has been passionate about this issue for many years, and is working very hard on his bill, and we would recognize the gentleman from West Virginia, the Chairman of the Natural Resources Committee, for an opening statement.

STATEMENT OF THE HONORABLE NICK J. RAHALL, II, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WEST VIRGINIA

Mr. RAHALL. I thank the distinguished Subcommittee Chairman, Mr. Costa, for those kind words. I might say we are cursed rather than blessed by my appearance here, but that would come more from the other side of the aisle than I believe those that are scheduled to testify because we have, as the Chairman has referred to, been talking with everybody on this issue, both Chairman Costa and myself, including meetings today, and these will continue as we try to reach common ground in what I view all sides, all sides are saying that certainly we need to eliminate the uncertainty that hangs over the industry's head. We need to have a plan to move forward so that we can mine the minerals and metals that are so important for our economy here domestically.

The gentleman from New Mexico, I believe, has referred to it, is it the National Science Foundation report, Steve, the latest report that you were referring to pointing to the strategic importance of minerals and metals to our economy? That is the same report, I believe, that Ranking Member Young called me on just a little while ago and wanted to have a separate hearing.

But from what I can judge from this report there is nothing with which anybody could disagree, certainly not this gentleman from

West Virginia. Metals and minerals and hardrock mining are important to our economy. They are important to our defenses in this nation, and nobody, certainly not this gentleman from a mining area of this country, wants to eliminate any jobs or any industry that is critical for our energy independence and/or the defenses of our country.

I want to make an opening statement because I not only want to address that issue, but also those who might wonder where this gentleman from the eastern part of the United States, although it is West Virginia, comes from on this issue, as well as the relationship of myself with my coal mining industry, and perhaps wonderment about how I would want to reform the hardrock mining industry when we have our own problems in the coal industry, which I certainly attest that we have.

But during the years that I have labored to reform the Mining Law of 1872, those who defend its privileges, and it is indeed a privilege to be deemed the highest and best use of our public domain lands, have often alleged that reform legislation fails to take into account the contribution of hardrock mining to area economies. They claim that reform would have dire consequences on the industry, that we did not provide the industry with unfettered access to public lands and public minerals, that is, if we did not provide such access, that the industry could no longer survive, et cetera, et cetera.

Let me just say that at the outset there is no member in the House of Representatives whose congressional district is more dependent upon mining for employment and its economic well-being than this gentleman from West Virginia. And when we are talking about the effects of mining, I would suggest that there is little difference between coal mining or gold mining. The effects, whether measured in terms of employment or in terms of the environment, are the same.

With that noted, I would note I have engaged in this effort to reform the Mining Law of 1872 for many years now, a couple of decades, not just for the apparent reasons—value of minerals, mined for free, the threats to human safety and the health—but also because I am pro-mining, because I no longer believe that we can expect a viable hardrock mining industry to exist on public domain lands in the future if we do not make corrections to the law today, and again I say it is to eliminate the uncertainty that hangs over this industry's future as well.

I do so because there are provisions of the existing law which impede efficient and serious mineral exploration and development, and I do so because of the unsettled political climate governing this activity. Reform, if not coming in a comprehensive fashion, certainly will continue to come in a piecemeal fashion and will continue to hang that cloud of uncertainty over the industry.

So I say to my colleagues from the Western states who resist reform I understand your concerns. I have and will continue to meet with you. I have been in your situation. Just in a meeting today in my office we recalled 1977, when this committee was then called the House Interior Committee under the chairmanship of the gentleman that oversees this room in spirit today, Mo Udall.

I was a young freshman, and in those days it was unheard of for a freshman to serve on a conference committee, but it was my first year, and I was confronted by legislation being advanced by our Chairman, and I will recall that the coal industry was dragged kicking and screaming into the debate that led to the enactment of the Surface Mining Control Reclamation Act of 1977. I voted for that legislation. It was not an easy thing to do, but I voted for the bill because in my region of the country we were grappling with a legacy of acidified streams, high walls, refuge piles, open mine shafts, and other hazards associated with coal mining practices, a legacy, I would submit, that we are faced with in our lands administered by the Forest Service and the BLM in the Western states due to hardrock mining practices.

The fact of the matter is that the gloom and doom predictions made by my coal industry at that time against the Federal Strip Mining Act all those years did not come about. Predictions, I would note, that are almost to the word identical to those whose industry has leveled at times against this Mining Law of 1982 reform legislation.

Yet today the coal fields of this nation are a much better place in which to live, and we are producing more coal than ever before. Certainly coal continues to have its controversies, whether they include mountain top removal coal mining, whether problems we are having with coal waste impalements, these are problems confronted on a daily basis, but at least—but at least there are laws on the books to deal with these situations, and we try to deal with these situations, whether it is mountain top removal or these impalements, we try to deal with them within the context of the current laws that exist, and the laws, for the most part, which the industry is legitimately following.

At least when one mine's coal in our Federal lands there is a royalty that is paid to the Federal government, and at least we are making provisions for the restoration of lands that are left abandoned by past coal mining practices. None of this exists with respect to hardrock mining under the Mining Law of 1872.

So I believe, as I conclude, with enough courage and fortitude we can continue to address the problems facing mining, and dove tail our need for energy and minerals with the necessity of protecting our environment and providing jobs for our people. At stake here, over the Mining Law of 1872, is the health, welfare, and environmental integrity of our people and our Federal lands. At stake, indeed, is the public interest of all Americans, and at stake is the ability of the hardrock mining industry to continue to operate on public domain lands in the future, to produce jobs for our people, and to produce those minerals that are necessary to maintain our standard of living.

I thank you, Mr. Chairman.

Mr. COSTA. Thank you, Mr. Chairman, for your illustrative comments that give us a snapshot of the history in comparison and reflects your own experience as it relates to the U.S. coal industry and the challenges on legislative changes that you quite concisely repeated in your testimony. We appreciate that history, and we hope it will be applicable in terms of our best collaborative bipartisan efforts to work on this effort as well.

I would like to entertain the committee's unanimous consent to allow Mr. Tom Udall to sit and participate in this afternoon's hearing. Hearing no objection. Mr. Udall has had a long interest in this subject matter, and of course, his uncle was, as noted by Chairman Rahall, the Chairman of this committee and his father used to be the Secretary of the Interior, so the family obviously lays claim—no pun intended—to a serious focus on the subject matter.

Speaking of serious focus on the subject matter, I don't know, Mr. Pearce, if it is just you and I this afternoon or why we are blessed with such illustrious talent in the House here. It must be the subject matter. But we have another Chairman, the gentleman from Alaska, who we all enjoy serving with who has blessed us with his presence, and so we will allow an opportunity for an opening statement from the gentleman from Alaska, Mr. Young.

STATEMENT OF THE HONORABLE DON YOUNG, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALASKA

Mr. YOUNG. Thank you, Mr. Chairman, and I do not have a written statement so my statement will be from my memory of history, and the gentleman is right, from West Virginia. He was dragging and crawling and opposing any mining law changes for the coal industry. I don't quite remember all the history mentioned in the sense that since that time there has been numerous other laws that we have passed in this committee and this Congress that affect the hardrock mining. Later on I am hoping that the industry will explain all the permitting process that you have to go through. The Endangered Species Act, the water quality control, the air quality control, those did not exist then, so don't suggest that they are the same thing when we passed the coal mining law at the same time.

There are numerous new laws that we put on the books that the industry has to meet, and my interest in this is, very frankly, one that we have to recognize—now 20 of the minerals which our industry base consumes are imported 100 percent. We are a nation dependent upon hardrock minerals, not just gold, but hardrock minerals, more so than even for energy. Every automobile has an imported mineral is in it, a metal of some type. Every computer, everything we use is imported from overseas, from China. I will give you an example if you don't have it.

We have China, Morocco, Mexico and Chile, and we have arsenic, you may not use it, but we do. Asbestos, we don't mine it but we do import it from Canada; bauxite and aluminum from Jamaica, Guinea, Australia and Brazil; molybdenum from Brazil, China, Mexico, South Africa and Mongolia, and on down the line.

If you don't have a copy of this, look at what we are dependent upon now today, far exceeds our energy, far exceeding our energy because we have not, in fact, encouraged the mining industry in this nation as we should have, and we are now dependent upon countries that are not friends of ours, and look at this bill the gentleman introduced and talking about reform and how we have to reform. Reforming for the benefit of the Nation is crucially important. Reforming to punish an industry that is crucial to our endeavors and our economy is wrong.

Look at Title III, and see how many new permits, how many other agencies, you will never get a permit ever to mine anymore minerals in this country, thus making us more dependent upon foreign countries not our friends, when we can't produce, Mr. Chairman, what we should be producing in this country. We weaken this nation. We weaken this world's climate. We weaken society as a whole. Resources are on this earth to be utilized for the good of man.

By the way, one of these resources that we are talking—none of these hardrock minerals are used by anybody but man. Man's use, and I believe we must need them.

I want to check your button over there, Mr. Udall, and see where it was made and what it is made of. Probably imported, United States Congressman's button. Many times I don't wear mine because I don't want to be a target, but just keep it in mind——

[Laughter.]

Mr. YOUNG.—that is probably where it was made, and now we go to your automobiles because we will hear a lot from that side of the aisle, oh, we have to save the world, the earth is coming to an end, hot house is hitting us. We are going to have hybrid cars. The average car today has 40 pounds of copper in it. A hybrid has 100 pounds of copper, and under this bill you will not have any new copper mines in the United States. Under this bill you will not have any tungsten, any moly, you are going to have no production of what we have to have even for our military strength in the United States because we will be all importing it, and that is why if we are to reform for the benefit of the nation, I will be on the gentleman's side. But if we are going to reform, saying we are going to solve all these problems and punish an industry that has contributed to this country, and will continue to contribute to this country, it is dead wrong.

Right now I will make you a deal. You knock out Title III, and I will take the rest of the bill.

Mr. RAHALL. Gentleman yield?

Mr. YOUNG. Yes.

Mr. RAHALL. What if we keep Title III in there and place a bet on whether there will be another permit issued?

Mr. YOUNG. Well, no, no, no. Knock it out and you have a deal. That is real reform. That will be real reform, and we will be able to provide for this nation the needed minerals we have to have to maintain our strength. If we go forth with this bill as it is written, you will not have a hardrock industry, and this nation will be at the mercy of those countries that don't have a unique understanding of the environment or the labor force or any other thing. That is what will happen.

Yield back the balance.

Mr. COSTA. Thank you very much, and it is inspiring, I think, to have the Chairman and the former Chairman here and weigh in, and let me make it clear to all of the members of the Subcommittee and those who are not members of the Subcommittee that it is not the intention of this Chairman to punish anybody, but to try to bring about some common sense or form, and we will see where we can reach that balancing point.

Having said that, any other statements wish to be submitted for the record? Mr. Heller from Nevada.

STATEMENT OF THE HONORABLE DEAN HELLER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEVADA

Mr. HELLER. Thank you, Mr. Chairman. I just want to tell you I appreciate the opportunity for this third hearing, a third hearing that at least I have attended, maybe more. But I also want to take a moment to also thank you and Senator Reid for the time that you spent in Elko, the two days that you spent there. I have gotten a lot of feedback from some of my constituents and how much they appreciated having the opportunity to discuss some of these issues with you, and though I may not support the current form of this bill, I hope that your experience and some of the things that you were able to detail while you were there in Elko will help maybe more calmer minds or reasonable minds come together with some legislation that we can live with and the industry also.

Having said that, because I want to get to the witnesses, I would like to submit my written comments to the record.

Mr. COSTA. Very good.

Mr. HELLER. And also, Mr. Chairman, I had a constituent that wrote a letter, Summit Engineering Corps, Thomas Gallagher. If there is no objections.

Mr. COSTA. Without objection, we will submit that for the record as well.

Mr. HELLER. Thank you very much. I yield.

[The letter from Thomas Gallagher submitted for the record by Mr. Heller follows:]

SUMMIT ENGINEERING CORPORATION™

September 28, 2007

The Honorable Jim Costa, Chairman
House Subcommittee on Energy and Mineral Resources
U.S. House of Representatives
Washington, DC 20515

RE: H.R. 2262 – THE HARDROCK MINING AND RECLAMATION ACT OF 2007

Dear Chairman Costa:

My name is Tom Gallagher. I am the CEO of Summit Engineering Corporation, a Nevada civil and geotechnical engineering firm with offices in Reno, Las Vegas, Elko and Ely. I started Summit with my partner Don McHarg nearly 30 years ago. We began by providing surveying services to mining companies working in Nevada. My partner Don was a U.S. Mineral Surveyor who surveyed the claims at Barrick's Goldstrike Mine that were the last mining claim patents granted. We've grown our business substantially, ventured into aspects of engineering, but continue to supply the mining industry with surveying and design engineering services. Today, my company employs 150 engineers, scientists and support staff, and is the largest Nevada-founded privately owned engineering firm headquartered in northern Nevada. We owe a lot of our success to our strong beginnings provided by our clients in mining.

I'd like to give you some comments on your committee's bill H.R. 2262. I've seen mining help many rural communities over the years, especially during times of strong commodities markets. When those markets are depressed, the mines are forced to close and our rural communities suffer. I see some parts of this bill that will force mines to close a lot sooner than planned. Some of the big new mines that we're working on right now may be mothballed if this bill is passed into law as it's now written. Those closures will hurt rural communities and businesses like mine. There are parts of the bill that will hurt us, and parts of the bill that aren't necessary.

Here are the parts of the bill that will hurt us:

- Limitations on patents
- Royalty of 8% gross
- Lands open to location
- Minerals Materials

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The limitations on patents is an extension of the Congressional moratorium on patents that has already cut into our business. My partner made the mineral surveys that were the last patents issued by the Federal government. Patents on mining claims were intended initially as an opportunity for small miners to earn real property by sweat equity, so the West could be settled. The society that needed that kind of motivation to move populations inland is no longer with us. The reason nowadays for patenting mining claims is so the banks that finance mine development have some guarantee that there's real property to secure the loans. Now, no one in mining that we know is against paying the fair-market value for the surface rights to their claims. That should be added to whatever change in the mining law is made.

The 8% gross royalty you've proposed is quite high. That could be roughly equal to 40% net profit. Even claim owners who lease their claims to mining companies don't get paid that unless they are fully participating minority partners in the operation. Even then, the royalty isn't paid on gross income, it's paid on the net income so the profit distribution can be adjusted for commodity price fluctuations, labor and supplier issues, environmental reclamation costs, materials and equipment price variations – all the factors that impact any modern industry. Our clients haven't been opposed to paying a fair net profits royalty. But you need to realize that since you're proposing to provide the mineral estates on an "as-is" basis, you should expect a much smaller cut of the profits. We suggest that you start with something like Nevada's 5% net profits severance on mining operations. This makes the royalty fair to mines on all commodities – industrial minerals, for example, barite, gypsum, and specialty clays, have very different operating and market conditions than precious metals. One of our current clients that mines specialty clays just had us stake a large deposit for them in Wyoming. That deposit is unlikely to be developed with this large of a royalty imposed on the operation.

As to lands open to location, I can only say that the more land you close to location, the more our business suffers. Mineral deposits are uncommon in nature. Our clients can only mine where the minerals are found. Minerals aren't grown like a forest or rangeland. I urge you to proceed cautiously before you close any lands to minerals exploration and development.

The Minerals Materials section in Title V, which would repeal the Building Stone Placer Act and negate the location of uncommon variety mineral materials, will be a negative impact to several of our clients. As I mentioned, we recently staked a large specialty clay deposit for one of these clients. Loss of business like this is likely to cost us more than $250,000 annually. We really don't want to lose this business. Please leave this section out of your legislation.

Here are some sections of the bill that are unnecessary:

Title III – Environmental Considerations of Mineral Exploration and Development
Title V - Citizens Suits

The reason that Title III is unnecessary is that it basically just restates a huge body of environmental laws that are already on the books, and already tested in the courts. It's redundant legislation that doesn't belong in this bill.

The reason that Citizens Suits should be excluded from this bill is that there are already more than enough legal avenues for reporting and pursuit of bona-fide criminal malfeasance. This section is redundant upon various existing laws.

In summary, what should be changed in the General Mining Law is the following:

- payment of fair market value for surface rights on patented claims
- a moderate (5%) net profits royalty

Thank you for this opportunity to express my input to the changes to the General Mining Law proposed in HR 2262.

Sincerely yours,

Thomas H. Gallagher, P.E., P.L.S.
Chairman and Chief Executive Officer

cc: The Honorable Nick J. Rahall II
The Honorable Don Young
The Honorable Dean Heller
The Honorable Stevan Pearce
The Honorable Harry Reid
The Honorable Larry Craig
Russ Fields, Nevada Mining Association
Laura Skaer, Northwest Mining Association

Mr. COSTA. As well as your testimony, and we thank the gentleman, and as I said on the outset, you and Senator Reid and your constituents most importantly were most hospitable, and the two days the committee spent in Elko were informative and certainly were a pleasure.

With that understanding, I think we will begin with the testimony. It almost sounds like we have already had testimony, but not true. We are here to listen to the witnesses. I would now like to recognize our first panel. Mr. Salvatore Lazzari of the Congressional Research Service, otherwise known as CRS; Mr. James Otto, a Consultant on issues relating to mining royalties for governments around the world; and Mr. James Cress, Attorney with Holme Roberts & Owens, LLP, are the three members on our first panel.

I think some of you—maybe all of you—are savvy and experienced with testifying on the Hill. Those timing lights in front of you would indicate the five minutes that are available to you. We certainly will take your full statement that may be longer than your oral testimony. When the light turns yellow, you need to kind of conclude your remarks. That gives you a minute left, and the Chair views favorably those members of the panel that testify that stay within the five minutes. If you don't, I will politely let you know, and then we will move to the questions.

Having said that, our first witness is Mr. Salvatore Lazzari from Congressional Research Service.

STATEMENT OF SALVATORE LAZZARI, SPECIALIST IN PUBLIC FINANCE, RESOURCES, SCIENCE AND INDUSTRY DIVISION, CONGRESSIONAL RESEARCH SERVICE

Mr. LAZZARI. My name is Salvatore Lazzari. For 28 years, I have been an economist at the Congressional Research Service, specializing in energy and natural resource economics and policy, focusing

on energy tax policy. I am honored to be here today to discuss the economic aspects of H.R. 2262, The Hardrock Mining and Reclamation Act of 2007, specifically, the proposal to impose an 8 percent ad valorem royalty in production of locatable minerals on public domain lands. Please keep in mind that CRS takes no position on any legislative options.

Part of the problem in deciding how to structure a royalty is confusion over just what a royalty is and what it is not. Economics is very clear on this. A royalty is a factor payment, part of the rent paid or the return to land as an input to production. It is analogous to the wage rate, which is a payment for the services of labor, or the interest rate, which is a payment for the services of capital. Mineral production requires the services of these productive factors, such as labor and capital, and generally must pay the going market rate in exchange for these services.

The exception to this rule, of course, has been the case of locatable minerals on Federal lands in the United States on which royalties are not paid.

In the case of mineral production, under conditions of perfect competition and no risk rents could be captured by the landowner as up-front payments or they could be paid in various forms, such as bonus bids, annual rentals, or a royalty, or even in various combinations of these, depending upon the type of mineral and the specific contractual agreement between a developer of the resources and the landowner.

However, given the risks in mineral production, the royalty becomes a way of allowing for mineral rents to be paid, i.e., for the landowner to earn a return on the land in a way that simultaneously protects the mineral producer against excessive or overestimation of rents, and the landowner against underestimation of rents.

Being a factor payment then, a royalty is not a tax, which is a compulsory levy on individuals and businesses to finance the general cost of government for the common welfare and not a return to a factor of production. This is an important point, one that might be used, for example, to argue against proposals to impose a royalty based on net profits, which would make the royalty more of an income tax rather than a factor payment.

As a type of rent then, the type of royalty that most closely captures the rents for mineral lands whose future productivity and value cannot be precisely determined is the ad valorem royalty based on value. Under such a royalty, all of the rental payments are made in installments rather than partial up front, and the rent payments are based on the amount and value of the mineral produced.

It would be inconsistent with the concept of rent as a factor payment for a royalty to be based on other than market value. Assessing the royalty based on the gross income definition of value under the percentage depletion laws of the Federal income tax, as is proposed under H.R. 2262, will not only be consistent with the economic concept of the royalty but would also facilitate industry compliance and government administration since the legal and regulatory apparatus for measuring the value would already be in place.

With regard to the specific royalty rate, economic theory is less clear beyond the implication that the royalty rate be determined in the competitive marketplace is generally the most economically efficient rate. In most types of private royalty arrangements, the most common type of royalty was the ad valorem royalty at rates ranging from 2 to 8 percent, with an average rate of five percent.

On state lands, mineral royalties are also ad valorem with rates ranging from two to ten percent. For oil and gas on Federal lands, the royalty rate is either one-eighth or one-sixth the share of the price. For coal on Federal lands, the royalty rate is either 12 percent for surface mines or eight percent for underground mines. Even for hardrock minerals on acquired lands as opposed to public domain lands, which are governed by the 1872 mining law, the Congress has established an ad valorem royalty rate of five percent.

The U.S. hardrock mineral industry is, in general, subject to the same income tax laws as apply to other businesses for profits. Hardrock mining companies are highly capital-intensive businesses and also benefit from accelerated depreciation allowance, and from several targeted subsidies.

Expensing of exploration and development costs, a percentage of the depletion allowance based on fixed percentage of the growth income as determined in the tax law, which ranges from five to 22 percent, and a deduction for mine closing and land reclamation costs in advance of the actual closing and reclamation, i.e., before the occurrence of the activity giving rise to the expenses. These special tax preferences have historically resulted in relatively low industry effective tax rates.

Finally mining companies pay a variety of claims fees—location, Bureau of Land Management processing, and annual maintenance fees, which are assessed for specific administrative services provided by the BLM. In cases where the title to the lands are conveyed, there are also patent fees, improvement and purchase fees also apply.

Thank you, Mr. Chairman. That concludes my testimony. I would be happy to answer any questions you or the Subcommittee members might have.

[The prepared statement of Mr. Lazzari follows:]

Statement of Salvatore Lazzari, Specialist in Natural Resource Economics and Policy, Resources, Science, and Industry Division, Congressional Research Service, Library of Congress

Mr. Chairman, and Members of the Subcommittee:

My name is Salvatore Lazzari. For 28 years I have been an economist at the Congressional Research Service, specializing in energy and natural resource economics and policy, focusing on energy tax policy. Before that I was a business economist for a major corporation in Michigan. I am honored to be here to discuss H.R. 2262, the Hardrock Mining and Reclamation Act of 2007, specifically the proposal to impose an 8% ad valorem royalty on production of locatable minerals on public domain lands, effective after the date the bill becomes law. As you requested, I will address the economic aspects of this issue, but keep in mind that CRS takes no position on any legislative options. My statement today addresses the following issues:

- What is a royalty?
- Assuming that a royalty is to be imposed, what is the best way to structure such a royalty? Should the royalty be an ad valorem type, a fixed unit based royalty, or based on net income or profit? If there is to be an ad valorem royalty, at what stage should value (or price) be measured, and what deductions, if any, should be allowed?

- What should the royalty rate be? And how do we decide what a fair royalty rate is?
- Finally, what taxes and fees does the hardrock mineral industry pay, and do they have any bearing or implications for royalty determination?

WHAT IS A ROYALTY?

Part of the problem in deciding how to structure a royalty is confusion over just what a royalty is and what it is not. Economics is very clear on this: A royalty is a factor payment, part of the rent paid, or the return, to land as both a marketable capital asset and input to production. It is a voluntary payment made by the renter of the land to the landowner (whether private or public) in exchange for the flow of services provided by that land over time. Thus, the royalty is analogous to the wage rate, which is a payment for the services of labor, or the interest rate, which is a payment for the services of capital.

Mineral producers, as business organizations, require land, as well as labor, capital, energy, and other materials, in order to establish their enterprise and produce goods and services—minerals that provide utility to consumers. In the typical economic model, just as mineral producers must pay for the services of factors of labor, capital, and other inputs, they must pay landowners for the services of land that contains a mineral deposit. The exception to this rule, of course, has been the case of locatable minerals on public (or federal) lands in the United States, on which royalties are not paid.

In the case of mineral lands, rents could be paid in various forms such as a bonus bid, annual rentals, or a royalty, or in various combinations of these depending on the type of mineral, and whether there is a lease or not, and the contractual agreement between a developer of the resources and landowner. For example, under the Outer Continental Shelf Lands Act of 1953, as amended, the federal government leases the lands for oil and gas development in return for a bonus bid, annual rents, and royalties. Lease sales are conducted through a competitive bidding process, and leases are awarded to the highest bidder, who makes an up-front cash payment called a bonus bid in order to secure the lease. Annual rents range from $5-$9.50 per acre, with lease sizes ranging form 2,500 to nearly 6,000 acres, and royalty rates are either 12.5% or 16.67%. [1]

These mineral rents are an attempt to capture the returns to the land above and beyond the returns paid to labor (wages), capital (interest), entrepreneurship (profits), and other factors, and above any taxes that have to be paid to government. With perfect knowledge and no risks, for example, the rents resulting from mineral lands could be captured by the landowner as up-front payments—as the price of the mineral rights, for example. However, mineral production, like all business, is risky; it is difficult to know in advance of production precisely the quantity and quality of the mineral, or the market price that it will sell for in the future. There are long lead times between exploration, discovery, and actual production, and it is difficult to project what mineral prices will be upon production and sale. These and other uncertainties make it risky for both the producer and landowner to predict up front what rents would be earned by mineral lands, and therefore what the mineral producer should pay the landowner. In general, the precise division between a royalty or bonus bids and annual rentals depends primarily upon how production risk is shared between landowner and mineral producer. The royalty becomes a way of allowing for mineral land rents to be paid, for the landowner to earn a return on the land, in a way that simultaneously minimizes the risk of either overpayment or under payment. As a land rental, then, an ad valorem royalty protects the mineral producer against excessive royalty payments (overestimation of rents) and the government against underestimation of economic rents.

Being a factor payment, then, a royalty is not a tax, which is a compulsory levy on individuals and businesses to finance the cost of government for the common welfare and not a return to a factor of production in exchange for specific services provided. This is an important point, one that might be used, for example, to argue against proposals to impose a royalty based on net profits, which would make the royalty more of an income tax rather than a factor payment. [2]

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[1] U.S. Library of Congress. Congressional Research Service. Royalty Relief for U.S. Deepwater Oil and Gas Leases. CRS Report RS22567, by Marc Humphries. August 1, 2007.

[2] There are examples of profit sharing, instead of revenue sharing, such as in the movie business. But these reflect the reality that the return to labor (wages) could be paid in different forms.

WHAT WOULD BE THE STRUCTURE OF AN ECONOMICALLY EFFICIENT (AND FAIR) ROYALTY ON HARD ROCK MINERALS FROM PUBLIC DOMAIN LANDS?

As a type of rent, then, the type of royalty that most closely is intended to capture the rents from mineral lands whose future productivity cannot be precisely determined due to risk—variability in price, unknown quality and quality of mineral, etc.—is the ad valorem royalty. Under such a royalty, all of the rental payments are made in installments over the life of the mine, rather than partially up front, and the rent amounts are based on the amount of the mineral produced, and the market value or price of the mineral at the mine. Lands producing minerals of higher quality and value, gold for instance, pay a higher royalty amount; those producing lower quality or value minerals, lead for example, pay a lower amount. The economic concept of a royalty as a factor payment implies that the payment should be based on the market value of the producer's output, whether it be hard rock minerals, coal, or oil and gas. It would be inconsistent with the concept of sharing and with the concept of a factor payment in a competitive market for a royalty to be based on other than market value minus the costs of obtaining it. For example, if instead of payments in kind (deer or crops or precious metals) the landowner were to be paid in money, one would expect him to receive the monetary equivalent of the value of the output. Rational landowners would not settle for less than what the deer, crop, or metal is worth because they could always have the deer, crop, or metals taken to market and sold for at least market value. If they wanted less rent, then presumably that would have been negotiated as a smaller share (instead of 1 deer out of 5, it would perhaps be 1 out of 6). Likewise it would not be rational for the renter to pay to the landowner a royalty based on more than market value.

In addition, assessing the royalty on value as determined under present federal income tax laws means that the industry compliance and government administration apparatus would already be in place. Under H.R. 2262, the proposed 8% ad valorem royalty would be applied to a base called the "net smelter return," which is defined as the gross income from the property for purposes of determining percentage depletion allowance under IRC§ 613(c), one of the tax preferences or subsidies available to the mining industry under the federal income tax laws. Under IRC§ 613, mining companies are allowed percentage depletion, at varying rates, based on the gross income from the property. Under IRC§ 613(c), gross income for depletion purposes is generally defined as "the actual price for which the ore or mineral is sold where the taxpayer sells the ore or mineral as it emerges from the mine before application of any processes other than a mining process or any transportation, or after application of only mining processes, including mining transportation." Thus, gross income allows deductions for any costs of non-mining processes but does not allow for deductions for the costs of mining processes, the idea being to arrive at a price or value of the mineral as close to the mine mouth as possible. However, in the event that the firm applies non-mining processes before the mineral is sold, so that the price is not available, then IRS regulations § 1.613-4 stipulate the use of the representative market or field price (RMFP, basically the first sales price less all non-mining costs) as an approximation to the actual price. Finally, if an RMFP is not determinable, regulations stipulate one of various other methods to estimate the mine mouth price.

Thus, conceptually, not only is the tax concept of gross income consistent with the concept of mine value or price for purposes of the ad valorem royalty, it facilitates royalty compliance and administration.

WHAT WOULD BE THE APPROPRIATE ROYALTY RATE?

With regard to the specific royalty rate, economic theory is less clear beyond the implication that the royalty rate determined in the competitive marketplace is generally the most economically efficient rate—the rate that is most likely to maximize social welfare. In the case of privately owned mineral lands, markets already exist that determine the royalty type and rate for a wide variety of minerals. In most types of private royalty arrangements in the early 1990s (the latest data readily available), the most common type of royalty was the ad valorem royalty at rates ranging from 2-8%, with an average rate of 5%.[3] In the case of publicly owned lands, laws determine the return on the resources, although competitive market rates may be a determining factor in establishing such rates. Most states with min-

[3] U.S. Department of the Interior. Economic Implications of A Royalty System for Hardrock Minerals. August 16, 1993.

eral resources imposed ad valorem royalties at rates ranging from 2-10%.[4] For leasable energy minerals on federal lands, the statutory royalty rates range from 5%-16.67%. For oil and gas, the royalty rate is either a 1/8 (12.5%) or 1/6 (16.67%) share of the price of the mineral, depending upon whether the oil or gas is shallow (1/6 share because costs are lower) or deep (a 1/8 share because costs are higher). On some leases, the rate could be higher than 1/6. Also, the royalty could be paid "in-kind" (either a 1/8 or 1/6 share of the output rather than of the price). For coal, the royalty rate is either 12% (surface mines) or 8% (underground mines). Note that the 8% ad valorem rate proposed in H.R. 2262 is the same as the royalty rate on underground coal mines. Even for hardrock minerals on acquired lands (as opposed to public domain lands, which are governed by the 1872 Mining Law), the Congress has established an ad valorem royalty rate of 5%.[5] Finally, in international lease transactions, mineral royalties are predominantly of the ad valorem type with rates ranging typically from 2-12%, depending on the country, and the mineral type.[6]

THE FEDERAL TAX TREATMENT OF THE HARD ROCK MINING INDUSTRY

The U.S. hard rock minerals industry is, in general, subject to the same income tax laws which apply to all other for-profit businesses. In addition, there are three special tax preferences available to the hardrock mining industry generally, as well as to coal mining. First, mining firms are permitted to expense (to deduct in the year paid or incurred) rather than capitalize (i.e., recover such costs through depletion or depreciation) certain exploration and development (E&D) costs; second, mining firms are also permitted to claim an allowance for depletion based on a fixed percentage of the "gross income"—i.e., sales revenue—from the sale of the mineral rather than on the basis of the actual investment in the mine. For hard rock minerals, these percentages range from 5% (for clay, sand, gravel, stone, etc.) to 22% (for sulfur, uranium, asbestos, lead, etc.). Metal mines generally qualify for a 14% depletion, except for gold, silver, copper, and iron ore, which qualify for a 15% depletion allowance. Under this method, total deductions typically exceed the capital invested. In addition to these two tax subsidies (which are also available for oil and gas production), mining qualifies for a third subsidy. Under IRC § 468, mining companies are allowed to deduct the costs of mine closing and land reclamation in advance of the actual closing and reclamation, i.e., before the occurrence of the activity giving rise to the expenses. This provision is contrary to the general tax rule under both the cash method of accounting and the accrual method of accounting, which state that expenses to be incurred in the future cannot be deducted currently.

These special tax preferences or subsidies, combined with accelerated depreciation (a significant tax benefit for highly capital intensive business such as hard rock mining) have historically resulted in relatively low effective average and marginal tax rates. Thus, firms that mine hard rock minerals on public domain lands pay no royalty, and benefit from fairly significant tax subsidies. In addition to reducing federal tax revenues, from an economic point of view, these subsidies have further distorted the economy's allocation of resources. H.R. 2262 does not address the tax subsidies, and the question of whether to impose a royalty is independent of whether to continue to provide or whether to reduce or eliminate these tax subsidies. It is fair to say there is no economic justification, absent a market failure, and based on efficiency considerations, for not assessing competitive market royalty rate on locatable minerals on public lands.[7] While the royalty question and tax subsidies are separate policy issues, if a royalty is imposed, then the percentage depletion deduction would be reduced. This is because, under IRC§ 613, royalties and rents are deductible against percentage depletion. To illustrate, at a 22% percentage depletion deduction, and an 8% royalty, the effective percentage depletion deduction would be 20.24%; at a 15% percentage depletion deduction, and an 8% royalty, the effective percentage depletion deduction would be 13.8%. Also, it should be noted that royalties are a tax deductible expense, a cost of doing business, against income, which reduces the effective burden of the royalty.

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[4] U.S. General Accounting Office. Mineral Royalties: Royalty in the Western States and in Major Mineral Producing Countries. GAO/RCED-93-109. March 1993.

[5] U.S. Department of the Interior. Minerals Management Service. Mineral Revenues 2000: Report on Receipts from Federal and American Indian Leases. p.134.

[6] Otto, Andres, Cawood, Doggett, Guj, Stermole, Stermole, and Tilton. Mining Royalties: A Global Study of Their Impact on Investors, Government, and Civil Society. The World Bank. 2006.

[7] Arguments have been made for royalty forgiveness and tax subsidies based on national security. These non-economic considerations are not addressed in this statement.

FEES PAID BY THE HARD ROCK MINING INDUSTRY

Finally, mining companies pay a variety of claims fees (location fees, Bureau of Land Management processing fees, annual maintenance fees). These are charges for specific type of administrative services provided by the BLM. In cases where the title to the lands are conveyed, patent fees (improvement fees and purchase fees) also apply.

Mr. COSTA. We appreciate that. I am sure there will be questions, and you are almost within the time limit.

The Chair would now recognize the next witness, Mr. James Otto, who will testify for five minutes.

STATEMENT OF JAMES OTTO, INDEPENDENT CONSULTANT

Mr. OTTO. Thank you very much for the opportunity to present my views here today. I am appearing here as a private citizen, and expressing my own views, and not those of any company——

Mr. COSTA. You might speak a little closer to the microphone, please.

Mr. OTTO. I have been active in this area for about 25 years, working with many countries around the world on mining tax return and mining law reform. I have been the lead consultant in tax reform efforts in many of the major mining countries of the world, including places like Australia, Indonesia, Mongolia, Papua New Guinea, Philippines, Canada.

You mentioned a report by the World Bank earlier. I was the lead author of the book "Mining Royalties." What I am going to try to do in five minutes is talk a little bit about international practice and how that might apply here in the United States. One of the things I can say is determination of a royalty and royalty method is not rocket science. There are a lot of good examples out there. If you get it right, it can be a win/win for both industry and government, but if you get it wrong, it can cost the treasury and it can pretty much close down an industry.

One of the key questions is should the U.S.A. have a royalty on minerals, and as we look around the world today, almost every country that produces minerals does have a royalty with one or two exceptions, and those countries are now considering imposing a royalty. So in terms of international competitiveness, the mere existence or lack of a royalty isn't going to have that much impact. It is the royalty of the type that the industry can sustain or not.

What is the rationale behind a royalty? Well, we had one explanation. Another way of thinking about it is an ownership transfer tax. It is the amount that is paid irregardless of profitability to the owner of the mineral as it is transferred from the public to the private sector.

Another way of looking at it is that it is a usage fee, a licensing fee, a fee that is paid for the right to mine, and this is often used in countries where the ownership of the mineral may not reside with the state as we might have in perfected claims here in the U.S.

But the general rationale or the main rationale most countries have royalties is to provide income to the treasury, and this could be to the general budget or earmarked, as it is in this bill for certain purposes.

Should royalties be different for different types of minerals? Well, as we look around the world today, many countries do come up with separate types of royalties for different types of minerals and the royalty is designed mineral by mineral. However, in many other countries this turns out to be a bit complex on the administration side, and for a variety of other reasons it can be very difficult to implement, for example, where you have a concentrate that may contain four or five or more minerals, how to value the royalty if you have different rates for each of the minerals contained in that concentrate.

The clear trend today is for a more uniform approach where you might have three or four different categories of minerals, each with a different royalty rate being applied to it in a different calculation basis.

My advice to most governments today is to aim for a more or less uniform system of royalties applying to all minerals with the except of construction minerals and perhaps coal, which may be more amenable to a unit-based royalty rather than a value-based royalty.

How should royalty be calculated? While there are a number of different approaches that are used, all can be used successfully. The simplest is a simple amount, a fee per unit volume or unit weight, as in construction minerals and coal in many countries. Another approach is a percent of value, an ad valorem. This is the most common type of royalty and the one that is advocated in the current bill. A third type is one that is based on some measure of profitability, and those are the most difficult to apply in practice, and aside from a few countries like Canada, one state in Australia, Nevada, most countries shy away from this as being not beneficial to the government.

The type of royalty proposed in the bill is called a net smelter royalty. I don't believe there is anyone in industry or in government that assesses a net smelter royalty who would call what is in the current bill a net smelter royalty. So you ought to think perhaps about that, redefining that.

Finally, I would like to say that the current mining law is badly out of date. It suffers from a host of problems, and one of the problems is it doesn't lay the groundwork for a social license to operate, and by this I mean acceptance by our society that the mining industry plays a positive role in our well-being. The public perceives the industry as highly polluting, causing a proliferation of abandoned eye sores, putting workers at risk, and contributing little to national or the local economy.

Today, most communities view a proposed mine not as an engine for economic growth, but an industry that must be kept out of their back yard. The imposition of a royalty, especially when revenues are earmarked for reclamation and local investment, may help to regain the industry's social license to operate.

Thank you.

[The prepared statement of Mr. Otto follows:]

Statement of James M. Otto, Independent Consultant on Mining Law, Policy and Economics

Thank you for the opportunity to present my views concerning the issue of royalty considerations to be taken into account with regard to H.R. 2262, the Hardrock Mining and Reclamation Act of 2007.

I appear here today as a private citizen, expressing my own views, and not representing any group. I have worked on mining policy, law and fiscal issues for twenty five years. I have assisted many governments in the development of their mining policies, laws, agreements and fiscal systems including many of the world's most important mining nations. Examples of my recent mining taxation related work includes: lead consultant to the Treasury on the bill to introduce royalties in South Africa, mining sector fiscal analysis for the Peruvian government prior to the introduction of royalty, analysis of the mining fiscal systems including royalty in Australia, Bolivia, Egypt, Indonesia, Mongolia, Mozambique, Papua New Guinea, Philippines, Saudi Arabia, Yemen, Zambia, and others. In some cases my mining taxation work is funded directly by the concerned government, other times by multilateral agencies like the World Bank, IFC or United Nations, and occasionally by the private sector. My books on the subject of mining laws and mine taxation are considered by some as standard references. My most recent co-authored book is titled Mining Royalties and it has been distributed by the World Bank to most mining and finance ministries and departments worldwide.

In my work for governments who are undertaking mineral sector fiscal reform, I advise that when designing a tax system, policy-makers should be aware of the integrated impact that all taxes, royalties and fees can have on mine economics and potential levels of future investment. When determining which types and levels of taxes to apply to the mining sector, policymakers should consider not only ways to achieve individual tax objectives (such as reclamation and community benefits in H.R. 2262), but also take into account the cumulative impact of all taxes. Such awareness should recognize the importance of each tax type in achieving specific objectives. The overall tax system should be equitable to both the nation and the investor and be globally competitive.

Should the U.S.A. impose a royalty on locatable minerals?

Most nations impose some form of royalty on minerals when the nation is the owner of the mineral. There are very few exceptions and over the past few years some countries that previously had no royalty now either have one or are planning to introduce one. Almost all new or recently amended mining laws include a royalty provision. The rationale for a royalty varies from country to country. In some, it is perceived as a form of ownership transfer tax, where the nation is provided a fiscal payment as the mineral moves from national ownership into private ownership. In other nations, it is justified as a form of usage fee—the royalty is considered as the regulatory fee paid in exchange for the "right to mine" in much the same way as a driver pays an annual registration fee to register and use a car on public roads. In this later case, questions about minerals ownership are mute which may be an important factor in the U.S.A. where for perfected claims minerals may no longer belong to the government. Regardless of the rationale, the primary reason behind imposing a royalty in most nations is to increase the amount of money flowing to the government, either to the general budget or for earmarked purposes. Most nations impose royalty and it is time for the U.S.A. to do so also.

Should royalties differ for different minerals?

There are many different types of minerals and their extraction costs, prices received and profit margins may differ substantially. For example, the average gold mine probably has a higher profit potential over the long run than an average copper mine. Should not the royalty for gold thus be higher than for copper? Many nations do discriminate between mineral types. In some nations like India and Indonesia, long lists of minerals appear in their laws along with separate rates or amounts for each mineral type. Other nations classify minerals into groups and apply a different royalty to each mineral group. Still others apply a uniform system regardless of the mineral type. In my visits with tax authorities in many nations, those responsible for tax collection almost invariably prefer a uniform system, with the one exception being construction minerals. There are a variety of reasons for this, and I will illustrate two reasons. Many mines produce one or more multi-metal concentrates. For example, a zinc concentrate may contain recoverable amounts of zinc, lead, silver, and gold. If different royalties apply to each mineral, how can the amount of royalty be calculated? A second reason to avoid royalty discrimination between mineral types is that it invariably leads to sustained efforts by producers of one mineral type to lobby for a reduction in their rate to the lowest rate on any

other mineral so that there is a "level playing field." My advice to most governments is to have a uniform royalty approach to all minerals, with the exception of construction type minerals and perhaps coal.

How should the royalty be calculated?

In its simplest forms, the royalty tax liability is calculated based either on a set amount per unit volume ($/cubic foot) or per unit weight ($/ton), or is based on a percentage of the value of the mineral commodity being extracted or sold (% x value). In the first instance, unit based royalties, the determination of the royalty liability is straight forward being solely dependent on the physical quantity or volume of the material produced but in the second case, value-based royalties, the assessment is more difficult because a value must be assigned to the commodity being sold. A third and more complex method relies on some measure of net profit where a measure of sales revenue is reduced by the deduction of certain allowable production and other costs to determine a net profit subject to a royalty rate (% x net profit). The advantage to government of unit and value based royalties is that they are fairly straight forward to calculate and pose fewer opportunities for tax minimization strategies. Their weakness is that low profit mines will have the same royalty basis as high profit mines, and this may impact them with regard to decisions about mine life, ore cut-off grade, and whether to continue operations when prices are low. Most Canadian provinces levy a form of net profits royalty, as do a few other jurisdictions including Nevada. In my experience, when a country is considering royalty reform, companies will argue strongly for a net profits type of royalty. However, most governments apply royalties based on units and/or on value. Unit based royalties are in common use mainly for construction minerals and sometimes coal but are less often applied to most other minerals.

Determining the value of the commodity for a value based royalty is not always straight forward. Different commodities each pose their own special problems and a nation may use several different valuation methods. Not only will different commodities often be valued by different methods but even a single commodity may pose assessment challenges depending on the state to which it has been processed. For example, take the following situation. A copper deposit is located which contains some ore suitable for recovery by smelting and some which is recoverable by leaching. The mine management determines that three products will be produced for sale: raw ore, a copper concentrate, and from an electro-winning plant, copper metal. The three copper products will obviously command very different sales values in the market. How should the three sales products be valued for royalty purposes? I usually advise nations that when devising a value based royalty to use a sales invoice (gross proceeds) based system for most minerals or a net smelter return system. The later reflects the value of the mineral after deducting certain allowed costs (such as the transport costs of the mineral to a third party facility that processes the mineral to a higher valued state and the charges associated with that processing).

If a value based royalty (such as net smelter return) is used, what royalty rate should apply?

This is a difficult question. For marginally economic mines, any royalty may result in them becoming sub-economic leading to closure. For highly profitable mines, a low rate may see the government needlessly forgoing revenue. The key is to achieve a royalty that most mines can bear and still make reasonable profits. The experience of many nations has been that for most minerals a royalty rate of between 2 and 5% of mineral value (gross proceeds or net smelter return) works well. Rates higher than this may over the long run result in lower income tax and royalty yields because fewer new mines will meet minimum rate of return decision criteria and some will not be built (the income tax base will be smaller). Additionally, capital may flow to lower taxing jurisdictions. The draft bill imposes an NSR of 8%, one of the highest value based royalty rates that I have encountered in my work. Is this rate too high? I am unable to offer a firm opinion on that without further study, and the main reason is another feature of the U.S. tax system—the depletion allowance. Very few nations have a depletion allowance for mineral production. Such an allowance is viewed by most nations as a form of negative/reverse royalty and most nations have rejected this concept. In most nations, the concept of a royalty is that payments should be made to government as non-renewable minerals are mined. Conversely, a depletion allowance allows an income tax deduction as non-renewable minerals are mined. Thus, over the life of a mine the impact of a high royalty is offset to some extent by lowering income tax through a depletion allowance (assuming that most mines pay income tax). Even given the depletion allowance there is a strong argument in favor of a royalty rate less than 8%. While tax-

payers with multiple operations may be able to take advantage of depletion allowances in most years because they are taxed on income from all operations, the taxpayer with a single mine will not enjoy the benefits of depletion during the early years of the project when it already has substantial other deductions or when its taxable income falls to zero because of low commodity prices. An 8% gross value type royalty will have a major impact on independent mines. If the U.S.A. did not offer a depletion allowance, I would certainly counsel that a net smelter royalty should be set in the 3 to 5 percent range.

Will a royalty put U.S.A. producers at a disadvantage to producers in other nations?

Any increased cost, such as a royalty, puts a U.S.A. producer in a worse off position to compete. Increased costs may discourage investment into the sector both by U.S. and foreign firms. However, almost all nations have royalty. In my advice to governments, I urge policy makers to take into account the complete tax system when considering a change in any part of it. It is the impact of the tax system as a whole that will determine whether most mines are able to operate profitably, and with sufficient profits to reinvest in new exploration to replace reserves. In extensive studies by myself and by the International Monetary Fund it has been determined that many mineral producing nations impose a fiscal system on mines that results in a total effective tax rate (ETR) in the range of 40 to 50%. ETR is simply the amount of all taxes and fees paid to government divided by before tax profit, calculated over the life of the mine. In my mining fiscal studies for other nations, I typically use a cashflow spreadsheet for one or more model mine and build in all the various taxes and fees and incentives. The model then calculates the ETR and the investor's rate of return. Such models are very useful to assist lawmakers in understanding the impact on a typical mine of various royalty rates in times of high and low commodity prices. They also allow a better understanding of the ways that the tax system works in a holistic way. For example, to what extent does the depletion allowance offset the impacts of a high royalty? To what extent does the ability to deduct a royalty from income subject to income tax affect profits? I don't know if such modeling has been done to assist in setting the proposed 8% rate. If this rate is contentious, I suggest that such modeling may be a useful tool for lawmakers to have so as to understand whether the rate is reasonable. Taken alone without reference to the rest of the tax system, it will be one the world's highest NSR royalties.

Transfer pricing

Transfer pricing is a major and growing concern with regard to royalty, more so than with income tax. The term transfer pricing refers to a practice where the mine product is sold to an affiliated company at a price less than the product would have been sold to an unaffiliated party. It in effect transfers profit from one tax entity to another. If a royalty is based on some measure of sales value (such as an NSR) this is a concern. The industry is consolidating, and sales between affiliated companies is common. In mining laws and agreements that I have recently drafted I strive to reduce the potential for transfer pricing with regard to royalty. For example, I may require special reporting of any sale to an affiliate, with affiliate being defined much more aggressively than in the draft bill (for example a 10% ownership interest test, rather than a just a control test). The bill lacks provisions requiring "arms length sales" practices. Perhaps it is intended that such provisions will be provided in rules, or perhaps this is addressed through provisions in other laws. If not, consideration might be given to adding additional provisions to the royalty section to reduce transfer pricing.

Royalty relief

Minerals prices are notoriously cyclical, more so than the prices for many other goods. The result is that high cost producers may and often do become unprofitable during periods of low prices. Royalty is a cost and if based on value, that cost will be incurred regardless of profitability. More marginal mines will close, perhaps permanently, in low price times because of royalty. This is the nature of the market system—low cost producers survive, high cost producers do not. Some nations provide a statutory means whereby royalty may be waived for a time to allow a mine to stay open during a price downturn. The impact from closing a large mine can be hard on local communities, and can in the long run lessen overall fiscal revenues. The key issues in such a statutory provision are: who has the authority to grant a waiver or deferment, what criteria must be met to qualify, and how long should the waver/deferment be for. In my opinion, such relief should not be offered. When prices turn down, many mines will apply for relief creating an administrative burden and when prices turn back up, pressure will be brought to continue the waiver.

Such royalty relief is becoming less available in other nations and most countries don't allow it.

Concluding remarks

The current mining law is badly out of date. It suffers from a host of problems and among these is that it does not lay the groundwork for "a social licence to operate." By this I mean the acceptance by our society that the mining industry plays a positive role in our well-being. The public perceives the industry as highly polluting, causing a proliferation of abandoned eye-sores, putting workers at high risk, and contributing little to the national or local economy. Today, many communities view a proposed mine not as an engine for economic growth, but an industry that must be kept out of their back yard. The imposition of a royalty, especially one where revenues are earmarked for reclamation and local investment, may help to regain the industry's social licence to operate. Since 1990, over 100 nations have replaced or made major amendments to their mining laws. It is time for the U.S.A. to do the same.

Mr. COSTA. Thank you very much, Mr. Otto, and we will look forward to asking questions that reflect your testimony, and our last witness on this panel but certainly not the least is Mr. Cress who has a great deal of expertise that he brings to the subject matter, and we look forward to your testimony. Please begin.

STATEMENT OF JAMES F. CRESS, ATTORNEY, HOLME ROBERTS & OWENS LLP

Mr. CRESS. Thank you, Mr. Chairman and Members of the Subcommittee. I appreciate the opportunity to appear before you to discuss the important issue of mining royalties.

My background is as a lawyer in private practice. I am a mining lawyer. In my practice, I have negotiated royalties for all kinds of minerals on behalf of mineral companies, and landowners, and I have also got some experience negotiating with foreign governments. So that is where I am coming from on this issue. I would ask that you include my written testimony in the record, but I will just summarize some of the high points.

Mr. COSTA. Without objection, it will obviously be submitted.

Mr. CRESS. Thank you, Mr. Chairman.

One thing that we often hear is a comparison between hardrock minerals and the royalty on coal and oil and gas. I will just take coal as an example. There are significant differences between hardrock minerals and coal that explain why royalties in a different amount can be imposed on them.

Coal is a generally uniform substance that is essentially crushed and sized and sent to market. Metals are highly complex, how they were found in the ground generally in lava flows frozen in rock, if you wish, require extremely difficult methods of processing to extract the metal from the ore, and the difference in the concentration of those metals in the rock makes all kinds of operational difficulties and challenges that a royalty needs to address.

The other thing that is completely different is the commodity markets in which they operate. The western coal mines on which a 12 percent royalty was imposed for surface mining had the ability to contract for long-term contracts, 20 years in some cases or greater. That provided the certainty necessary to build those mines, and in addition to that the leases that were in effect at the time did not have the 12 percent royalty and it was phased in over a period of up to 20 years.

At the same time the economics of transportation improved and the demand for the low sulfur western coal increased, so you might say they dodged a bullet in that sense, and those rich deposits of coal can bear that kind of gross royalty.

Hardrock minerals need to be treated with a little more precision, I would say. A gross royalty is really not a fair measure of the value of the minerals in the Federal lands. Gross royalties can have extreme impacts on the development of a mine and the operation of a mine, and in fact, it can be inconsistent with the principle of sustainable development because once a mine is open and operating, if the price of the commodity dips below what is necessary to keep that mine operating, the mine may close and the rest of that mineral deposit may be lost. So you need a little more nuance in your royalty.

The H.R. 2262 royalty is really a gross royalty. The definition that was incorporated by reference from the tax code is a gross income from mining definition, and it is not truly a net smelter royalty as that term is used in leases and other industry agreements that I have negotiated.

If mining companies do use net smelter return royalties in private negotiations, but you shouldn't leap to the conclusion that that is an appropriate burden for all Federal lands, and the reason for that is the way the industry is structured and also the way that, you know, the task before you, which is to impose one levy on all Federal lands. You need to be able to encourage exploration for hardrock minerals. They are extremely hard to find, even more hard to find in a mature company like the United States, which has been explored. So you need to allow sufficient—put a burden on that is appropriate and that allows for explorationists to go out and find those minerals. They need to be paid too, and they are often paid in the form of an overriding royalty based on production.

So if the government takes too large a share, there will not be any share left, if you will, for the persons who find the minerals that are produced.

I am only aware of a single royalty that is as high as the royalty proposed in the bill, just one in my 20 years of practice. An eight percent gross royalty would really be ruinous, and you should consider a net approach which takes into account the differences between minerals and can be used to impose not too high a burden on any given mineral.

I would be happy to answer any questions that you have. Thank you.

[The prepared statement of Mr. Cress follows:]

Statement of James F. Cress, Holme Roberts & Owen

Mr. Chairman and members of the Subcommittee,

My name is Jim Cress, and I am testifying today as a mining lawyer in private practice on the subject of mining royalties. I am a partner at Holme Roberts & Owen, a 109-year old law firm that represented miners in Colorado in the late 1800's and today represents mining companies around the globe. I have specialized for nearly 20 years in U.S. and international mining law, as well as oil and gas and coal law. I have represented mining companies and landowners in negotiating royalties for gold, silver, copper, coal, uranium, oil and gas and other minerals, and have advised clients on royalty compliance for private, federal and state royalties and severance taxes. In my international practice, I have negotiated royalty and tax sharing agreements with governments from Asia to the Americas. I have taught in

the Graduate Studies program in Natural Resources and Environmental law at the University of Denver Sturm College of Law, am a contributing author to the Rocky Mountain Mineral Law Foundation's American Law of Mining treatise, and am the former Chair of the Mineral Law Section of the Colorado Bar Association. Thank you for the opportunity to appear and speak on the important issue of hardrock mining royalties.

The H.R. 2262 Royalty is a gross royalty, not a "net smelter return," and is not an appropriate measure of fair value for mining on federal lands.

This hearing focuses on the royalty provisions of H.R. 2262. Section 102(a)(1) of H.R. 2262 provides for a royalty of 8 percent of the "net smelter return" from production from federal mining claims. The term "net smelter return" is defined in Section 102(i) as "gross income" as defined in Section 613(c)(1) of the Internal Revenue Code of 1986. This provision is used to define the depletion allowance under the tax code, and was not intended to capture a fair return for minerals mined from federal lands.

Let's call a spade a spade: the H.R. 2262 royalty is a gross royalty, not a net royalty. The use of the term "net smelter return" in the bill is actually misleading, because this royalty is not a "net smelter return" royalty as customarily used in the mining industry.

A customary "net smelter return" royalty in the mining industry permits the deduction of the costs of smelting (and sometimes costs of leaching and other non-smelting processing methods), refining, transportation from the mine to smelter, transportation from refinery to market, as well as deduction of taxes paid to the government and royalties paid to landowners. The deduction of post-mining costs such as smelting and refining is, in fact, the hallmark of this type of royalty (thus the name "net smelter return").

The term "gross income from mining" under Section 613(c)(1) of the Internal Revenue Code is designed to capture the gross value of the mineral after the mining processes end and non-mining processing begin, contrary to the industry definition of "net smelter return." The intent of this provision of the tax code is to prevent mining companies from claiming a depletion allowance on the value added by the non-mining operations such as smelting and refining operations. Thus, the customary deductions for smelting, refining and other costs under an industry "net smelter return" royalty are actually prohibited under Section 613(c)(1). The result is essentially a gross royalty. A gross royalty is a blunt axe approach to royalty valuation that ignores the comparative value of the federal land base and the value added by subsequent beneficiation and processing of mineral products, and makes little sense in the context of hardrock mineral economics.

A gross royalty is not a fair measure of the value of hardrock minerals in federal lands

Any royalty payment to the United States for hardrock minerals should be based on the value of the United States' ownership interest in the land. That interest is limited to the minerals in the ground, and it cannot justifiably be extended to require a royalty to be paid on values added to the minerals after mining, by the mining company processing, refining and selling the mineral products. The United States makes available land, and any minerals in the land for development, but the United States contributes nothing to the costs and effort of producing and processing the minerals.

Gross royalties are inconsistent with the principle of sustainable development. A gross royalty reduces the volume of an ore deposit that can be recovered. Each deposit of metallic minerals will have varying grades of mineral, generally requiring extensive concentration and refining to be marketable. The portion of the deposit with grades too low to be recovered economically is either removed as waste or left undisturbed in the ground. Adding costs such as royalties raises the "cutoff point" between recoverable ore and waste, shortening the life of a mine by causing what otherwise would be valuable minerals below the cutoff point to be lost. These lost reserves generally can never be recovered, because once the mine is reclaimed, it is uneconomic to recover them.

If mining costs can't be deducted, a mining company would have to pay the royalty regardless of how high those costs may be for difficult mining situations or for low grade ores. This would require a mining company to continue paying a royalty even when it is operating at a loss, and that royalty could even cause the loss. No mine can be operated long at a loss. The result would be that some mines would shut down prematurely, creating loss of jobs, federal state and local taxes not paid, and suppliers of goods and services suffer. The result is lost economic vitality affect-

ing both those directly involved in the mining activity and the governmental entities, including the United States, that are sustained by those activities.

Hardrock minerals are different, and should be treated differently than coal and oil and gas

Why should hardrock minerals not be subject to the 8 percent or greater royalty imposed on oil & gas and coal? The dramatically different characteristics of the minerals themselves and the ways in which they are explored for and developed justifies different treatment.

Oil and gas are fluid and usually collect in sedimentary basins. Exploration for oil and gas usually consists of seismic studies to detect the type of structures where oil and gas are found. These studies are conducted at relatively low cost and usually without the need to acquire more than an easement over the property to be explored. When a promising prospect is identified leases are acquired, a well is drilled and core samples, drill stem tests and logs are taken to determine whether the well is successful. The costs of drilling can sometimes be quite high, but a single well can also drain a large area because of the fluid characteristics of oil and gas. Development of a field is usually accomplished through the initial exploratory well and one or more development wells that are drilled in locations reasonably expected, as a result of the information gathered from seismic studies and the initial wells, to draw from the same reservoir. Once a prospect has proved successful, identification of the size and shape of the reservoir can be conducted with relatively low risk and expense.

After extraction, oil must be processed and refined before it is ultimately consumed as vehicle fuel or other product. The royalty on oil produced under federal leases is not based upon the value of these refined products, however; it is measured by the value of the crude oil at the lease or wellhead, prior to such processing and refining. Unlike many other minerals, there is a market for oil in its crude, unrefined state and therefore a ready value for royalty purposes before the value added by refining and processing. Most oil is sold at the wellhead into this crude oil market and that wellhead sales price establishes the value of the oil for federal royalty purposes. Thus, it is somewhat misleading to call the federal royalty on oil a "gross" royalty. Because the royalty is typically based on the value of the crude oil prior to processing and refining, the royalty is, in essence, "net" of those costs.

Similarly, federal royalty on gas is also based upon the value of the gas at the lease. After gas is extracted, often the only thing required for consumption by the ultimate end-user is transportation (the cost of which, if paid by the producer, is deducted before royalties are calculated). Sometimes further processing is required to remove sulfur and separate gasoline, butane and other constituents from the gas. The royalty, however, remains payable on the value of the gas at the lease or wellhead and the processing costs incurred by the producer downstream of the lease are deducted under the federal rules before calculating royalty, to arrive at essentially a "net" value at the lease.

Coal is a solid mineral of generally uniform quality and composition. In the West, where most federal deposits exist, coal beds often consist of vast deposits of great thickness, in Wyoming averaging 80 feet and up to 200 feet. Little exploration for coal is required, and it is relatively easy to determine the quality of the coal and the thickness of a seam prior to mining. The western coal miner thus knows much about the characteristics of the mineral he has to sell prior to actual mining. At the same time, coal mining is an extremely labor and capital-intensive enterprise. Because of the need to construct facilities, obtain equipment, employ workers, and comply with substantial permitting requirements, it can take years to design, permit and construct a mine. For these reasons, coal from federal lands in the West has often been sold under fixed, long-term contracts entered into prior to construction of a mine. Based on the certainty of a market provided by these contracts, the coal miner can lease sufficient reserves to mine over the life of these long-term contracts and make the considerable capital investments required to construct the mine. Additionally, many long term coal contracts and state utility laws allow for the pass through of the royalty burden to the consumer, while no such pass-through is available for many hardrock minerals, which are sold and priced in global markets.

While the 12.5% royalty imposed on coal in 1976 was a considerable increase over the coal royalties typical at the time, the royalty did not take effect for many federal coal leases until they were readjusted, which occurred over a period of 20 years. In the meantime, the demand for low-sulfur western coal boomed due to the increasingly stringent requirements of the Clean Air Act, and transportation costs out of the Powder River Basin decreased, which permitted the large surface coal mines developed in Wyoming during this period to bear the increased royalty burden, which

in any event was generally passed on to utilities (and consumers) under long term coal contracts. The higher-cost coal production in Colorado and North Dakota did not fare as well as Wyoming. Colorado's production initially plummeted, and North Dakota's fared little better, and only because North Dakota mines are associated with mine mouth power plants and because the state made efforts to prop up the industry by lowering taxes and discouraging import of coal from Wyoming. The higher BTU or heating value and low sulfur content of Colorado coal has allowed the market to rebound since that time, and to bear the 8% royalty applicable to Colorado's underground coal deposits (although some Colorado mines have operated under royalty reductions during economic downturns).

In addition, the federal coal royalty regulations permit the deduction of the most material costs, including coal washing where required, and transportation. Thus, the federal coal royalty is not a gross royalty in the strictest sense.

Oil and gas and coal are not the only leasable minerals on federal lands. Sodium, potash, and phosphate are also leasable minerals. These minerals are commonly occurring, low margin industrial and fertilizer minerals the economics of which cannot support a 12.5% or even an 8% royalty. The statutorily established base rate for phosphate is 5% and for sodium and potassium is 2%. That is because the nature of these commodities and the economics around their extracting and marketing differ from oil and gas and coal. In practice, these mines have operated under government-sanctioned reduced royalties during periods when economic conditions and foreign competition threatened to close the mines.

These examples demonstrate clearly why prevailing royalties differ from mineral to mineral. Specific analyses can be made for many other types of minerals. It is clear, however, that application of a gross royalty at a rate of 8% to hardrock minerals simply because that is what is done with coal and oil and gas would be dangerously naive.

Hardrock minerals are, by comparison, scarce and hard to find. Unlike oil and gas and coal, the size and geometry of a hard rock ore deposit, the quality of the ore, the mineral composition, the value of the mineral products, the metallurgical processes required, the mining methods, the commodity prices and the capital costs all vary for each operation. Commercial ore bodies may be found under as little as a few acres of land. Exploration is conducted through exploratory drilling which gives initial clues regarding the deposit, followed by many expensive development drill holes to define a deposit for development. Once a prospect is identified, development commences at considerable cost, with the capital and labor intensiveness of large coal mines, but without the geologic or metallurgical certainty of coal mines nor the economic certainty and incentive of long-term coal sales contracts, which are not customary for most hard rock minerals. The prices of hard rock minerals have historically been subject to great fluctuation. Because hardrock deposits were often concentrated by ancient subsurface magma flows which have been altered by subsequent faulting, the concentration of metals varies considerably over relatively small distances, unlike the relatively constant quality of western coal deposits. As a result, portions of a hardrock deposit may be economic while other portions may contain near- or sub-economic ore that is extremely sensitive to the addition of royalty and other burdens. The combination of price volatility and the variations in the concentration and the chemical and geological characteristics of the minerals within an ore body can turn a profitable mine into valueless rock with a sudden downturn in the market.

Hard rock minerals, therefore, require considerably different approaches to exploration and extraction than do oil and gas and coal. Oil and gas and coal are relatively plentiful, and occur over relatively large areas where found. Hardrock minerals are scarce and occur in small concentrations, and must be discovered by expending considerable money pursuing elusive prospecting clues. The period between exploration and extraction for hard minerals is much more lengthy than with oil and gas or coal, and since hard minerals prices are not stable, the risk of the project becoming uneconomic before production begins is substantial. These factors are some of the reasons that hard rock mining transactions and agreements are considerably different from each other and from those dealing with oil and gas and coal. These factors also weigh in favor of a royalty reduction provision in the bill, so that site-specific determinations can be made to reduce costs and achieve the maximum economic recovery from federal mineral deposits.

While individual royalties for specific commodities would theoretically be the best approach, such a system might be too difficult to administer. The most reasonable approach given the large number of commodities to be covered would be a uniform net royalty that permits deduction of mining and processing costs. The Nevada net proceeds tax provides a model that has been tested in practice, and you should consider a similar approach for federal lands.

If mining companies use net smelter returns in private negotiations, why shouldn't the government follow that approach if it imposes a royalty?

A negotiated royalty between private parties is not analogous to the federal government's imposition of a royalty on millions of acres of unexplored federal lands. Private royalties are negotiated on a case by case basis for each property. Usually, the royalty negotiated depends on what information is known about the property at the time of the negotiation. The less that is known, the lower the royalty.

An 8% gross royalty for lands not proven to contain a mineral deposit is virtually unheard of. I am aware of only one royalty of this magnitude in 20 years of practice. In that case, there was a known ore body containing millions of ounces of gold on the property when the royalty was negotiated and the owner conveyed the mineral rights to the surrounding area (measuring roughly 25 miles by 15 miles), free from any royalty. Clearly, this is not the typical case on unexplored federal land.

Any particular private royalty is not the proper benchmark for setting the federal royalty for tens of millions of acres of federal lands. The purpose of the federal royalty is to encourage exploration and discovery on lands which are not yet proven to contain mineral deposits.

In privately-negotiated royalties, there are almost as many royalty rates and calculations as there are minerals. Each is dependent upon the nature of the product that is produced and sold, customs and practices in the industry, the strength of the market for the particular mineral, the mining cost/processing cost ratio, and many other factors. Use of a net royalty for the federal royalty avoids the need for extensive, mineral-specific legislation. All mines measure net revenues, or profits, and bear determinable operating costs. Therefore, a reasonable percentage net proceeds royalty can be applied and achieve a reasonable return for the use of federal lands, without disproportionate impacts on any particular mineral industry.

In my experience, other countries are paying considerable attention to the appropriate royalty and tax burden to encourage mineral exploration and development. The United States has relatively low grade deposits of many hardrock minerals, relatively high labor costs, and stringent environmental and operating requirements. These must also be balanced in determining whether a royalty is necessary on federal lands. The United States should not impose a royalty without careful consideration of the economic and competitive impacts.

British Columbia's failed experiment with a "net smelter returns" royalty is instructive.

In 1974, British Columbia enacted the Mineral Royalties Act, which imposed royalties on mines located on Crown Lands and the Mineral Land Tax Act and subjected owners of private mineral rights to royalties equivalent to those applied to Crown Lands. The government imposed a net smelter royalty of at 2.5% in 1974, and 5% thereafter.

The results were devastating for British Columbia mineral development. During the period the royalty was in effect, no new mines were developed, several marginal mines ceased operations, and non-fuel mineral output fell, despite increased prices. As a result, revenue collected from royalties on metal mines declined from $28.4 million in 1974 to $15 million in 1975. During the two year period the royalties were in effect, nearly 6,000 mining-related jobs were lost. In 1972, $38 million Canadian was spent on exploration expenditures. In 1975, exploration expenditures fell to $15.3 million Canadian (a 60% decline) while exploration expenditures in the Pacific Northwest—outside British Columbia—increased. New mine exploration and development spending (excluding coal) decreased from an annual average of $131 million in the years 1970-1973 to an estimated $20 million in 1975 (an 85% decline). In 1972, 78,901 new claims were staked. In 1975 the number of new claims staked fell to 11,791 (an 85% decline).

The royalty was repealed in 1976. After the royalty was repealed, BC Mine Minister Tom Waterland said that "[t]he Government's decision to introduce royalties in 1974 was the result of inadequate understanding of the realities of mineral resource development and the economic characteristic of that development.."

I thank the Subcommittee for the opportunity to address this important public lands issue, and I am happy to answer any questions you may have.

Mr. COSTA. Thank you, Mr. Cress, for your testimony.

In your testimony you indicated that you opposed a gross royalty and you take issue as to whether or not the bill as it currently is drafted really creates for a net smelter royalty. I would like you to

be a little more explicit on why you don't believe it holds that definition as a net smelter.

Mr. CRESS. The definition that is incorporated by reference into the bill is Section 613[c][1] of the tax code, which is a definition of gross income from mining. There are a number of deductions that you would see in a net smelter return royalty that are not present in that section. They may appear in other sections of the tax code or in the regulations, but in fact really as a matter of drafting the only section referred to is 613[c][1], which is a two-line section.

Mr. COSTA. This area as it relates to the tax code I am learning about, and as well there is a depletion allowance, is there not, under the current tax code?

Mr. CRESS. There is a depletion allowance, yes.

Mr. COSTA. And doesn't that sort of work like, in effect, a negative royalty that provides breaks that are not there that other countries don't offer?

Mr. CRESS. I am not sure whether we are the only country that has a depletion allowance. It was designed for specific purposes in the tax code, and I guess that is what——

Mr. COSTA. Let me ask your opinion. If the industry, and I know you don't pretend to speak for the industry, but you have a sense of their focus, had a choice between paying a five percent net—a true net smelter royalty or giving up the depletion allowance, which do you think they would choose?

Mr. CRESS. I couldn't say. I haven't polled them.

Mr. COSTA. You don't have a sense of that then?

Mr. CRESS. I am actually not a tax expert.

Mr. COSTA. OK.

Mr. CRESS. My practice is royalties.

Mr. COSTA. All right. I want the record to stipulate you are not a tax expert.

The discussion in the World Bank and—well, I think I don't want to go into that with Mr. Cress.

Mr. Otto, you talked about different royalties and what works best for government and taxpayers without putting industry out of business. In your testimony you talked about gross income versus net smelter royalties as being relatively straightforward to calculate, but you note that the gross income type of royalties pose fewer opportunities for tax minimization strategies. I don't know whether or not you are a tax expert or not as the previous witness indicated he was not, but which are typically seen as net profit royalties, and to respond to the point that was made earlier, do you think the definition of this bill really provides for a net smelter royalty?

Mr. OTTO. Absolutely not. A net smelter royalty as the term is used around the world by industry and most governments reflects where the mineral is taken for further processing, smelting, refining, and in that process certain costs are involved, and in a net smelter royalty the cost of the smelting and refining are deducted from the value of the mineral. Oftentimes insurance and freight to that smelter and refinery are also deducted.

In the definition that is in the current bill and its relationship to the Income Tax Act, it is just a straight gross proceeds. There is no deductions for that smelting and refining.

Mr. COSTA. And so you heard my opening comments about I generally think simple is better both from the standpoint of the government to provide the auditing necessary to get a fair amount. What side do you fall on in terms of what would be preferential, in your opinion?

Mr. OTTO. I think a royalty that is based on a carefully defined definition of gross sales value is preferable over most other systems.

Mr. COSTA. All right. We will go back to another round. I will defer to the gentleman from New Mexico for five minutes of questioning.

Mr. PEARCE. Thank you, Mr. Chairman. I was checking each other over. We had those high-Ranking Members come in, I felt like Darth Vader and Obi-Wan Kenobi were shooting lasers back and forth, and I don't think one of us got holes through us, so that worked out pretty well.

Mr. COSTA. We are fine.

Mr. PEARCE. Back into the regular committee hearing now, so that is good.

One of the comments that the Chairman of the full committee made is that the gloom and doom forecast for the coal mining industry, when they did the reforms, did not come about, and yet when I look on page 12 of the hearing from July 25, Wednesday, July 25 of this year, Mr. Duncan says that in 1978, there were 157 small coal mines in the east coal mining companies and east Tennessee, and now there is zero. One hundred and fifty-seven to zero seems like a significant decrease, and the coal mining production in east Tennessee or the whole State of Tennessee is 25 percent of what it was, and have been for many years.

So at least in the case of the one circumstance that is reflected in the hearing testimony, Mr. Duncan claims that significant gloom and doom did actually occur, based on what something caused a difference in the industry. Again, I think that is what we are here to discern, and I think both sides should figure out how we can do reform without creating a competitive disadvantage for the country.

So, Mr. Cress, if we look at what actions government agencies can cause, not necessarily just in this country, but economically, if the British Columbia's mining industry tell us a little bit about the super royalties they imposed in the 1970s. Again, I think your testimony says the eight percent royalty is kind of unprecedented. So ours might be equivalent to the super royalty of British Columbia, and maybe even exceed that. Let us learn from somebody else's experience. If you can share with us what happened there.

Mr. CRESS. Thank you, Congressman. I would be happy to do so.

British Columbia imposed a net smelter return royalty of 2.5 percent, increasing to five percent after a year or so in the early seventies, and that system was only in effect for a few years because the result in fact was fairly devastating. Revenue collected from royalties on metal mines declined from 28.4 million in 1974 to 15 million in 1975. Exploration expenditures also decreased from 38 million in 1972 to 15.3 million in 1975, and exploration is necessary to find those new mines, and new mine and exploration development also

decreased from an annual average of 131 million in the years 1970 to 1973, to 20 million in 1975.

This ill-advised experiment was repealed in 1976, and I think it is instructive that even with a relatively modest burden of a royalty, nowhere near the eight percent number, even if it was a net smelter number that is being discussed here, there were significant impacts on mineral exploration and production.

Mr. PEARCE. So with considerably less effect than the eight percent that is being recommended under the Rahall bill, would you say a 50 percent decline is accurate? In other words, we are just thinking the kind of bigger numbers up here. Is that a 50 percent decline that you——

Mr. CRESS. It was a significant decline, yes.

Mr. PEARCE. OK.

Mr. CRESS. And 85 percent decline actually in mine development expenditures.

Mr. PEARCE. Mr. Lazzari, you mention on page 3 of your testimony that—you are describing under R.C. 613[c]——

Mr. LAZZARI. Yes.

Mr. PEARCE.—that you describe the depletion allowance as a subsidy available to the mining industry.

Mr. LAZZARI. Yes.

Mr. PEARCE. Would you describe for me the difference. In other words, I was in business, and we had equipment. We had large trucks, large pumps, and the IRS allowed us to depreciate it. In other words, the IRS recognized that if you buy an asset, it begins to be worth less value over a period of time, and just part of accounting convention in order to reflect reality that the investment is worth less 10 years from now than it was today. So if they allowed the depreciation in the mines for every rock like this you take out, the mine is worth someone less. In other words, it depletes.

And so can you tell me exactly how that is perceived as a subsidy? I think that is the word you used in your testimony.

Mr. LAZZARI. Yes. Yes, that is a good question. I would be happy to.

Well, just like equipment, depletion is very similar to depreciation for equipment. But in the case of equipment, the depreciation is based on the cost, the actual investment of the equipment. In the case of percentage depletion allowance, the deduction is not based on the actual investment in the asset as it is for equipment, but in fact is a percentage of gross income, which is essentially sales revenue from the mine at the mine mouth before any manufacturing or non-mining processes can take place.

So you get to deduct the same percentage every year regardless of your investment, which means that total deductions over time can exceed your actual investment in the mine as compared to the case you mentioned, which is the depreciation for equipment, and the subsidy value is in the excess which the Joint Tax Committee computes and calculates every year the excess of percentage depletion allowance over cost depletion, which would be based on your actual investment and computed annually based on the output from the mine.

Mr. PEARCE. Thank you, Mr. Chairman. I see my time as lapsed. I have other questions if you——

Mr. COSTA. That is OK. We will come for a second round.

The gentleman from New Mexico, Mr. Udall, recognized for five minutes.

Mr. UDALL. Thank you, Mr. Chairman.

One of you, I think it was Mr. Otto, said that a royalty is basically a usage fee that is paid by industry, and as we know with regard to this industry, the hardrock mining industry, it doesn't pay anything, and so we are trying to get to something. I understand the Chairman and the Ranking Member in this Subcommittee are trying to get to a usage fee that is simple and that is a significant usage fee because the incomes being dedicated or the revenue that comes in from the fee is dedicated to a substantial problem of these abandoned mines.

So isn't the principle to try to, whatever you call it, make it very simple in terms of what you are trying to achieve rather than go through long lists of deductions and end up, and in no way am I picking on Nevada, my good friend, Mr. Heller, over here. But Nevada has what is called a net profit royalty, and in 2006, for Nevada gold and silver mines, they paid a net proceeds tax of just $61 million on a production worth $5.1 billion.

So would you all comment on that on how you get, maybe start, Mr. Lazzari, with you. How do you get to something that is simple, that achieves the objective of a reasonable usage fee, and yet at the same time try to make sure that it is not so complicated and burdensome to industry? Thank you.

Mr. LAZZARI. Yes, that is a very good question also, and economics can't really tell us what the level of the royalty or the rate of the royalty should be, and it is very important to take all the considerations into account because we don't want to have an adverse effect domestically or internationally. So it can't really tell us what the rate should be beyond basically using the market as a guideline.

As far as simplicity and the other aspects, it is just basically the fact that economic theory suggests that the royalty should be based on value is an important consideration in terms of promoting efficiency and resource use, which basically means balancing industry concerns with the way resources are allocated efficiently throughout the rest of the economy, not just in the industry.

Now, simplicity in administrative issues are also important and it seems like this bill, without recommending it, is consistent with that principle in that an administrative apparatus for compliance and administering the royalty would already be in effect if it is based on gross income as defined in the current tax law, because in fact the tax law defines gross income as value as close as possible to the mine mouth before non-mining processes are taken into account. So it seems like administratively you already have a system in place.

The IRS has administered the system, the courts have made rulings, and in fact there is also a Supreme Court ruling to that effect.

Mr. UDALL. So you end up having a number of rules that have already been tested and they are settled, and you are not going to have a lot of disputes is what you are saying.

Mr. LAZZARI. Well, you are not going to eliminate disputes. You are always going to have disputes, but a lot of it has already been settled

Mr. UDALL. A lot of it has already been settled and you have a certainty level.

Mr. LAZZARI. You have guidelines for each specific mineral on how to define gross income from mining

Mr. UDALL. Yes.

Mr. LAZZARI. I.e., value, they have that

Mr. UDALL. Yes. And Mr. Otto, you were nodding.

Mr. OTTO. I concur with you. Go with any type of tax system that allows adjustment to the tax basis to account for costs. The number of interpretations about what qualifies or doesn't qualify as a deductible cost is going to be higher than if it is just based on some measure of income without cost adjustment

Mr. UDALL. Thank you.

Mr. COSTA. All right, thank you, the gentleman from New Mexico.

In order of those who first came to the Subcommittee this afternoon, Mr. Heller, the gentleman from Nevada.

Mr. HELLER. Thank you, and I appreciate the panel being here today. I just had a couple of questions.

First of all, Mr. Cress, you said there was one royalty above what is being submitted in this particular bill. What royalty was that?

Mr. CRESS. That is the gold quarry royalty of Newmont Mining. That royalty was negotiated as part of a package deal, if you will, where the company acquired several million ounces of gold that were actually known on the property, and lands of, I think, a 25-by-15-mile ranch with mineral rights that would not bear a royalty, and that is kind of an example of how you are mixing apples and oranges, I think, when you focus on any one given example.

If you knew there were 2 million ounces of gold under a property, you would obviously pay more.

Mr. HELLER. Right.

Mr. CRESS. So that is that example.

Mr. HELLER. Mr. Udall pointed out the fact that Nevada gets about $60 million a year in net proceed at five percent, and you have spoken a lot but you haven't talked about the impact that a gross royalty would have potentially on states. Can you tell us what impact, revenue impact this particular bill would have for state revenues, on state revenues as it is written?

Mr. CRESS. I am sorry. Are you addressing that question to me?

Mr. HELLER. Yes, I am.

Mr. CRESS. Oh, thank you. I think states collect their own piece of the pie, if you will, and any system, any royalty system is going to have to take that into account, so you could end up with decreasing the severance tax base for the State of Nevada, for example, if that is going to be deducted, if the payments are going to be deductible from—the Federal royalty payments are going to be deductible from the severance tax, so you are really just transferring money from one account into another.

Again, the overall burden, if it is too high, is going to have the effect of shutting down the mines. It will be uneconomic. So you are

making a policy choice to use some of the money to fund the abandoned mine problem, but at the expense of the people of Nevada.

Mr. HELLER. Thank you. Mr. Otto, you are the accountant here. I guess that has been decided or determined anyway.

Effective tax rates, you talk about that in your written testimony. Have you done an analysis on what the effective tax rate may be currently here in the United States on mines?

Mr. OTTO. During the 1990s, a lot of countries began reforming their mining laws and tax laws, and I was with the United Nations at that point, and we started getting a lot of requests for information on this, and I went into academia shortly thereafter and launched an effort to produce a global comparison of mining tax systems around the world, and we included in those studies that were published in 1997 and in 2000, taking a look at a gold mine in Nevada and a copper mine in Arizona, and using those model mines we applied the tax system for not only those two states but countries all around the world.

The findings in 2000, and things have changed since 2000, were that the effective tax rate, the combined impact of all the various taxes to be applied to the industry were around 50 percent in both of those states, putting them in the range of being competitive but kind of in the middle, not too high, not too low, pretty much in a competitive position to attract domestic and foreign investment.

That study hasn't been updated since 2000, though, and we have seen some governments lowering their tax systems quite considerably in terms of income tax, withholding taxes. We have also seen some increases in other countries with regard to in a position of higher royalty rates.

Mr. HELLER. What do you think an eight percent gross royalty would have, in effect, on a tax rate?

Mr. OTTO. If you were to take a look at just the royalty alone without consideration of any other taxes, it would certainly be the highest ad valorem type royalty in the world in terms of all minerals as a whole. We can see some exceptions. In Poland, you have 10 percent on gold, and on diamonds you have higher rates in some countries. There are a few exceptions, but once you get above about five percent most countries have had the experience, they see a very great decline in levels of exploration taking place. So you may see a short-term increase in tax revenue, but over the longer term the tax base become smaller because you have fewer mines that can meet their minimum rate of return for investment decision-making.

Mr. HELLER. Thank you. Mr. Chairman, I yield back.

Mr. COSTA. Thank the gentleman from Nevada.

Mr. Chairman, want to yield the balance of your time? I have some questions I want to ask.

Mr. RAHALL. I have no questions.

Mr. COSTA. All right. Thank you very much.

Mr. Lazzari, you may be aware that last week the Inspector General of the Department of the Interior found that the royalty collection program administered by the Minerals Management Service is fairly flawed which, I guess, for some of us doesn't come necessarily as news; that it is mismanaged and that as a result the public is losing millions of dollars in royalties and gas revenues.

I guess my question is as we try to structure something responsive, something simple, something that doesn't repeat the mistakes that some of us believe exists within the Minerals Management Service, how do we avoid the major administrative factors into the decisions of establishing a royalty in this effort here, a better system, learning from mistakes that have previously been made? What would you advise the committee?

Mr. LAZZARI. I am not familiar with the details of the Inspector General's report and really it is beyond my area of expertise as an economist, except to say that we have heard about the administrative problems, you know, tracking, reporting and collection problems, and they have been going on for a long time.

To some extent, these types of problems are inevitable. They are going to occur regardless of the type of royalty you have, and the idea is to try to minimize those kinds of collection system problems and administrative problems as much as possible, but I would just have to say again based on economic theory there is no real—that problem, so far as I know, has no direct bearing on the theoretical advantages of the ad valorem royalty, and the practical or administrative advantages of the ad valorem royalty based on the gross income as defined in the tax law.

Mr. COSTA. Mr. Otto, you have testified at length about what might work better or what is fair, and it seems to me that, based on the capacity of the administrative agency, on the surface it appears that it would suggest that a value-based may be better. What is your sense?

Mr. OTTO. I generally advise for most countries, and I think for the U.S. also that a sales price-based royalty is the easiest to administer that also takes into account the fact that minerals prices are cyclical. So as the value of minerals goes up or down, the amount of royalty that is paid is going to go up and down because the sales value will change, so it is two percent of sales value. Unit-based royalties don't have this attribute, and royalty systems that have deductibility for some types of costs have many administrative problems.

Mr. COSTA. Well, then to be a little more specific, you have advocated that simpler is better, which is kind of my opening statement as well, and if I were to advise the Chairman, who is here, to stick with a net smelter type but watch for the definition that was pointed out by one of the witnesses that maybe this doesn't completely fall under the definition of a net smelter based upon the draft, that maybe we lower the rate below eight percent.

Mr. Otto, from your book in 2006, that you said most jurisdictions with profit-base systems will assess at a rate of in excess of five percent. Given the special depletion allowance that the U.S. Tax Code offers, might a profit-based royalty say of 10 percent be reasonable in order to bring a fair rate of return?

I mean, at some point we are going to be negotiating these numbers, and I guess I am trying to get a sense from you based upon your 2006 book in terms of what is going on around the world what would be fair and competitive.

Mr. OTTO. In providing tax reform advice to other governments, they almost all take the same approach. They take a look at the system as a complete whole, and so what is the offsetting advan-

tages from the depletion allowances as compared to the penalties imposed through a royalty, and they would take a look at how those two would offset each other, and I just haven't done that for the United States, and I am not aware of any other government outside of Egypt and the Philippines that allows depletions, so I just don't have enough experience.

Mr. COSTA. I understood there were just a few. If I submit that in the form of a written question, I would like you to give it a little more thought, and to respond, please. Will you do that?

Mr. OTTO. It would take quite a bit of analysis so I can't commit to that.

Mr. COSTA. You will try? You will try?

Mr. PEARCE. Mr. Chairman, he wants you to pay for the time.

Mr. COSTA. I guess. I get that sense.

[Laughter.]

Mr. COSTA. No pro bono work here. Not Italian, huh?

All right. My time has expired clearly, and are we with the gentleman from Idaho?

Mr. SALI. Thank you, Mr. Chairman.

Mr. Lazzari, have you ever been involved in any mining yourself?

Mr. LAZZARI. No.

Mr. SALI. You just have experience as an economist?

Mr. LAZZARI. I am an economist, yes.

Mr. SALI. OK.

Mr. LAZZARI. I was a business economist in Michigan before my experience here at CRS, a corporate economist, but no, I have never had any direct experience in mining.

Mr. SALI. Mr. Otto, you indicated a few minutes ago that the effective tax rate when you take into account all the taxes, and I think you had two subjects you were looking at, Arizona and Nevada, if I understand correctly, of about 50 percent. If we impose the royalty as it is structured in the bill we are talking about today, would that effectively take that tax rate to 58 percent? It would just add another eight percent on top of that?

Mr. OTTO. No. It gets a little more complicated because royalties are deductible for the purposes of computing income tax, for example, so it would be probably less than 58 percent, but it could also influence other factors in the calculation of the total tax basis. So it would be less than 58 most probably.

Mr. SALI. It would take more of that work that you weren't willing to do for the Chairman of this Subcommittee, is that right?

[Laughter.]

Mr. SALI. OK. Well, I guess I am trying to figure out.

Mr. OTTO. Any mineral economist can work these numbers out. It is not a complex assignment.

Mr. SALI. Well, I am trying to figure out with the description we had of what happened in Canada when the royalties were imposed, and trying to balance what might be a fair amount, what might be a simple amount, but making sure that we aren't going to end up killing the goose that is laying the golden egg, if you were going to advise, and recognize this might require some of that work you are not willing to do, but if you were going to advise the members of the committee how should we approach this to make sure that our mining industry does stay healthy and viable, and we don't re-

duce exploration dollars, where should we end up with a royalty rate? What would be fair and healthy for the economy and healthy for the mining industry?

Mr. OTTO. I think if we take a look at the industry simply a little bit round-about, and I apologize for that. If we take a look at the mining industry, it is under a lot of pressure right now about getting access so that it can mine, the social license to operate that I was talking about. It is perceived that it is not contributing to our society, and one of the principal criticisms of the industry is we don't get anything out of this. Where is the royalty? Everybody else gets royalty. We don't get royalty. And I think a lot of people in the industry wouldn't mind seeing a reasonable royalty, particularly if it is earmarked for the types of purposes as in the current bill here, for community impact, mitigation, for reclamation purposes, but you don't want to have a situation where when the company sits down and it calculates the economics on its mine it finds that it is not meeting its minimum rate of return, its hurtle rate, it is not meeting that return that it needs in order to move ahead with investment.

So for a typical mine in the United States, how much can you add on and it will still be economic for that mine to go ahead?

Now, for most countries that have a typical tax system, they have from experience found that it is probably on the order to two, three, four, five percent for most minerals on a sales-based royalty. Every tax system is a little different and so that is why in answering that question I can't say two percent for the U.S. or three percent for the U.S. No matter what royalty is, it will make some mines become sub-economic.

Mr. SALI. You would agree with me that what is proposed in this bill is not going to get the job done in a way that will keep the mining industry healthy, is that correct?

Mr. OTTO. I think an eight percent is excessive. Whether it should be four percent or six percent, I——

Mr. SALI. This would take some more of that work that you——

Mr. OTTO. It would take more work. I can give you another example. Jim Cress gave you the example of British Columbia. Papua New Guinea, a major mineral-producing country, produces copper and gold. They had a royalty of two percent. They raised their royalty, they put an additional royalty in place of around three percent, took it up to five percent, and exploration collapsed. They repealed it. Exploration started coming back up. So there is a point where when companies do their assessments of the tax systems, they say even if we find something, we can't make profits to develop it. Where that point is for the U.S., I can't say.

Mr. SALI. Thank you.

Mr. COSTA. The gentleman's time has expired.

Mr. Otto, I am not so sure we are just getting you future billable hours in your consulting career or not, but I am going to try again here.

[Laughter.]

Mr. COSTA. You have indicated, and you have heard Mr. Cress's concerns about the definition of net smelter, and I raised that a moment ago, in the legislation before us. Let us say we want to clarify that and make it easy so that we have the appropriate for

hardrock minerals that include a limited number of logical deductions for transportation and for refining.

Is there, from your experience and world knowledge, a definition of a net smelter return on hardrock minerals elsewhere? Number one.

Number two, and this one I dare say I will ask, would you work with the committee to propose a clearer definition?

Mr. OTTO. If you are interested in good definitions, there are quite a few out there that could be applied to the U.S. example. I have the legislation from the——

Mr. COSTA. Buy the book.

Mr. OTTO.—countries in here. Eighteen dollars.

[Laughter.]

Mr. COSTA. I got that.

Mr. OTTO. There is a CD in the back, and if you take a look at say the definitions for determining value in Papua New Guinea, they have a sales value definition and they have a net smelter return definition. A lot of minerals aren't smelted and aren't refined.

Mr. COSTA. Correct.

Mr. OTTO. So to use that smelter for all minerals is a bit awkward. But in answer to your question, if the committee would like information on other types of definitions or other approaches to definitions than we see in the Income Tax Act, yes, I could provide information.

Mr. COSTA. All right. I am going to defer the balance of my time to the gentleman from Texas, who has been very patient.

Mr. GOHMERT. Well, thank you. It might be a shock too that I have been patient, but I appreciate your kindness. Thank you very much, Mr. Chairman.

I just have a couple of observations and questions, but when I hear the term "economist", I can't help but think of that great quote from John Kenneth Galbraith about there are only two kinds of economists. There are those who don't know, and there are those that don't know they don't know. But anyway whether he was right or wrong or whether we can tax that opinion is a different question. But I am still trying to gather facts and come to some conclusion.

One thing that would help me though is to know, and I throw this out for all three, is there any nation in the world where it is more difficult or time consuming to get an application processed and approved than the United States and any nation where it is any more difficult to meet environmental requirements? So I throw that out for observations from all three of you, actually.

Mr. CRESS. I will field that question. I think the United States, the permitting times for new mines in the United States are probably among the highest in the world because we have our environmental laws that we have here. One effect of that royalty-wise is that during a period of seven to 10 years when you are trying to get an operation permitted, the mineral commodity cycle, the price of that mineral is going to vary considerably so an investment decision that made sense five years ago may not make sense, and that is one of the competitive disadvantages that we have here even though environmental protection is obviously important and critical, but those times are a problem.

Mr. GOHMERT. I would be curious to hear from either one of you. Mr. Lazzari, you have made obviously a great deal of study of the matter, and I do appreciate what CRS does to educate us around here.

Mr. LAZZARI. Thank you. I don't have a comment on that. That is kind of beyond my area of expertise. I don't really know.

Mr. GOHMERT. OK. Mr. Otto?

Mr. OTTO. Oftentimes the perception is that our permitting processes here take a lot longer than elsewhere. If we take a look at most of Europe though, I think we would find that the system here works in the end, where in many European countries' companies won't even attempt to begin that process.

There is a study that has been done to take a look at how long it takes to get through the permitting process, to get through all the approvals. It was done by a very competent Australian, Richard Shodie, and in his studies he shows that the time that it takes to get a mine permitted in the United States is actually less than in many other places.

Now, when I say permitting, it is not just environmental permitting in other countries. It can be the negotiation of an agreement to take a deposit into production. So he takes a look at how long it takes from the time that the company has made a decision that it wants to proceed with the mine until the mine starts producing, and that time period, he has gone in, he has looked at hundreds of mines and taken the data from it, and his conclusion is that the U.S. is not out of line with what is generally encountered in most countries around the world.

I can provide a copy of that study to the committee if it desires.

Mr. GOHMERT. That would be helpful.

Mr. Chairman, I was wondering if I might ask indulgence just to ask one quick question further of all three witnesses because I really am trying to get educated on this?

Mr. RAHALL. [Presiding.] Yes.

Mr. GOHMERT. You all actually obviously have various areas of expertise and experience. I am just curious. What would each of you say is the best way for the U.S. Government to raise revenue from mining? Just a very short answer. What is the best way you have seen, all things considered, for each of you?

Mr. LAZZARI. Well, if I can go first. I can't really say as an economist what the best way is. That is a policy question. The way I see it though in terms of economic theory it is not really a question of revenue per se. It is more a question of the allocation of resources. Just like I said earlier, you have wages that are paid for labor services.

Mr. GOHMERT. I understand all the considerations.

Mr. LAZZARI. It is not a revenue consideration per se.

Mr. GOHMERT. OK. Then whatever you say, want to call it, to get money from the process of mining to pay for what the Federal government does to allow the mining. Just whatever process you want to call it, getting income from that.

Mr. LAZZARI. Well, as I said earlier, economic theory suggests that the most economically efficient approach is a royalty based on value, the ad valorem royalty.

Mr. GOHMERT. OK.

Mr. LAZZARI. OK.

Mr. GOHMERT. Thank you. If I can get a quick answer from everybody else.

Mr. CRESS. I guess I would come out in favor of a net royalty that allows for deduction of mining and processing costs because when you are applying it to that many minerals and with a huge land base, that is going to, I think, result in continued development and not be too burdensome or too high.

I differ, I guess, with Professor Otto in one respect, which is, I think metals are just more complicated than coal, so a gross system, while simpler and hard to administer in some countries that lack the capacity, I think could be administered here.

Mr. GOHMERT. But bottom line net royalty?

Mr. CRESS. Bottom line would be net royalty.

Mr. GOHMERT. Mr. Chairman, you have been very gracious with his allowance of time, but if you could give me a quick answer.

Mr. OTTO. I would focus not so much on trying to impose a new tax or fiddle with the existing rates on existing taxes, but rather to provide incentives to the industry to encourage more exploration. Small incentives don't cost very much at the exploration stage.

Mr. GOHMERT. So we pay others to do the mining? I mean, that is what incentives sounds like. I am talking about how do we raise it.

Mr. OTTO. To give you an example, some countries allow a double deduction for exploration expenses so that if you invest a dollar in exploration, you get two dollars in the future deducted.

Mr. GOHMERT. Right. Deducting from what though? That presupposes there is some kind of tax or revenue source, right? So what would that tax revenue source be?

Mr. OTTO. Either a deduction from current revenue, because a lot of companies have multiple mines, or a deduction against future revenues that could be carried forward.

Mr. GOHMERT. Well, you are talking about deductions. I am talking about what are you deducting it from. Is that a tax, a royalty, ad valorem?

Mr. OTTO. From the income tax.

Mr. GOHMERT. OK, thank you. Thank you, Mr. Chairman.

Mr. COSTA. Yes. I would just suggest to the gentleman from Texas that it is my sense that the gentleman from West Virginia doesn't want this bill to go to Ways and Means. So as we focus on how we reach this middle ground, and of course I don't presuppose to speak for the gentleman from West Virginia, but my guess is he doesn't want to go to Ways and Means.

We will recognize the gentleman from New Mexico for this last bit of questioning, and then we will switch to the next panel, but we do appreciate all of your testimony.

Mr. PEARCE. Thank you, Mr. Chairman. I would just guess that everybody thinks it is a little bit complex to do the net smelter computation, that we could just subcontract that out to the State of Nevada and they could do it if they aren't already doing it for their own program right now.

Also, Mr. Chairman, it is unfortunate that you came here. I was going to suggest that while the Chairman of the full committee is here that maybe if the Chairman would consider buying all those

books for everybody on the committee, 50 books, then we might get better and deeper answers. We would be paying more for that time from Mr. Otto there, so I would recommend that.

I would say, Mr. Chairman, you put together a great panel. I think if we locked these three guys in a room with committee members, I think that we could drive toward a solution that would be productive, that would be fair for the industry, and fair for the Nation without being punitive, and I do believe that.

I am just going to ask one question. Mr. Lazzari, we have heard kind of concern from both members that the eight percent might be excessive, that it might be the highest in the country. Do you have an opinion about the eight percent?

Mr. LAZZARI. I do not have an opinion about the eight percent, no.

Mr. PEARCE. Do you want to say? You just don't want to go on record at all because now we got——

Mr. LAZZARI. No, because I cannot say. That is not something that comes out of economic theory. That is more of an empirical and policy question, so I cannot. No. That is right.

Mr. PEARCE. OK. Is there ever a possibility in economic theory that a royalty rate would get so high as to cause undue distress and exiting out of, is that theoretically possible that would get high enough?

Mr. LAZZARI. Absolutely. Yes.

Mr. PEARCE. OK.

Mr. LAZZARI. That is correct.

Mr. PEARCE. But you don't have an opinion that we are approaching that at the eight percent level?

Mr. LAZZARI. No.

Mr. PEARCE. OK. I appreciate that, Mr. Chairman. I will yield back the rest, and we will submit the other questions in writing. Appreciate it, and again, I really compliment you. This panel has been very good at reaching, I think, the balance that we are looking for. Thanks.

Mr. COSTA. Thank you very much the gentleman from New Mexico, and we do appreciate the witnesses' testimony, and obviously this will be revisited, and I guess I will have to go out and buy the book myself.

Our next panel, please. As I mentioned, members of the committee, as our next panel of witnesses are getting comfortable, this is going to be the other focus of the bill before us—that is, it gets to the balancing act. As Congressman Rahall's bill is before us, once there is an agreement between the various parties and the Senate and the House on what is a fair rate of return, that purpose, of course, is in fact because these are on public lands. But the other part of the purpose is because we have a significant problem with abandoned mines throughout the country, and as some of us know, from our own experiences either within our areas or within our states, states are attempting to focus on it. They are not ignoring it. There is an issue as it relates to health and safety, as it relates to water quality, and therefore I think it would benefit all of us to hear the testimony of this second panel as they attempt to describe the size of the problem of abandoned mines throughout the country. My terminology is how big is this breadbox that we

are describing, and therefore is there a way that you prioritize. Is the Federal government through the Bureau of Land Management doing all that it should be doing? And just as importantly, are they collaborating with states? Because states are a lot closer to this issue, and local governments are too, they oftentimes are the first to have to deal with it.

With that said, we will begin with our next round of witnesses. The first witness before us is Mr. Jim Hanlon. He is the Director of the Office of Wastewater Management from the United States Environmental Protection Agency.

Mr. Hanlon, you know the rules, the five-minute rule, and all that good stuff.

Mr. HANLON. Yes, thank you.

Mr. COSTA. So take it away. You don't need any instructions, sir.

Mr. HANLON. Not today.

Mr. COSTA. OK, very good.

STATEMENT OF JIM HANLON, DIRECTOR OF THE OFFICE OF WASTEWATER MANAGEMENT, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. HANLON. Good afternoon, Mr. Chairman and Members of the Subcommittee. I am Jim Hanlon, Director of the Office of Wastewater Management in the Office of Water at EPA. Thank you for the opportunity to discuss an important issue facing the United States—impaired watersheds and legacy impacts from abandoned mines.

Inactive or abandoned mine sites can pose serious public safety and environmental hazards. The good news is that there are significant resources available through voluntary efforts to remediate these sites and improve environmental health and safety.

Unfortunately, as a result of unavoidable legal obstacles, we have been unable to take full advantage of the opportunities to promote cooperative conservation through partnerships that will restore and enhance abandoned mine sites throughout the United States.

According to estimates, there are over half a million abandoned mines nationwide, most of which are former hardrock mines located in the western states, which are among the largest sources of pollution, degrading water quality in the United States. Acid mine drainage from those abandoned mines have polluted thousands of miles of streams and rivers as well as groundwater, posing serious risks to human health, wildlife, and the environment.

This problem can affect local economies by threatening drinking water and the agricultural water supplies, increasing water treatment costs, and limiting fishing and recreational opportunities.

Mine drainage and runoff problems can be extremely complex and solutions are often highly specific. In many cases, the parties responsible for the pollution and cleanup of these mines no longer exist. However, over the years an increasing number of Good Samaritans, who are not responsible for the pollution, have stepped forward on a voluntary basis to clean up these mines. Through their efforts, we can restore watersheds and improve water quality.

The threat of liability, whether under the Clean Water Act or the Comprehensive Environmental Response Compensation and Liability Act, CERCLA, can be a real impediment to voluntary remedi-

ation. A private party cleaning up a release of a hazardous substance might become liable as either an operator of the site or as an arranger for the disposal of hazardous substances.

Under the Clean Water Act, a party may be obligated to obtain a discharge permit which requires compliance with water quality standards in streams that may already be in violation for those pollutants. The potential assignment of liability occurs even though the party performing the cleanup did not create the conditions causing or contributing to the degradation. Removing this liability threat under both CERCLA and the Clean Water Act will encourage more Good Samaritans to restore watersheds impacted by acid mine drainage.

Let me emphasize, however, that encouraging Good Samaritan cleanups is not about lowering environmental standards or letting polluters off the hook. Good Samaritans should be held to a realistic standard that results in environmental improvements, and those responsible for the pollution, if still in existence, will remain accountable, consistent with the agency's "polluter pays" policy.

In June of this year, EPA Administrator Steve Johnson released administrative tools that provide strong protections for Good Samaritans under CERCLA. Our administrative tools do much under CERCLA to remove road blocks, but we can only go so far administratively. In addition to the administrative tools, the administration in EPA proposed the Good Samaritan Cleanup Watershed Act in the last Congress that comprehensively reduced the Good Samaritan liability issues. That legislation, as you probably know, would modify both CERCLA and the Clean Water Act.

With the release of our administrative tools, however, and our desire to accelerate the pace of environmental improvement, EPA continues to work with a broad range of stakeholders, including the Western Governors Association and others, to develop a bipartisan legislative proposal for the Clean Water Act, which remains the main obstacle to Good Samaritan cleanups.

We applaud the bipartisan legislative efforts in both Houses of Congress to correct the issue, and we look forward to working with the appropriate congressional committees on this legislation. In the interim, EPA will continue to facilitate cleanup of abandoned mines through use of its administrative tools and authorities.

In conclusion, we hope the Good Samaritan initiative will be a good springboard for future successes such as those achieved through the Brownfields Program, which legislation passed in 2002. But unlike the situation in Brownfields, Good Samaritans of abandoned mines are not looking to purchase the property or receive monetary award for their efforts. They simply want to engage in voluntary stewardship activities that benefit the environment.

The bottom line is that this type of innovative partnership agreement, coupled with targeted watershed grants and other assistance, can help dramatically in revitalizing thousands of water bodies harmed by acid mine runoff.

A comprehensive solution to the problem associated with abandoned mine remediation is long overdue. EPA is actively working with Congress and our partners at the state and local levels to create a long-term solution to encourage and expedite Good Samaritan cleanups. EPA will continue to provide leadership through the

Good Samaritan initiative and to work with our Federal land management agencies, states, and the Congress to pass legislation for the Clean Water Act that promotes and encourages environmental restoration and restoration of abandoned mines across the country.

That concludes my oral statement, and look forward to any questions.

[The prepared statement of Mr. Hanlon follows:]

Statement of James A. Hanlon, Director of the Office of Wastewater Management, U.S. Environmental Protection Agency

Good Morning Mr. Chairman and Members of the Subcommittee, I am James A. Hanlon, Director of the Office of Wastewater Management at the United States Environmental Protection Agency (EPA). Thank you for the opportunity to discuss an important issue facing the United States—impaired watersheds and legacy impacts from abandoned mines.

The Abandoned Mine Problem

Inactive or abandoned mine sites can pose serious public safety and environmental hazards. The good news is that there are significant resources available through voluntary efforts to remediate these sites and improve environmental health and safety. Unfortunately, as a result of avoidable legal obstacles, we have been unable to take full advantage of opportunities to promote cooperative conservation through partnerships that will restore and enhance abandoned mine sites throughout the United States.

According to estimates, there are over half a million abandoned mines nationwide, most of which are former hardrock mines located in the western states, which are among the largest sources of pollution degrading water quality in the United States. Acid mine drainage from these abandoned mines has polluted thousands of miles of streams and rivers, as well as ground water, posing serious risks to human health, wildlife, and the environment. This problem can affect local economies by threatening drinking and agricultural water supplies, increasing water treatment costs, and limiting fishing and recreational opportunities.

The Center of the American West at the University of Colorado, Boulder developed and published a report entitled, "Cleaning Up Abandoned Hardrock Mines in the West—Prospecting for a Better Future," for which EPA provided financial assistance. However, the report does not represent formal EPA policy. The report details the history of the nation's mining industry, the environmental legacy that remains, and describes challenges and management options—at the Federal, State and local level—in reducing the effects of inactive and abandoned mines.

Mine drainage and runoff problems can be extremely complex and solutions are often highly site specific. In many cases, the parties responsible for the pollution and clean up of these mines no longer exist. However, over the years, an increasing number of Good Samaritans, who are not responsible for the pollution, have stepped forward on a voluntary basis to clean up these mines. Through their efforts, we can help restore watersheds and improve water quality.

Liability

The threat of liability, whether under the Clean Water Act or the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), can be a real impediment to voluntary remediation. A private party cleaning up a release of hazardous substances might become liable as either an operator of the site, or as an arranger for disposal of the hazardous substances. Under the Clean Water Act, a party may be obligated to obtain a discharge permit which requires compliance with water quality standards in streams that are already in violation of these standards. The potential assignment of liability occurs even though the party performing the cleanup did not create the conditions causing or contributing to the degradation. Removing this liability threat will encourage more Good Samaritans to restore watersheds impacted by acid mine drainage.

The Clean Water Act requires permit holders to comply with their permits so discharges do not violate water quality standards. While this concept has been extremely effective for protecting and restoring our Nation's waters, it inhibits the type of work Good Samaritans would undertake. Partial cleanups by Good Samaritans will result in meaningful environmental improvements and will accelerate achieving water quality standards. Yet, in many cases, the impacted water bodies may never fully meet water quality standards, regardless of how much cleanup or remediation is done.

By holding Good Samaritans accountable to the same cleanup standards as polluters or requiring strict compliance with the highest water quality standards, we have created a strong disincentive to voluntary cleanups. Unfortunately, this has resulted in the perfect being the enemy of the good. Another concern for potential Good Samaritans is their potential liability for any remaining discharges at the abandoned mine site. The ability for a Good Samaritan to go onto a site, do a clean up to improve the quality of a discharge, and then leave the site after completing what they said they were going to do without long term liability, is not possible under current law. A statutory change for the Clean Water Act is necessary to provide these protections and to be realistic and fair to a volunteer agreeing to improve water quality. By removing this threat of liability, we will encourage more voluntary and collaborative efforts to restore watersheds impacted by acid mine drainage.

Let me emphasize, however, encouraging Good Samaritan cleanups is not about lowering environmental standards or letting polluters off the hook. Good Samaritans should be held to a realistic standard that results in environmental improvements and to be held accountable while they have a permit. And those responsible for the pollution, if still in existence, will remain accountable, consistent with the Agency's "polluter pays" policy.

Good Samaritan Tools

In June of this year, EPA Administrator Steve Johnson released administrative tools that provide strong protections for Good Samaritans under CERCLA. The Agency developed a model Good Samaritan Agreement and comfort/ status letter that can be used to provide greater legal certainty to a volunteer while also providing adequate assurances to the Agency that a cleanup will be performed properly. We are also working closely with our Federal land management agencies and State partners to encourage, where appropriate, greater use of voluntary cleanup programs for abandoned mine remediation. In addition, we are developing guidance that will help Good Samaritans understand our approach to these cleanups. Our administrative tools do much under CERCLA to remove roadblocks, but we can only go so far administratively.

Legislative Efforts

In addition to the administrative tools, the Administration and EPA proposed The Good Samaritan Clean Watershed act in the last Congress to comprehensively reduce the Good Samaritan liability issues. That legislation, as you probably know, would modify both CERCLA and the Clean Water Act. With the release of our administrative tools, and our desire to accelerate the pace of environmental improvement, EPA continues to work with a broad range of stakeholders including the Western Governors' Association, and others, to develop a bipartisan legislative proposal for the Clean Water Act which remains the main obstacle to Good Samaritan cleanups. In fact, there are many cleanups in the State of Colorado that remain on hold and unfinished, not because of CERCLA liability concerns, but because of Clean Water Act liability concerns.

We applaud the bipartisan legislative efforts in both houses of Congress to correct the issue, and we look forward to working with the appropriate Congressional committees on legislation. In the interim, and until such time as Good Samaritan legislation is enacted, EPA will continue to encourage and facilitate clean up of abandon mines through use of its administrative tools and authorities.

Good Samaritan Activities

The first project under the Agency's Good Samaritan Initiative is the abandoned mine in Utah's American Fork Canyon. We are working with Trout Unlimited (TU) and a private landowner who had not caused the pollution at the site. This project will help restore a watershed that has been impacted for well over a century, restoring the water quality and the habitat of a rare cutthroat trout species. Restoration of the American Fork is part of an ambitious multi-year effort by Trout Unlimited to draw attention to the problem of abandoned mines in the western United States while also identifying solutions. EPA has learned from the experience of the Trout Unlimited project and is putting those lessons to good use. This restoration effort exemplifies how cooperative conservation, emphasizing collaboration over confrontation, can accelerate environmental protection.

Mine scarred lands are a particular concern of the EPA Brownfields Program and they were explicitly highlighted in the Brownfields Law passed in 2002. The Brownfields Program has coordinated a multi-agency collaborative initiative to help communities clean up and reuse mine-scarred lands. The federal partners are implementing six community pilots in Virginia, Pennsylvania, West Virginia, Colorado and Nevada. The pilot communities received targeted federal technical and financial

support; initially to help develop action plans and then to create local assistance packages leading to revitalization.

Conclusion

We hope the Good Samaritan initiative will be a springboard for future successes, such as those achieved through the Brownfields program. But unlike the situation with Brownfields, Good Samaritans at abandoned mine sites are not looking to purchase the property or receive monetary awards for their efforts—they simply want to engage in voluntary stewardship activities that benefit the environment.

The bottom line is that this type of innovative partnership agreement—coupled with targeted watershed grants and other assistance—can help dramatically in revitalizing thousands of water bodies harmed by acid mine runoff.

A comprehensive solution to the problem associated with abandoned mine remediation is long overdue. EPA is actively working with Congress and our partners at the State and local levels to create a long-term solution to encourage and expedite Good Samaritan cleanups. EPA will continue to provide leadership through the Good Samaritan Initiative and to work with our Federal land management agencies, States and Congress to pass legislation for the Clean Water Act that promotes and encourages environmental restoration of abandon mine sites across the country.

Mr. COSTA. Thank you very much, and we look forward to getting back to you, and we appreciate the collaboration there as well.

Our next witness is Tony Ferguson, who is the Director of Minerals and Geology Management for the United States Department of Forest Service. Mr. Ferguson.

STATEMENT OF TONY L. FERGUSON, DIRECTOR OF MINERALS AND GEOLOGY MANAGEMENT, U.S. FOREST SERVICE

Mr. FERGUSON. Thank you. Good afternoon, Mr. Chairman and Members of the Subcommittee. Thanks for the opportunity to testify on the hardrock abandoned mine land reclamation program. I am pleased to be here with you today.

This year, the Forest Service and the Bureau of Land Management are celebrating 10 years of hardrock abandoned mine land program success. With your permission, Mr. Chairman, I would like to submit for the record a copy of the joint Forest Service and BLM publication describing the successes we have had reclaiming the abandoned mine lands over the last decade.

Mr. COSTA. Without objection, it is submitted for the record, and I believe we each have a copy.

[NOTE: "Abandoned Mine Lands: A Decade of Progress Reclaiming Hardrock Mines" prepared by the Bureau of Land Management and U.S. Forest Service has been retained in the Committee's official files.]

Mr. FERGUSON. The Forest Service and the BLM——

Mr. COSTA. We didn't have to pay for this one.

Mr. FERGUSON. Well, it depends on your perspective.

[Laughter.]

Mr. COSTA. I am sorry. I didn't mean to interrupt your testimony. Please, I will give you back your time.

Mr. FERGUSON. The Forest Service and the BLM, using data compiled by the Bureau of Mines in 1995, estimates that approximately 38,500 abandoned mine sites are on National Forest System lands, and 65,000 abandoned mines site are on BLM lands. An estimated 20 to 30 percent of the abandoned mine lands on the Forest Service and BLM lands have dangerous human safety hazards and as many as 10 percent may be releasing toxic heavy metals, acidity, and radioactivity into rivers, lakes and streams.

In 1994, an interagency task force was formed to develop a watershed approach for the cleanup of hardrock mines on public lands. The goals of the watershed approach are to foster coordination and collaboration across Federal and state agencies, facilitate solutions to address mixed ownership issues on sites, address important problem sites first and reduce cost through fund leveraging and avoiding duplication of efforts.

The momentum of the interagency task force led to the Forest Service and the BLM launching formal AML programs in 1997. Two top priority watersheds were selected as pilot projects for remediation—the Animas River watershed in Colorado and the Boulder River watershed in Montana. A third top priority pilot, Cottonwood Wash in Utah, was selected in 1998. I would like to highlight the Animas River watershed as an example of the success of the pilot projects.

The Animas River watershed reaches across 186 square miles of Colorado's San Juan Mountains. Over the years, the impacts of contaminants including aluminum, cadmium, copper, iron, lead, and zinc emanating from historic mines and natural sources became environmentally and economically visible with acidity levels in the water rising to levels that impair many fisheries and leave some streams devoid of fish.

Communities within the watershed have a long history of mining that dates back to the late 1800s. These communities are in the process of transitioning from a mining economy to one based on tourism and recreation, and reclamation of these historic sites is an important part of that effort. The Animas River stakeholders group was formed to assist the communities in their efforts to address the environmental impacts of mining within the Animas watershed. Approximately 15 mining remediation projects had been successfully completed within the Animas River watershed. The community is now reaping the benefits of these cleanup efforts, including overall increased water quality and two successfully reproducing species of trout in the watershed. This, in turn, is beginning to entice more visitors to seek recreation opportunities in the area.

Building on their existing AML inventories, the BLM and Forest Service can develop better program planning and prioritization of sites for reclamation.

Again with your permission, Mr. Chairman, I would like to submit a copy of BLM's strategic plan for the abandoned mine land program for the record.

Mr. COSTA. Without objection.

[NOTE: The strategic plan submitted for the record has been retained in the Committee's official files.]

Mr. FERGUSON. In an effort to coordinate AML activities, the BLM has embarked on an effort to develop a National Mine Land Inventory that will show AML and all mine sites locations on Federal lands. Additionally, the Forest Service is in the process of putting its regional AML data into a national database, making it available for land use planning and other resource management activities.

Past partnerships show that collaboration and coordination result in more efficient use of limited funding. Future AML site successes depend on initiating and building long-term relationships

with local individuals and organizations that are in tune with the local wildlife, traditional culture and character of the community.

With many years of experience cleaning up mining sites, the Forest Service and BLM know that the greatest savings in cleanup costs comes from technological improvements. To bring these technological advancements to bear on public lands, both agencies must partner with others in training and technical assistance. The next 10 years will certainly bring new and cost-effective tools to AML reclamation.

With the current estimates of AML sites on the public lands, reclamation will not be completed in the near term. Preventing future AML sites is also a crucial goal of any land management agencies' AML program. Sustainable mining practices, environmentally protective mining closure planning, optimal permitting requirements and financial assurances are all tools that land management agencies are using to encourage mining companies to operate under a sustainable business model that follows a mine's life from start up to clean closure.

Thank you for this opportunity, and I will be happy to answer any questions.

[The prepared statement of Mr. Ferguson follows:]

Statement of Tony L. Ferguson, Director of Minerals & Geology Management, National Forest System, U.S. Forest Service, U.S. Department of Agriculture

Mr. Chairman and members of the Subcommittee, thank you for the opportunity to testify on the hardrock Abandoned Mine Land (AML) reclamation program. I am pleased to be here with you today.

This year, the Forest Service and the Bureau of Land Management (BLM) are celebrating 10 years of hardrock abandoned mine lands program success. The BLM and Forest Service hardrock AML programs operate to improve the quality of public lands through similar missions:

- To mitigate hazards present at abandoned mines;
- To restore watersheds for natural resources; and
- To protect public health and safety, recreation, fish and wildlife.

Over the last decade, both agencies' hardrock AML programs have grown and matured through the dedicated effort of many people.

Scope of AML Issues on Federal Land

The Forest Service and the BLM, using data compiled by the Bureau of Mines in 1995, estimated that approximately 38,500 abandoned mine sites are on National Forest System (NFS) land and 65,000 abandoned mines sites are on BLM. A mine site consists of one or more mine features, such as human-made objects or disturbances associated with mining activities. These mine features include shafts or adits (vertical or horizontal opening), tailings, waste rock, machinery and facilities.

An estimated 20 to 30 percent of the abandoned mine sites on Forest Service and BLM lands have dangerous human safety hazards and as many as 10 percent may be releasing toxic heavy metals, acidity and radioactivity into rivers, lakes and streams. The Forest Service has estimated that approximately 2,500 mines would require cleanup of hazardous substances and more than 22,500 would require mitigation of non-hazardous pollution and safety hazards. Since the late 1990's, the Forest Service has inventoried 20,000 sites, mitigated more than 2,000 safety hazards and cleaned up hazardous substances at more than 400 sites, with hazardous substance cleanup at another 150 sites in progress.

The BLM AML reclamation program supports core BLM programs by addressing degraded water quality, hazardous materials, and other environmental impacts on or affecting lands administered by the BLM, and mitigating physical safety hazards of abandoned mine sites on public lands. Between 2000 and 2007, the BLM has inventoried 5,500 sites and remediated physical safety hazards at more than 3,000 sites. The BLM also restored water quality at over 280 sites through FY 2003 and on more than 3,000 acres between 2004 and 2007.

The BLM and Forest Service efforts to clean up abandoned mine lands have many worthwhile outcomes. Visitors to public lands are better protected from health and safety hazards, and neighboring communities enjoy cleaner water. Onsite soil and water quality is often returned to pre-mining conditions resulting in restored habitat for plants and wildlife. Significant cultural and historic resources are preserved.

Inventory of Abandoned Mine Sites

At the time the BLM and Forest Service began to address AML reclamation, the sheer number of abandoned mining sites across the United States was daunting, with estimates ranging from tens of thousands to hundreds of thousands. In the early 1990s, the BLM and Forest Service began to inventory abandoned mine sites, focusing on hardrock and non-coal abandoned mines. This inventory built on data previously compiled by other governmental agencies, including the U.S. Bureau of Mines and the U.S. Geological Survey (USGS).

Inventory work performed by the Forest Service, the BLM and State agencies has varied among agencies and over time. The Forest Service is in the process of putting the regional inventory data into a national database. The BLM is developing a national mine lands inventory that will show AML and mine site locations on all Federal lands. States with access to Surface Mining Control and Reclamation Act (SMCRA) funds and those with pilot watershed reclamation projects have more comprehensive inventories. Some discrepancies between various inventories are a result of the protocols used to develop them. Inventories are dynamic and continue to be refined, supplemented and amended.

Prioritization of Sites

Each year Forest Service national priority project lists for the out year budget are developed from projects submitted by the National Forest Regions. Projects are prioritized for funding by a team using the Choosing By Advantages (CBA) method, which ranks projects by various criteria including benefits to human health and safety, environmental protections, public/private partnerships and public interest. Funding is allocated directly to the projects in order of their priority.

In March 2006, the BLM released its Cooperative Conservation Based Strategic Plan for its AML program. The plan sets out both a national strategy and state-specific multi-year work plan. More specifically, the plan identifies priority watersheds and high-use areas where AML funds will be directed through FY 2013 given current funding levels. State-specific plans were developed in consultation with the BLM's Federal and State partners.

Cleanup of Abandoned Mine Sites

In 1994, an interagency task force was formed consisting of Federal land management agencies, including the BLM, Forest Service, National Park Service and Department of the Interior (DOI) science bureaus, including USGS and the former Bureau of Mines. This task force worked closely with the Environmental Protection Agency (EPA) to develop a "watershed approach" for the cleanup of hardrock mines on public lands. The goals of the watershed approach are to foster coordination and collaboration across Federal and State agencies, facilitate solutions to address mixed ownership issues on sites, address important problem sites first and reduce costs through fund leveraging and avoiding duplication of efforts.

The Forest Service and the BLM launched formal AML programs in 1997. Two top priority watersheds were selected as pilot projects for remediation: the Animas River watershed in Colorado and the Boulder River watershed in Montana. A third top priority pilot, Cottonwood Wash in Utah, was selected in 1998. I'd like to highlight the Animas River watershed as an example of the success of the pilot projects.

Animas River Watershed, Colorado

The Animas River Watershed reaches across 186 square miles of Colorado's San Juan Mountains. Communities within the watershed have a long history of mining that dates back to the late 1800s. Over the years, the impacts of contaminants including aluminum, cadmium, copper, iron, lead, and zinc emanating from historic mines and natural sources became environmentally and economically visible with acidity levels in the water rising to levels that impair many fisheries and leave some streams devoid of fish.

The communities are in the process of transitioning from a mining economy to one based on tourism and recreation, and reclamation of these historic sites is an important part of that effort. Approximately 50 mining remediation projects have been successfully completed within the Animas River watershed, eight are underway and plans are ongoing for 40 additional projects. Of the completed projects, remediation activities for 19 priority sites have been completed with the mining companies addressing approximately one-half, Federal land management agencies addressing ap-

proximately one-quarter, and the Animas River Stakeholders Group addressing approximately one-quarter of the activities.

The community is now reaping the benefits of these cleanup efforts, including overall increased water quality and two successfully reproducing species of trout in the watershed. This, in turn, is beginning to entice more visitors to seek recreation opportunities in the area. As the community continues to work together to address the remaining sites, a collaborative initiative among six federal agencies is helping to revitalize a two-mile stretch of the Animas River corridor through Silverton, recognizing the community's value on tourism as it promotes aesthetic and quality-of-life improvements to the area.

The positive outcomes of early AML partnerships and commitment to reclamation efforts in the pilot watersheds resulted in Federal funds that were specifically directed at AML programs. Since then the BLM and Forest Service have continued to fund the cleanup of abandoned hardrock mines using a variety of approaches designed to meet multiple objectives, including addressing physical safety hazards as well as hazardous substances and non-hazardous sources of pollution and contamination. The following are examples of successful AML reclamation projects on National Forest System lands.

Stibnite Mine (near Yellowpine, Idaho), Payette NF, Valley County, Idaho

The Stibnite Mine site is mixed ownership of Forest Service and private. The Forest Service, EPA and the State of Idaho worked closely and cooperatively on reclaiming and remediating the mine site through a Memorandum of Understanding. Remediation began in the late 1990's and included stabilization of a large mill tailings pile in and around Meadow Creek, stabilization of the Meadow Creek diversion, design of a new channel through the tailings area and placing Meadow Creek into the new channel, and shaping and revegetating the spent ore pile. Much of this work was completed by Mobil Oil Corp. The Forest Service completed the clean up of tons of trash and abandoned equipment as well as covering and capping ponds from a cyanide leach pilot test plant. The State of Idaho removed milling facilities and chemicals located on the private lands.

Garnet Dike Mine, Sierra NF, Fresno County, California

The Garnet Dike Mine is located in the Kings River Special Management Area of the Sierra National Forest. This is an area of the wild and scenic portion of the Kings River. This cleanup project included removal of explosives, installation of two bat-friendly gates, foam closures of a shaft and adit, and two wire-rope warning fences with signs on a 40 ft. diameter daylighted slope. This was the first phase of an on-going project that will include removal of structures, debris and abandoned equipment in future years. The cleanup completed has provided for improved public safety and protection of critical bat habitat.

El Portal Barite Mine, Sierra NF, Mariposa County, California

The El Portal Mine site is located on the Sierra NF near Yosemite National Park. During the mid 1990s the Forest Service completed a CERCLA removal action at this mine site to address heavy metal contamination. In 2005, additional work was completed to improve public safety, protect bat habitat and allow continued bat occupancy of mining features. The project included installing bat-friendly angle iron gates at two adits and foam closures at another adit and tunnel portal. Yosemite National Park personnel played an integral role in assisting the Forest with this project. One of their administrative sites was made available for a staging area; they assisted with traffic control, made a forklift and operator available and provided other logistical support.

Champion Mine, Umpqua NF, near Cottage Grove, Oregon

The Champion Mine cleanup project in Lane County, Oregon was completed by the Forest Service in 2006. Project work included the removal of waste rock, diesel and heavy oil contamination, treatment of acid mine drainage and encapsulation of hazardous mill tailings. These actions will reduce or eliminate contaminants in Champion Creek which is a tributary to Row River and Dorena Reservoir, a source of drinking water for the City of Cottage Grove, Oregon.

Red River Area, Questa, New Mexico

The Red River area has had a history of mining but has now successfully transitioned to a tourism economy based on skiing and other recreational activities. The Forest Service helped promote this new economic base by ensuring the safety of Federal Lands. We worked closely with the State, EPA, U.S. Fish and Wildlife Service, Trout Unlimited and the ski resort owners to improve the safety of the area by consolidating contamination from abandoned mine sites into a single, capped re-

pository. One of these sites was situated upstream of the City of Red River's water system. Other activities included closing exposed adits, minimizing erosion and stabilizing slopes.

Current Sources of Funding

The Forest Service addresses AML reclamation primarily through two programs.

The Environmental Compliance and Protection (ECAP) program provides for cleanup of hazardous materials and restoration of natural resources damaged by hazardous materials at abandoned mines on NFS lands. ECAP cleanups are typically done to comply with CERCLA (Comprehensive Environmental Response, Compensation and Liability Act), RCRA (Resource Conservation and Recovery Act) and CWA (Clean Water Act) requirements.

The Abandoned Mine Lands (AML) program provides for non-CERCLA related cleanup (uncontaminated sediment, erosion), and mitigation of safety hazards at abandoned and/or inactive mines on NFS lands. The AML program is also responsible for the basic inventory of abandoned mines on NFS Lands.

In addition, the Forest Service also receives funds from the USDA hazardous material management account (HMMA). The USDA has also received approximately $300 million in funding or work from potentially responsible parties (PRPs) since 1995. The majority of these funds were recovered from PRPs on NFS Lands.

Current funding for the AML program for the BLM comes from several sources, including the Soil, Water and Air program and the Department of the Interior's Central Hazardous Materials Fund. The BLM receives approximately $12-14 million for the AML program each year. Finally, receipts from land sales around the Las Vegas area under the Southern Nevada Public Lands Management Act have provided additional funds for local AML projects.

Additional funds and/or support come from partnering with State and Federal agencies on mine cleanups and safety mitigation. In some cases, particularly for states that receive SMCRA (Surface Mining Coal and Reclamation Act) reclamation funds, cleanup of abandoned mine safety hazards is usually a joint effort.

More recently, partnerships have been developed with groups such as Trout Unlimited, Bat Conservation International and Tiffany and Company to successfully complete cleanup efforts. By forming partnerships during the reclamation process, project stakeholders collectively maximize and pool resources that would not have been readily available if only one entity was involved.

Looking to the Future

Building on their existing AML inventories, the BLM and Forest Service can develop better program planning and prioritization of sites for reclamation. Additional data collection is necessary to ensure that all sites that pose significant health and safety threats are prioritized appropriately. In an effort to coordinate AML activities, the BLM has embarked on an effort to develop a National Mine Lands Inventory that will show AML and all mine site locations on Federal land. Additionally, the Forest Service is in the process of putting its regional AML data into a national database, making it available for land use planning and other resource management activities.

Past partnerships show that collaboration and coordination result in more efficient use of limited funding. Looking to private sector, academia and nonprofit alliances will tap new capabilities in technology transfer, funding sources and knowledge management. Future AML site successes depend on initiating and building long-term relationships with local individuals and organizations that are in tune with the local wildlife, traditional culture and character of the community.

With many years of experience cleaning up mining sites, the Forest Service and BLM know that the greatest savings in cleanup costs come from technology improvements. To bring these technology advancements to bear on public lands, both agencies must partner with others in training and technical assistance. The next 10 years will certainly bring new and cost-effective tools to AML reclamation.

With the current estimates of AML sites on public lands in the hundreds of thousands, reclamation will not be completed in the near term. Preventing future AML sites is also a crucial goal of any land management agency's AML program. Sustainable mining practices, environmentally protective mine closure planning, optimal permitting requirements and financial assurances are all tools that land management agencies are using to encourage mining companies to operate under a sustainable business model that follows a mine's life from startup to clean closure.

Mr. Chairman, thank you for the opportunity to talk about the hardrock Abandoned Mine Lands program. I would be happy to answer any questions.

[The response to questions submitted for the record by the U.S. Forest Service follows:]

October 17, 2007

The Honorable Jim Costa, Chairman
Subcommittee on Energy and Natural Resources
Committee on Natural Resources
United States House of Representatives
1626 Longworth House Office Building
Washington, DC 20515-5255

Dear Chairman Costa:

Enclosed please find responses to the questions for the record submitted by the Subcommittee on Energy and Natural Resources of the House Committee on Natural Resources from the October 2, 2007, hearing on H.R. 2262, "The Hardrock Mining and Reclamation Act of 2007."

1. You testified that the Bureau of Land Management is developing a "National Mine Lands Inventory," and the Forest Service is in the process of putting regional inventory data into a national database.

1a. Are the two agencies using similar site prioritization systems?

Descriptions of CERCLA and non-CERCLA cleanup projects, including the costs and benefits of each, are submitted by the Forest Service Regional Offices two years prior to the desired implementation date. Because the number of projects always exceeds the available funding, they are prioritized for funding by a team of Washington Office and Regional Office representatives using the Choosing by Advantages (CBA) methodology. In the CBA process all proposed projects are evaluated and assigned scores based on potential benefits to:

- Human health and safety;
- Environmental factors such as water quality;
- Economic and social factors including partnerships, public interest and overall cost.

The projects are then ranked on the basis of their scores and funded as money becomes available through the budget process.

Safety Mitigation Projects are prioritized at the regional level and submitted to the National Office for funding. Criteria used for prioritizing safety mitigation projects are based on the severity of the hazard and accessibility to the public including:

- Sites where a death, injury or close call has occurred;
- Sites where complaints or concerns have been expressed by the public or others;
- Sites nearby developed recreation sites or other concentrations of people;
- Sites accessed by, or near forest roads or trails;
- Other sites based on the severity of the hazard and accessibility to the public.

Unlike cleanup projects, each region can only receive up to a certain percentage of the national budget. This percentage is mutually agreed upon by the Regions, and is based on the number of abandoned mines in the region and the degree of public exposure risk.

The BLM has similar criteria for its AML water quality projects and physical safety hazard sites. The criteria are in the BLM's strategic plan submitted to the committee for the record. The BLM field organization applies the criteria to prioritize their sites within project descriptions entered into the Bureau's Budget Planning System for each fiscal year. Then, AML program leads from the BLM State Offices and Headquarters collaborate on funding allocations. Like the Forest Service, funding requests exceed available dollars. In order to complete ongoing projects only about 10-20 percent of a given year's available allocation are available for new projects.

1b. A Decade of Progress estimates that there are approximately 47,000 sites identified on BLM and FS Lands, but, we have also heard estimates closer to 100,000. Please explain the basis of each estimate; what percent of each inventory is based on field surveys as opposed to old mineral records?

The 47,000 figure reflects the number of records currently contained in the BLM (12,000) database and a Forest Service estimate of total sites (35,000) made based on mineral records collected by the former USDI Bureau of Mines (BOM) and recorded in the Mining Availability System/Mineral Indicator Location System (MAS/MILS) database. Records in MAS/MILS in the mid 1990's for both BLM and FS ad-

ministered lands showed approximately 100,000 abandoned mines (65,000 and 39,000 for BLM and FS respectively). BLM and FS field surveys have only been done on a small percentage of the estimated sites

MAS/MILS data were based on information in published reports and maps, and to some extent from private and public sources and included data on abandoned coal mines. Data in MAS/MILS were not field verified, but there was some attempt by the BOM over the years from the 1960's to the 1990's to clean up obvious location errors. Management of the MAS/MILS database was taken over by the U.S. Geological Survey when the BOM was disbanded in the mid 1990's.

MAS/MILS data remain the most comprehensive basis for estimates of total AML sites on federal lands. BLM and FS field surveys have only been done on a small percentage of the estimated sites. BLM and FS inventory efforts during the 1990s and continuing to the present are focused on identifying those AML sites which pose the greatest threat to human health and the environment and scheduling them for cleanup, rather than simply adding to the known inventory.

1c. When was the last time the Forest Service did inventory work?

Inventory for the purpose of refining the estimate of total AML sites was de-emphasized by the FS in the 1997-1998 period when the focus shifted to identifying sites which pose the greatest threat to human health and the environment and scheduling them for cleanup. Some basic inventory continues where there are known gaps in data, and in response to discovery of sites by the public and work crews involved in cleanup of priority sites.

1d. The northwest mining association testified that we probably do not need to develop another AML inventory-that we know enough already. Does the forest service agree? Are there some areas, or States, where you think there are significant gaps in our understanding of the abandoned mine land problem?

The FS agrees with this assessment to an extent. Our main focus is currently on assessing the relative risk to human health and the environment posed by known sites, and prioritizing them to receive available funding. This does not mean that all inventory effort should be discontinued. Some basic inventory must continue where there are known gaps in data, and in response to discovery of additional sites by the FS personnel and the public, and in populated paces and high use areas.

1e. Please detail how the Forest Service coordinates with States on inventory compilation and management, and on reclamation prioritization and projects.

The FS Regions coordinated with most States during the inventory phase of the AML Program by using data from State AML inventories, or by the use of MAS/MILS data which was often the basis of State AML inventories. The FS is currently developing a national AML database which will be used among other things, to track any continuing discovery of AML sites and cleanup status of known sites. Once this national database is complete the FS will be able to share data regarding the presence, priority and cleanup status of AML sites with States, other federal agencies and the public. In addition, we understand that the Department of the Interior (DOI)'s Office of Inspector General has identified the need for the BLM to undertake some additional inventory work in populated and high-use areas. We suggest contacting the BLM for additional information.

Coordination with States on reclamation priority and projects varies depending on the State involved and the type of cleanup project.

The FS works closely on AML safety hazard mitigation with States such as Colorado, Utah and Montana which have abandoned mine reclamation programs funded under Title IV of the Surface Mining Control and Reclamation Act (SMCRA). These funds allow States to work on hardrock mines once they have certified that priority coal reclamation has been completed. In Colorado for example the FS provides funds to the State for safety project planning and execution on FS Lands. Coordination with States like Idaho and California that do not have access to SMCRA reclamation funds occurs to a lesser extent through sharing of information and project planning.

Coordination with States on environmental cleanup projects is encouraged through the use of project selection criteria which rewards State/federal partnerships and evidence of State priorities such as work within a State priority watershed or water quality limited stream or waterbody.

Formal partnerships or agreements exist where cleanup involves mixed ownership sites that include private or State lands.

The BLM AML Program coordinates with State governments and other entities via the AML Program Lead in each of the eleven AML States. In addition to the

on-the-ground risk criteria, the BLM recognizes partnership arrangements as high priority opportunities.

1f. How do your inventories and site prioritization process incorporate growing residential and recreational growth in and near areas with abandoned mines?

For environmental cleanups, the FS project selection process includes a measure of how much public exposure to contaminants exist at a given site. Sites with such exposure are assigned a higher priority. This exposure may result from growing residential, or from public use of campsites, roads or trails.

For safety cleanups, the FS allocates a greater percentage of the national budget to Regions with abandoned mines that are near population centers. For example Regions 2 and 5 receive the highest percentage of the national budget due to the number of abandoned mines near population centers in Colorado and California respectively.

The BLM AML Program's inventory methodology incorporates growing residential and recreational access areas with a focus on populated places and high use areas.

2. Please help the Subcommittee better understand the potential costs of hardrock abandoned mine reclamation on public lands.

2a. What are the cost estimates for reclaiming hardrock abandoned mines on Forest Service land? On BLM land? Do those estimates include superfund sites? Please break down the estimates by State, if possible. Do those figures include restoration, or just remediation?

The FS allocates funding by Region, and does not have a break down of cost estimates by State. Funding by Region for the last 5 years is presented below.

In 1994, the FS estimated that will cost approximately $2.1 billion and $2.3 billion dollars respectively to cleanup hazardous substances and mitigated safety hazards at abandoned mines on FS Lands. Using a simple inflation multiplier based on the consumer price index the 1994 estimate would be approximately $5.55 billion dollars in 2007 dollars. It should be stressed that these are very rough approximations at best since the actual number of abandoned mines and the extent of cleanup that will be required is unknown.

To date, the Forest Service has spent $180 to $200 million dollars of USDA and FS funds on abandoned mine environmental cleanup and safety mitigation from 1998 to 2008. This is a net figure and does not include overhead and indirect costs. Exact figures are not available since historic records do not separate environmental cleanups at FS facilities from abandoned mines.

Finally records show that nearly $300 million dollars of work or funding has been provided by potentially responsible parties (PRP) at abandoned mine sites.

For the most part FS cleanup and safety mitigation work would be described as remediation rather than restoration. The primary focus is on eliminating or minimizing the environmental or safety threats present rather than fully restoring land and water to pre-mining conditions.

Based on the BLM's AML Program's Strategic Plan, the BLM projects needs of approximately $130,000,000 for AML projects scheduled through FY 2012, which does not represents all of the

AML work that needs to be done on BLM lands in the years beyond 2012. The work currently identified includes a wide variety of cleanup solutions, for example: mitigation with signs and fences, complete closure or removal of physical safety hazards, bat gating, restoration of streambeds, and removal of hazardous materials to repositories. Most of these projects are medium size sites and do not include several special situations, such as the Kelly Mine/Rand Mining District in California. This is a large, potentially high-cost CERCLA site

The following are cost estimates spelled out, State by State, in the BLM's AML Strategic Plan:

Arizona	$ 7,928,000
California	$ 35,090,000
Colorado	$ 7,139,000
Idaho	$ 4,215,000
Montana	$ 6,318,000
Nevada	$ 17,837,000
New Mexico	$ 470,000
Oregon	$ 3,566,000
Utah	$ 45,065,000
Wyoming	$ 2,477,000
Total	$130,105,000

2b. How does total annual funding for reclamation compare to the total need?

Relying solely on a FS budget of $15 million dollars annually in direct project work, it would take 370 years to complete the estimated $5.55 (2007 dollars) billion dollars of cleanup and safety mitigation work. If we assume that USDA and PRP funding remains constant at rate of roughly $35 million dollars (based on 10 years of record), then it would take approximately 105 years to complete the safety and mitigation work. It should be stressed that these are very rough approximations at best since the actual number of abandoned mines and the extent of cleanup that will be required is unknown.

2c. At your current rate of funding, when might you have secured your priority sites and/or watersheds?

The FS does not have the environmental and physical safety data available on all AML site to support identification of a complete priority list of environmental cleanup or safety mitigation projects. Although we believe that the time frame to address priority sites would be less than that estimated for the total need (see above), we do not have sufficient information to make a defensible estimate for completing priority work.

2d. A decade of progress mentions the successful reclamation project in the Questa area, around the Red River, with potential benefits for the city of Red River's water system. Has the Forest Service done any cost-benefit analysis of that reclamation project, or assessed what potential costs were avoided through reclamation?

The Placer-Pioneer Watershed (Red River) project was completed in FY 2007. Here is summary of the benefits we expect to see over the next few years:

The Placer Creek Watershed and Pioneer Creek Watershed are located directly southwest of and adjacent to the town of Red River and drain into the Red River. The town of Red River's water system and Red River Ski Resort are located in the Pioneer Creek watershed.

The town of Red River and Red River Ski Area are visited by thousands of visitors and tourists year round, including fishermen, hunters, horseback riders, campers, hikers, skiers, bikers, and folks attending seasonal events such as running marathons, rafting competitions, & school events. As part of this project the Forest Service removed 8,050 cubic yards of tailings and waste rock containing elevated levels of lead and arsenic from the banks of Placer Creek, restoring over 2 miles of perennial stream improving the water quality, and increasing water quantity to the Ski Area and the town of Red River. The Forest Service also removed 5,900 cubic yards of mine tailings and waste rock containing elevated levels of lead and arsenic from the banks of Pioneer Creek, restoring over 4 miles of perennial stream, improving water quality and increasing water quantity to the Ski Area and the town of Red River

The project benefits realized were:

- Removal of waste rock and tailings eliminated direct long-term exposure of human, animals and plants to high levels of arsenic and lead at and downstream of the site in the town of Red River and the Ski Area. The resulting benefits include reduced water treatment costs in Red River and the Ski Area and the increased human health and safety of residents and visitors. These direct benefits to human and ecosystem health, and secondary benefits due to the continued economic benefits of recreation and tourism are significant, but have not been quantified in monetary terms.
- Closure of 8 hazardous mine openings (adits and shafts) eliminated the risk of human injury or death over the long-term, as well as the negative affects to recreation and tourism that would result if such injury or death occurred. This is a long-term benefit to visitors to the National Forest as well as visitors to the nearby town of Red River and Ski Area, but the benefit has not been quantified in monetary terms.

The cost of the Placer and Pioneer remediation was $1.1 million. We will monitor the effectiveness of the remediation for the next 3 to 5 years.

The next and final phase of the Red River remediation is to remediate the mine waste located within Bitter Creek Watershed, which contains over 44,000 cubic yards of tailings and waste (elevated levels of arsenic and lead). The Bitter Creek Watershed is situated adjacent and directly northeast of the town of Red River. The total cost of this remediation is $2.8 million and with $1.3 million currently available the Forest Service is planning to initiate the project in May 2008. Funding to complete the project will compete for funding through the national project selection process.

Please provide a list of program offices in the forest service and the BLM which are involved in abandoned mine cleanup. Please estimate resources (staff and funding) in each of those offices for each of the past five years.

Attached is a list of National and Regional Office contacts for the Environmental Compliance and Abandoned Mine Land Program in the Forest Service. There are additional personnel involved less than full time in these programs at the local (national forest) level. The only estimate we can provide is an estimate of FS (excludes USDA and PRP) funding received by each of the nine Regions based 2003 through 2007 budgets.

FS Environmental Compliance and Protection/Abandoned Mine Land (ECAP/AML) Allocation by Region, 2003-2007 [1]

In 1000's Dollars

YEAR	R1	R2	R3	R4	R5	R6	R8	R9	R10	Total
2003	2,235	1,480	1,100	2,228	1,255	1,695	602	1,380	2,325	16,303
2004	1895	2134	810	3025	1768	1075	1005	1875	1030	16621
2005	2710	1687	1039	2114	1809	1197	760	1524	1370	16215
2006	2450	2557	1375	1882	1730	2015	500	1540	775	16830
2007	1702	2140	1674	1823	2061	1050	590	1000	1960	15107
Total	10,992	9,998	5,998	11,072	8,623	7,032	3457	6,419	7,460	

R1—Montana, North Dakota, parts of Idaho, South Dakota
R2—Colorado, South Dakota, Nebraska, Kansas, Wyoming
R3—New Mexico, Arizona
R4—Utah, Nevada, part of Idaho, Wyoming and California
R5—California
R6—Oregon, Washington
R8—Southern States
R9—Northeastern States
R10—Alaska

The following shows the BLM offices that have been involved in AML related cleanup work for the past five years and the amount of funding distributed:

FY2003 - FY2007 1010 AML Annual Work Plan Distributions

#	State	FY2003	FY2004	FY2005	FY2006	FY2007	Totals
1	AK	$730,000	$449,000	$553,000	$832,000	$517,000	$3,081,000
2	AZ	$273,000	$148,000	$320,000	$255,000	$300,000	$1,296,000
3	CA	$823,000	$550,000	$883,000	$886,000	$925,000	$4,067,000
4	CO	$999,000	$1,693,000	$1,737,000	$1,737,000	$1,636,000	$7,802,000
5	ES	$0	$0	$0	$0	$0	$0
6	ID	$964,000	$915,000	$864,000	$879,000	$782,000	$4,404,000
7	MT	$2,797,000	$2,465,000	$1,830,000	$1,547,000	$1,347,000	$9,986,000
8	NV	$472,000	$440,000	$610,000	$621,000	$575,000	$2,718,000
9	NM	$0	$0	$0	$0	$0	$0
10	OR	$591,000	$435,000	$625,000	$625,000	$410,000	$2,686,000
11	UT	$1,017,000	$859,000	$845,000	$845,000	$688,000	$4,254,000
12	WY	$543,000	$493,000	$505,000	$545,000	$495,000	$2,581,000
13	WO	$477,000	$602,000	$553,000	$553,000	$542,000	$2,727,000
14	NSTC	$0	$240,000	$245,000	$245,000	$242,000	$972,000
Totals		**$9,686,000**	**$9,289,000**	**$9,570,000**	**$9,570,000**	**$8,459,000**	**$38,115,000**

Thank you for your interest in the management of the National Forests.

Sincerely,

/s/ Douglas W. Crandall
Director, Legislative Affairs

cc: Dave Whittekiend

[1] Approximately 70-80 percent of FS ECAP/AML Allocation is for AML Environmental Clean-up and Safety Hazard Mitigation. The remaining 20 to 30 percent is spent on FS facilities.

Mr. COSTA. We appreciate that very much, and your focus, and I am sure we will have a number of questions as it relates to your efforts.

Our next witness is Senator Greg Lind, State Senator from Montana, and many of us found our origin from state legislatures from around the country. Almost half the Members of Congress are from state legislatures, and as one who is very fond of their experience in those years there, I am very pleased that you are here testifying on your experience in Montana. Senator Greg Lind.

STATEMENT OF THE HONORABLE GREG LIND, STATE SENATOR, MONTANA

Mr. LIND. Thank you, Mr. Chairman, Distinguished Members of the Subcommittee. I appreciate this opportunity to testify on this important matter.

For the record, I am a physician practicing in Missoula, Montana. I have served in the legislature since 2004, and in 2007, I chaired the Senate Natural Resource and Energy Committee.

With my testimony, I would like to touch on some of the problems with our mining legacy in Montana, and appeal to you for a promise for a different future.

Across the state many operations permitted on Federal lands under the 1872 mining law have caused pollution to important water resources, resulting in contaminated drinking water, harm to fish and wildlife, impacts to residential and agricultural lands, and significant cost to our taxpayers. Several mines will present health and environmental problems forever.

First and foremost, abandoned mines are not just the mines that were operated with pick and shovel in the last century, but in Montana, we now have a legacy of modern mine problems that are the responsibility of state, tribal and the Federal government.

I would like to touch on three examples from recent history in Montana. The common theme here will be water.

Zortman Landusky: Zortman Landusky gold mine is located on Bureau of Land Management land in the Little Rocky Mountains of north central Montana adjacent to the Fort Belknap Reservation. It operated between 1979 and 1998. Numerous cyanide releases occurred during operations which have affected the community drinking water supply. Water quality problems escalated in 1991, when acid mine drainage had permeated ground and surface water.

In 1998, the company filed for bankruptcy, leaving insufficient funds to cover the reclamation costs for long-term water pollution. State and Federal scientists have determined that acid and metal polluted runoff from the mine will continue in perpetuity.

The tribes worked with the legislature to secure passage of a bill in 2005. We appropriated roughly $19 million of state money to pay for perpetual water treatment at this site.

Shifting to Beal Mountain, Beal Mountain Mine is an open-pit cyanide leach gold mine located in Beaverhead Deerlodge National Forest and operated by Pegasus Gold from 1989 until bankruptcy in 1998. After cessation of mining, water quality issues continued in contamination of steams with cyanide, selenium and copper have continued.

The Forest Service and state government have already spent $5 million in public funds to install and operate water treatment systems, but that is just the beginning. Forest Service estimates that an additional $13 million is needed for additional reclamation and long-term water treatment.

Those are some examples from the recent past. In addition to these, we have a legacy of historical mine problems. There is an inventory of mines in Montana that I thought it was a large number until I heard of California's experience, but we have at least 6,000 inventoried abandoned mines in the State of Montana, 350 are top priority sites for restoration because of ongoing safety risks to public health and the amount of pollution generated at these sites. According to Montana DEQ, over 3,700 miles of rivers and streams in Montana are polluted by metals, primarily from abandoned mines.

To date, the state has spent over $26 million for historic abandoned mine cleanup and it estimates that the unfunded costs for remediation at the top 350 sites of these historic sites are in excess of $91 million. That is a very conservative estimate. Our state agency estimates it will cost our taxpayers hundreds of millions of dollars to cleanup all the historic sites in the State of Montana.

As you know, resources are limited and needs are great. The State of Montana is currently spending about $3.5 million a year at some of the state's abandoned sites and we are working through those problems that do exist.

I am going to shift briefly to a Superfund site. Montana's capital city, Helena, obtained 70 percent of its drinking water from 10-Mile Creek Basin, in which are sited 150 abandoned mine sites. The estimates to cleanup 70 of those sites that are the highest priority is calculated in excess of $22 million. The state's share would be 10 percent of that, and those problems are ongoing.

Montana faces funding challenges for reclamation and long-term water treatment resulting from modern and historic abandoned mine operations. We anticipate the costs to be well over $180 million just for the sites I have mentioned in my written testimony. I have abbreviated it here. This is a conservative estimate and includes resources that have already been allocated and projections for future needs.

I would encourage the committee to please close the door on projects that require water treatment in perpetuity. Perpetuity is very expensive. We have found that out all too well in Montana, and provide the regulators the tools to say no to projects that aren't appropriate, such as the one adjacent to—the Crown Butte site adjacent to Yellowstone National Park that we paid $65 million to buy back.

I thank you for your time and I look forward to your questions, and appreciate your work.

[The prepared statement of Mr. Lind follows:]

Statement of The Honorable Greg Lind, Montana State Senator

I thank the chair and subcommittee members for inviting me to come and testify on this important matter.

Mr. Chairman and distinguished members of the subcommittee: My name is Greg Lind. I am a practicing physician in Missoula, MT and member of the Montana Leg-

islature. I was elected in 2004 and served as chair of the Senate Natural Resource and Energy Committee in 2007.

The Need for Reform

The need for reform of the 1872 Mining Law is clear in Montana. Across the state, mining operations permitted on federal land under the 1872 Mining Law have caused substantial pollution to important Montana water resources, resulting in contaminated drinking water supplies, harm to fish and wildlife, impacts to residential and agricultural lands, and significant costs to taxpayers. Several mines have resulted in such severe water quality problems that they will generate contaminated runoff forever. It is time to reform the Mining Law of 1872.

One of the key issues in the debate about reforming the law is the need to clean up abandoned mines and create a source of revenue to ensure that the public safety risks and environmental damage from these mines is corrected. I commend the Chairman for holding the hearing today to address these issues.

In our state of Montana, we have made a significant investment in understanding the problems from abandoned hardrock mines around the state and created an aggressive program to clean up these mines. I want to make a few remarks about the scope of the abandoned mine problem that we have identified in Montana, because I expect these same problems are repeated in states across the West.

First and foremost, abandoned mines are not just the mines that were operated by pick and shovel in the last century. In Montana, we now have a legacy of modern mine disasters that are now the responsibility of the state, tribal and federal government. Here are just a few examples of the mines that have been operated in Montana in the past 20 years.

Impacts of Modern Mines

Zortman Landusky Mine

The Zortman Landusky gold mine is located on Bureau of Land Management (BLM) land in the Little Rocky Mountains of north central Montana. The mine adjoins the Fort Belknap Reservation to the north, home to the Gros Ventre and Assiniboine Tribes. It operated from 1979-1998. Mining operations resulted in widespread pollution to surface and groundwater in the Little Rockies. Numerous cyanide releases occurred during operations, including a release of 50,000 gallons into Alder Gulch, which affected a community drinking water supply.[1] Water quality problems escalated when acid mine drainage developed at the mine. By 1991, acid runoff from the mine had permeated surface and groundwater.[2] In 1993, the EPA and the Tribes filed suit against the company, charging that its discharges "present human health risks" and that "the acidity of the discharges would kill fish and aquatic life."[3]

In 1998, the company filed for bankruptcy, leaving insufficient funds to cover reclamation costs and long-term water pollution. State and federal scientists have determined that acid and metals-polluted runoff from the mine will continue in perpetuity. As a result, costly water treatment systems must be maintained to prevent further contamination of downstream water resources.[4]

The BLM's June 2004 Action Memorandum describes the threats to the public health and welfare and the environment that could result if operation of the water capture and treatment systems are not continued at the mines. If the systems fail or ceases operation, the BLM states that "the release of hazardous substances would increase greatly without the benefit of treatment, creating significant environmental damage. This includes the release of solutions containing metals such as arsenic, cadmium, copper, selenium, and zinc; plus cyanide complexes, nitrates, and solutions having low pH (acidic) levels".[5] The document warns that drinking water supplies or sensitive ecosystems could be contaminated and that human and animal populations could be exposed to the toxic effects of these substances. Over a billion gallons of contaminated run-off has been intercepted from the mine since 1999.[6]

Faced with the on-going threat to tribal water resources, the Fort Belknap Tribes have spent endless hours and scarce tribal resources to advance funding legislation. The Tribes worked with state legislator Rep. Jonathon Windy Boy on the passage of a bill in the 2005 Montana legislature that appropriated approximately $19 million in state funds to pay for long-term water treatment at the mine.[7]

While progress has been made, issues at the mine are far from over. A federal Court Judge Donald Molloy recently wrote, "It is undisputed that the Zortman Landusky mines have devastated portions of the Little Rockies, and will have effects on the surrounding area, including the Fort Belknap Reservation for generations. That devastation, and the resulting impact on tribal culture, cannot be overstated."

Beal Mountain Mine:

The Beal Mountain Mine is an open-pit cyanide leach gold mine located on the Beaverhead Deerlodge National Forest of western Montana. The mine was operated by Pegasus Gold Corp. from 1989 until its bankruptcy in 1998. Even after mining operations ceased, it continued to pollute neighboring streams with cyanide, selenium and copper.[8] In 2003, scientists determined that native westslope cutthroat trout in the mountain streams downstream of the mine were contaminated with harmful amounts of selenium caused by mining activities.[9]

Warren McCullough, of the Montana Department of Environmental Quality, told the Montana Standard in July 2003 that the aftermath of the closed Beal Mountain Mine is "not going to be something that we're ever going to be able to walk away from." In 2003 the Forest Service pulled the mine into a federal "time critical" clean-up program because conditions at the mine present a "substantial endangerment to human health and the environment."

The Forest Service and State government have already spent $5 million in public funds to install and operate a water treatment system, but that is just the beginning.[10] The Forest Service estimates that an additional $13 million is needed for additional reclamation and long-term water treatment.[11]

Basin Creek Mine:

The Basin Creek Mine, which is located in the Beaverhead Deerlodge National Forest near Helena, Montana, operated from 1989 to 1991. After the Pegasus bankruptcy in 1998, responsibility for the mine fell to the State of Montana and the U.S. Forest Service. After spending the $6.5 million reclamation bond, reclamation work was still needed and water pollution problems persisted. The Forest Service has spent $2 million, and the State of Montana has spent over $5 million in public funds, with another $1 million to be spent in 2007.[12]

Kendall Mine:

The Kendall Mine is an open pit gold mine, originally permitted on BLM land in north-central Montana—a key agricultural region. Although the mine operated for just seven years (1989-1995) it caused substantial impacts to water resources. The mine experienced several cyanide releases during its years of operation.[13] Mining operations also polluted waters with contaminants such as thallium, arsenic and nitrates.[14]

In October 2001, six families who live downstream of the mine filed suit against the company for alleged damages to water supplies and private property. According to the complaint, mine activities have deprived livestock of water, crops of irrigation and harmed the value of downstream ranches and other property.[15]

Although the mine was originally permitted on lands managed by the BLM, the BLM subsequently entered into a land swap with the company, leaving the State to deal with the on-going reclamation and water management issues at the mine. To date, approximately $500,000 in public funds have been spent on an EIS to develop a new reclamation plan for the site because water treatment issues were not anticipated in the original mine permit.[16]

Impacts of Historic Abandoned Mines

In addition to these modern mine disasters, the State of Montana has also inherited a vast legacy of historic abandoned mines. The state conducted a comprehensive inventory of the abandoned hardrock mines on federal, tribal, state and private lands to determine where the problem sites were and to develop a comprehensive plan to address the pollution and health risks from these mines. There are 6,000 inventoried abandoned mines scattered around Montana in our old mining districts, including 350 or more sites that are top priority for restoration because of the ongoing safety risks or the amount of pollution generated by the mine.

These 6,000 old mines pose many hazards, ranging from physical and health hazards from open mine shafts or exposure to toxic materials to environmental hazards such as water contamination from mine tailings or waste rock. According to the Montana Department of Environmental Quality, over 3,700 miles of rivers and streams in Montana are polluted by metals, primarily from abandoned mines.[17]

To date, the State has spent $26,748,276 for historic abandoned mine cleanup, and it estimates the unfunded cost of remediation for the 350 top priority mines at $91,815,000.[18] Our state agency estimates that it will cost hundreds of millions of dollars to clean up all the problem mine sites identified around Montana.

The state of Montana has been able to find a small amount of federal, state and local funds to address the water quality and safety issues at some of the state's abandoned hardrock mine sites, approximately $3.5 million a year. This funding is provided largely by federal grants derived from a tax on coal under the Surface Min-

ing Control and Reclamation Act of 1977 (SMCRA). It is not enough to address the serious problems posed by abandoned mines in Montana, and the tremendous backlog of sites in need of timely remediation. Montana's abandoned mine lands program is an effective program with demonstrated on-the-ground successes. Yet, the limited funding available to the State, allows the program to remediate only a few sites each year. The following examples highlight the problems and the need for funding:

Silver Creek, Marysville

Abandoned mines in the Marysville area north of Montana's capitol city have caused extensive mercury contamination in the area, precluding land development and presenting public health risks. Mine pollution has also contributed towards the degradation of area streams, particularly from mercury. The State has issued a fish consumption advisory warning the public of the health hazards associated with eating fish from Silver Creek. Mine cleanup costs are projected at $4 million. [19]

McLaren Tailings, Cooke City

The New World Mining District has been extensively damaged by historic mining. One of the sites, the McLaren Mill, regularly experienced overflows from the tailings impoundment downstream into Yellowstone National Park. [20] By the late 1960s, Soda Butte Creek was considered the most polluted stream entering Yellowstone National Park, adversely affecting the fish producing capacity of Soda Butte Creek within the Park. Some initial remediation work was done in 1969, but current studies show that the McLaren Tailings Site remains a significant source of acid drainage and heavy metal pollution to Soda Butte Creek. [21] The Montana AML program projects the cost of mine cleanup at $4 million. [22]

Superfund Program

A number of Montana's more egregious mine sites have been designated Superfund Sites on the National Priority List. Funding for cleanup of these sites has seriously declined in recent years. The tax that supports the federal Superfund Trust Fund hasn't been collected for 10 years, and very little money remains in the fund. The following example demonstrates the real need for reclamation funding.

Ten Mile Creek

Montana's state capitol, the City of Helena, obtains 70% of its municipal drinking water from the Ten Mile Creek watershed, which also contains an estimated 150 abandoned hardrock mines. During heavy rains or spring runoff, the mines and their associated waste piles and tailings contribute to the contamination of surface water, groundwater, and stream sediments throughout the drainage basin of upper Ten Mile Creek and its tributaries. [23]

The EPA has determined that these mines pose a current and potential threat to human health and the environment. In 1999, the drainage was added to the EPA's National Priorities List for Superfund cleanup. Cost for cleaning up 70 of the 150 sites is calculated at $22,427,000 [24], of which the State of Montana must contribute 10%. The availability of funds has been piece-meal at best. Much more remains to be done.

Economic Benefits of Cleanup

The benefits accrued from abandoned mine cleanup go far beyond the benefits to public health, safety and the environment. Removing the messes of a hundred years of mining takes millions of dollars. Those millions create hundreds of jobs. Across Montana, consultants, engineers and construction crews are rebuilding streams, removing contaminated soils and planting new vegetation. These projects represent a net injection of new funds into Montana's economy. Abandoned mine cleanup provides substantial economic benefits, and many of the jobs are created in rural areas. According to the federal Office of Surface Mining (OSM), the economic impact from abandoned mine remediation projects completed in Montana in 2004 totaled $5.9 million. [25] The projected economic benefit of the McLaren Tailings cleanup project is $8 million in generated income and 280 jobs. [26] The projected economic benefit of the Silver Creek is $7.4 million and 260 jobs.

Places at Risk: Yellowstone National Park

Montana also offers a compelling example for the need for the discretionary provisions in H.R. 2262. Crown Butte Mines, a subsidiary of a Canadian mining company proposed a massive gold, copper and silver mining enterprise on National Forest Service and lands patented under the 1872 Mining Law in Montana, adjacent to Yellowstone National Park. The proposed mine straddled three watersheds. One watershed drains into an adjacent wilderness area, another drains into the only Wild and Scenic River in Wyoming, and the third drains into Yellowstone National

Park. The project was highly controversial given the potential damage that could occur to the water, recreational assets and wildlife habitats in and around the Park. Despite the clear risks to one of the nation's most treasured sites, federal land managers maintained that under the 1872 Mining Law they had no choice but to permit the mine. It took intervention by President Clinton in 1996 to stop the mine—at a cost of over $65 million to the U.S. taxpayer.

We are proud of our abandoned mine program in Montana. We have been able to complete the inventory of abandoned mines. We know where the highest priorities are for restoration of lands and rivers. Montana's abandoned mine program is a model for other states.

It is now up to Congress to create a comprehensive program for abandoned mine restoration in the West. In order for this program to be successful, it needs to be funded. And it should be funded by the mining industry that caused the damage in the first place, otherwise the burden falls to the taxpayer to carry hundreds of millions of dollars of clean up costs.

Recommendations for Committee Action:

Generate Funding for Clean-up of Existing Mine Sites

As in many arid western states, water is critical for Montana's economic success. Access to clean water is one of the economic drivers in the western part of our state and the scarcity of useable water has contributed to population outmigration and economic declines in the drier regions. But, as you can tell from the examples in this testimony, many Montana citizens are paying a high price to protect and reclaim sources of water. Ranching families strive to protect their livelihood; native communities struggle to preserve their remaining water supplies; sportsmen work to restore damaged fisheries; and cities pay to remediate their drinking water aquifer.

Montana faces funding challenges for reclamation and long term water treatment resulting from modern and historic abandoned mining operations. We anticipate costs of well over $180 million for just the sites I've mentioned in my testimony. This conservative estimate includes resources that have already been allocated and projections for future needs. For too long, mining interests have been able to extract U.S. minerals from public lands for free. A royalty levied against the hardrock mining industry, as provided for in H.R. 2262, is an equitable and appropriate way to generate revenue to fund the clean up our treasured rivers and streams and reclaim lands for the protection of public health and the benefit of Montana's wildlife. Congress should look for as many opportunities as possible, like a new royalty on hardrock mining, to create a revenue stream for restoration of these old mines. This program will create jobs in Montana in land and watershed restoration and provide a lasting benefit for Montana communities.

Protect State Resources and Prevent Future Problems:

At the same time that funding is urgently needed to address the existing mine reclamation and water treatment issues, it is equally important that measures be taken now to prevent future problems. Under the 1872 Mining Law, federal land managers are forced to prioritize mining over all other land uses. While this may have seemed reasonable a century ago, it doesn't provide for sound public land stewardship today. Land managers must have the discretion to balance mining with other land uses, and the ability to protect important public resources such as Yellowstone National Park. H.R. 2262 will provide much needed balance to the management of our public lands by requiring the Interior Secretary to assure that mining is conducted in a manner that recognizes the value of such lands for other uses such as wildlife habitat, recreation, agriculture and water supplies.

H.R. 2262 will also return balance to the management of our public lands by establishing operation standards and reclamation criteria for hardrock mining. It's clear that the existing patchwork of federal laws does not provide sufficient protection to our nation's waterways and puts downstream families, fisheries, wildlife and water supplies at risk. A recent scientific study that analyzed water quality impacts from twenty-five representative hardrock mines around the west found that 76% of those exceeded water quality standards due to mining activity.[27] A solid framework of federal laws—specific to the impacts of modern hardrock mining—will better protect our natural resources and reduce the number of future liabilities.

It is crucial that Congress address the enduring legacy of hard rock mining's impacts on our nation's fish and wildlife and other natural resources now. The dramatic increase in commodity prices is currently driving a new "gold rush" across the west, including Montana. The number of mining claims staked on public lands in Montana has increased dramatically, jumping from 617 new claims filed in 2002 to 3,012 new claims filed in 2006 (September).[28]

Although mining activity on public lands has polluted Montana waters, harmed wildlife and left taxpayers with significant cleanup costs, government oversight remains stuck in the 19th Century. Unless something is done now to address the substantive inadequacies of the 1872 Mining Law, these may be the abandoned mine land problems of the future.

ENDNOTES

[1] Kuipers, P.E., Jim. "Nothing New Here: A Technical Evaluation of Initiative I-147. September 2004.
[2] U.S. BLM, Action Memorandum for Zortman and Landusky Mines Time Critical Removal. June 2004
[3] Final Supplemental EIS for the Zortman and Landusky mines, Phillips County, Montana, MDEQ and BLM, December 2001.
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[5] Ibid.
[6] Ibid.
[7] Mitchell, Larry, "Metal Mine Bonding in Montana" A report of the Montana Environmental Quality Council, May 2004. And, House Bill 379: http://data.opi.state.mt.us/bills/2005/billhtml/HB0379.htm
[8] Action Memorandum for Beal Mountain Mine Time Critical Removal. Beaverhead-Deerlodge National Forest, Silver Bow County, Montana, July 2003.
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[14] Montana DEQ, Notice of Violation and Administrative Order, Docket No. WQ-98-06
[15] Complaint filed in the Montana 10th Judicial District Court; Alan and Stephanie Shammel et. al. v. Canyon Resources Corporation. Sept. 2001.
[16] Mitchell, Larry. "Metal Mine Bonding in Montana" A report of the Montana Environmental Quality Council, May 2004.
[17] Sonja Lee, "State Hits Cleanup Pay Dirt", Great Falls Tribune, December 11, 2005.
[18] Vic Anderson, MT DEQ Abandoned Mine Lands Program, Pers. Comm. Sept. 27, 2002.
[19] Office of Surface Mining Reclamation and Enforcement, Annual Evaluation Summary Report for the Mine Waste Cleanup Bureau's Abandoned Mine Land Program for the State of Montana, 2004.
[20] Draft Final EECA for the McLaren Tailings Site, Prepared for Montana DEQ, May 2002.
[21] Ibid.
[22] Vic Anderson, Montana Abandoned Mine Land Program, Pers. Comm. Sept. 27, 2007.
[23] U.S. EPA, October 2001 Proposed Plan Upper Tenmile Creek Mining Area Site.
[24] Ibid.
[25] Office of Surface Mining Reclamation and Enforcement, Annual Evaluation Summary Report for the Mine Waste Cleanup Bureau's Abandoned Mine Land Program for the State of Montana, 2004.
[26] Ibid.
[27] Kuipers P.E., Jim and Ann Maest, "Comparison of Predicted and Actual Water Quality at HArdrock Mines: the Reliability of Predictions in Environmental Impact Statements" 2006.
[28] U.S. Bureau of Land Management, Claims Data

[The response to questions submitted for the record by Senator Lind follows:]

October 11, 2007

Rep. Jim Costa, Chairman
Subcommittee on Energy and Mineral Resources
U.S. House of Representatives
Washington DC 20515

Dear Chairman Costa;

Thank you for the opportunity to share additional information about the abandoned mine lands program in Montana, and the benefits of mine remediation to public health, safety, environment and the economy. Here are my responses to your questions:

1. Please tell us about Montana's Abandoned Mine Lands program. Would you describe it as efficient? Why or why not? How ready is that program to participate in reclamation endeavors should funding for hardrock mine reclamation increase?

Montana's Abandoned Mine Lands (AML) program was established in 1980. It is approved and funded by the U.S. Office of Surface Mining Reclamation and Enforcement (OSMRE). In 1990 Montana certified it had completed reclamation of all high priority abandoned coal sites, which allowed the state to focus on abandoned hardrock mining reclamation. The program has done an extensive inventory and prioritized a list of abandoned/inactive hardrock mines. While there are thousands of AML sites in Montana, approximately 350 were identified by state and federal agencies as high priority. The state program has, since 1995, successfully reclaimed 31 of these high priority sites: removing waste rock and tailings from streams for placement in properly sited engineered repositories with geo-synthetic liners and caps, redirecting acid mine drainage away from wastes to reduce water contamination, and removing safety hazards such as dilapidated structures and open shafts that pose safety problems. [1]

The program is very efficient, utilizing a small professional staff of 5 FTE to manage a large number of private-sector engineers, scientists, and construction contractors. The program on average spends $25/cubic yard of wastes to (1) fully investigate the site, (2) prepare the necessary compliance documents to receive clearance from OSM, other agencies and the public, (3) prepare design and bid documents, and (4) construct the selected cleanup plan. [2] This is 20% of what federal agencies have experienced doing similar work. [3]

The AML program currently utilizes approximately 10% of its available funds to administer the program; 90% goes to investigations, designs, and construction to reclaim sites. This reliance on private sector contractors, utilizing well-defined agency processes, gives the program the ability/flexibility to responsibly respond to and spend a significant increase in funding. [4]

The proficiency of the program is exemplified by a recent project completed in 2005—the Montana Silver Smelter Project, located inside Giant Springs State Park at Great Falls, Montana. [5] This site contained an area of 40 acres with high levels of lead, arsenic, cadmium and iron. The highest levels occurred where the slag was dumped near and into the Missouri River. Several fish hatchery employees and their families reside on the site near the river and their yards were found to be extremely toxic. The soil had to be completely excavated down to the base of the foundations of the residences and each yard sealed and completely reconstructed with clean fill. The site is also heavily utilized by the general public because of the large, adjacent State Park and fish hatchery. A national Lewis & Clark celebration drew over 150 thousand people to the area during the summer of 2005. The 2.1 million dollar clean-up project was finished in 2005—just one year from the initial investigation. [6]

2. Your testimony mentioned that reclamation can bring economic benefits. Tell us more about what you have experienced in Montana in terms of direct and indirect benefits of reclamation, whether in terms of the value of water that no longer needs treatment, recreation, jobs, and so on.

Montana's AML program currently utilizes 17 contractors with various skills to sample sites, perform feasibility studies, prepare cultural resource reports, conduct threatened and endangered species assessments, prepare engineering designs, develop bid documents, and oversee construction operations. While some of these are national firms nearly all of the personnel are in Montana. [7] Thus, they pay Montana

taxes, buy food, clothes, cars, and gas for those cars, and contribute to the local economy. Largely, the samples they take are sent to laboratories in Montana for analysis. The reports are prepared locally and sent to local office supply firms for reproduction. In general the 90% spent on contractor services for direct cleanup of the AML sites is spent in Montana.

The Office of Surface Mining and Reclamation has calculated the economic benefits of various construction ready projects in its annual evaluation reports of Montana's AML program. According to its 2005 report, if $22.49 million in funding were available to complete the 20 construction-ready projects identified that year, it would generate $53.38 million in economic benefits and support 1,831 jobs. [8]

The indirect economic benefits come from public use of the restored resource for a variety of purposes. Recreationally, people can use the clean water for fishing, swimming, rafting and in some cases even drinking. Restored areas can also be utilized for livestock grazing, camping and other activities that were previously restricted because of risk from either air contaminants, direct contact with materials or adversely impacted ground and surface water. Recreational dollars go into the local economy.

For example, in the Boulder River watershed in Montana, more than 80 years of mining has left a legacy of degraded water quality, contaminated water supplies in local communities, and the drastic reduction or complete elimination of fish populations as far as 55 miles downstream. [9] Spurred by a transitioning economy, surrounding communities faced the challenge of reversing this damage to improve water quality and restore impacted fish populations. A combined effort between the Montana AML program and federal agencies has resulted in significant improvements. Fish species like the native Westslope Cutthroat Trout have begun to return and increase in number. The agencies expect that eventually local species and recreational fishing may once again thrive and the watershed could become a premier fishery.

3. You testified that the unfunded costs of remediation for the top 350 abandoned mine sites in Montana is $91 million and the total for the sites you mentioned specifically in your testimony could be $180 million, including long-term water treatment. Meanwhile the state of Montana is receiving roughly $3.5 million a year in funding for reclamation.

I'd like to take a minute to make a correction to my earlier testimony, which understated remediation costs at AML sites in Montana. The $91 Million figure mentioned in my testimony is only the cost for approximately 150 high priority sites, not the full 350 priority sites. [10]

These estimates are about 7 years old; costs will be higher today and the problems that have gotten worse over time will also be more costly to fix. Furthermore, cost estimates were not made on many of the sites owned at least in part by federal agencies and were not made for sites on private land where enforcement action may be taken. The Montana AML program also decided that there was no advantage to spending program dollars on developing more cost estimates when the program dollars are better spent performing actual on the ground cleanup. [11]

It is also important to note that water treatment costs are not part of the estimate. [12] That cost is undetermined at this time but current estimates are that water treatment can easily cost 10 times more than cleanup of the solid wastes (waste rock, tailings, overburden) found at abandoned sites. [13]

I also mention the Zortman Landusky Mine in my previous testimony. Zortman Landusky is a modern abandoned mine located on BLM and patented land in Montana. I'd like to include some supplemental information to clarify costs associated with cleanup at this mine. The following paragraph provides a breakdown of incurred and projected costs for the State of Montana and the BLM according to current calculations by the Montana Department of Environmental Quality. [14] The estimated total funding for the Zortman/Landusky project is as follows:

- Funds provided by Zortman Mining Inc or their Sureties: $52 Million
- Funds provided by the State of Montana (through 2008): $6.5 Million
- Funds to be provided by the State of Montana (through 2017): $10 Million
- Funds provided by the U.S. BLM (through 2008): $8 Million
- Funds to be provided by the U.S. BLM (through 2017): $6 Million (projected)
- Anticipated Total: $82.5 Million

Another project it's important to mention in terms of mine remediation is the cleanup activity associated with the Clark Fork Superfund complex in Montana. The Berkeley Pit, a huge, former open-pit copper mine, is one of the largest bodies of contaminated water in the United States. It is the most visible of four sites in a wider Superfund cleanup of century-old mining sites along the Clark Fork River that is expected to cost Arco more than $1 billion by the time it is completed. [15] The

company indicates that it has spent about $700 million in the past 10 years as part of the overall cleanup of toxic mining sites around Montana's Butte-Silver Bow County.[16] The site represents a significant liability to the State of Montana if the company should fail or file for bankruptcy.

4. How many sites are you addressing each year with that funding?

The Montana AML program currently receives approximately $3.5M/year. At this level of funding 2-4 sites can be cleaned up each year. However there are sites on the list that will cost between $3M and $7M. These will have to be performed in phases.

The 2006 amendments to the Surface Mine Control and Reclamation Act have yet to be fully implemented. Depending on the resolution of how much money OSM will release to Montana each year there is a possibility of increased funding for the short term (10 years or so) from annual grants and return of the state share of the AML trust fund.

5. Can you provide a cost estimate for reclamation of abandoned mines in Montana on public lands?

Forest Service Lands: According to the Forest Service, there are an estimated 3,500 abandoned mines identified within National Forest boundaries in Montana.[17] It's important to note that this number does not include abandoned placer mining operations.[18] The Forest Service has indicated that it is requesting assistance from the Montana Bureau of Mines to identify the number of placer operations on Forest Service lands throughout the State.[19]

The Forest Service does not have projections for cleanup costs for the abandoned mine sites on Forest Service lands in Montana.[20] Furthermore, field visits have occurred to only a small percent of the sites. The only figures available are rough approximations of nation-wide costs, identified as $5.55 billion.[21]

BLM Lands: According to the BLM, the Western BLM Montana Zone currently has 5-7 unreclaimed abandoned mines in priority watersheds and 59 unreclaimed sites that pose physical safety hazards.[22] For Fiscal Years 2007—2013, the BLM has identified seven priority watershed cleanup projects, with projected costs of approximately $5.8 million, and twenty-one priority physical safety hazard sites, with projected costs of approximately $500,000. They have not projected cleanup costs for the remaining unremediated abandoned mine land sites.

Sincerely,

Greg Lind
Montana State Senator, District 50

ENDNOTES

[1] Sandi Olsen, Montana DEQ, "H.R. 2262 Supplemental Information: Questions to Mr. Greg Lind, Montana State Senator" October 2007.
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[5] Office of Surface Mining and Reclamation and Enforcement, Annual Evaluation Summary Report for the Abandoned Mine Lands Program Montana, 2005.
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[17] Data from USDA Center for Environmental Excellence database, 8-15-07
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Mr. COSTA. Thank you very much, Senator.

Our last witness but certainly not the least is the Executive Director for the Northwest Mining Association, Ms. Laura Skaer. Good to see you again.

STATEMENT OF LAURA SKAER, EXECUTIVE DIRECTOR, NORTHWEST MINING ASSOCIATION

Ms. SKAER. Thank you, Mr. Chairman and Members of the Committee.

Nearly everyone, especially the mining industry, agrees that eliminating AML sites is an important public policy objective, but in order to accomplish this goal in the most expedient, effective and efficient manner we must first ensure we understand the nature and extent of the AML problem so we match the right solution to the problem. I am going to highlight the four most important points of my written testimony, which are: most of the abandoned mine sites are landscape disturbance or safety hazards, approximately 90 percent are in that category; that they are historic; that they are state and Federal programs that are effective in making progress in reclaiming abandoned mine sites; and that we have an absolute need for Good Samaritan legislation if we are truly going to address this problem in the right way.

Now, AMLs are historic. The ones that are in need of remediation occurred all the way back to 1820. Some of them were operated by the Federal government during World War I and World War II, and they were all abandoned, most of them were abandoned before the advent of modern mining regulations. Table 1 in my testimony compares the advent of mining regulation with the history of mining.

But today we have comprehensive regulatory programs that include bonding requirements and financial assurance requirements that work together to ensure that the AML problem is a finite one and will not grow in the future.

Now, I said the vast majority of the sites do not pose significant environmental problems. The three types—landscape disturbance, safety hazards and environmental problem. The safety hazards we need to address first. Those are the ones that are fairly straightforward in addressing and actually they can be addressed for a lot less money.

We have had three recent surveys and they all agree that safety and landscape disturbances are between 80 and 90 percent of all of the AMLs. One was the Western Governors Association report in 1998. A more recent one was the Center for the American West, a study in 2005, that found that only a small fraction of an estimated half a million AMLs were significant problems for water resources, and the just released BLM-USFS study that Mr. Ferguson testified about.

Now, Mr. Chairman, you asked how big is the breadbox. Well, the estimates are all over the board, and it is primarily because we

don't have a universal definition of what constitutes an AML site, and because each hardrock AML site is unique. We have had estimates from a half a million to the Forest Service and BLM's recent estimate of 47,000 on 450 million acres of Federal land.

I don't think it is important to know exactly how many. I think what is important is that we get started and we continue to put the money on the ground to abate the AML issues that are out there. Great progress has been made with the BLM and the Forest Service in every western state. I detail Nevada as an example in my written testimony.

Nevada has made great strides. In fact, they have secured over 9,000 dangerous abandoned mine openings since the inception of the program in 1987.

We need Good Samaritan legislation. Although some progress has been made, the number one impediment to voluntary cleanup of abandoned hardrock mine sites is the U.S. is the potential liability imposed by CERCLA, the Clean Water Act and other environmental laws, and virtually everyone agrees that we need Good Samaritan legislation and in fact the National Academy of Science recently recommended to Congress that Congress enact such legislation.

Last year we supported S. 1848 by Senator Salazar and Allard from Colorado. We believe that is an effective model for Good Samaritan legislation.

We also support the creation of the abandoned mine fund that is in H.R. 2262. We believe the money should be distributed back to the existing state programs. We do not believe we need a new program or that the money should be distributed to OSM for their use. That is inefficient. Let us get the money to the states who know where the problems are and can best prioritize how that money should be spent.

Finally, we want to see the AML's remediated and reclaimed as much as anyone. After all, they are our dirty pictures, but we need your help. We have the desire, the experience, the technology, the expertise and the capital to remediate and reclaim AMLs, and we ask that you help us with creating a Federal fund that will be used from the royalties and to enact Good Samaritan legislation.

Thank you.

[The prepared statement of Ms. Skaer follows:]

Statement of Laura Skaer, Executive Director,
Northwest Mining Association, Spokane, Washington

INTRODUCTION AND EXECUTIVE SUMMARY

My name is Laura Skaer. I am the Executive Director of the Northwest Mining Association, a 113 year old non-profit mining industry trade association. Our offices are located in Spokane, Washington. NWMA has more than 1,650 members residing in 35 states and 6 Canadian provinces. Our members are actively involved in exploration, mining and reclamation operations on BLM and USFS administered land in every western state, in addition to private land. Our membership represents every facet of the mining industry, including geology, exploration, mining, reclamation, engineering, equipment manufacturing, technical services, and sales of equipment and supplies. Our broad-based membership includes many small miners and exploration geologists, as well as junior and large mining companies. More than 90% of our members are small businesses or work for small businesses. Our members have extensive first-hand experience with reclaiming active and inactive mine sites and remediating a variety of safety issues and environmental conditions at these sites.

Our members also have extensive knowledge of the scope of, and potential dangers posed by, hardrock abandoned mine lands (AMLs), as well as experience and expertise in dealing with those dangers. As I discuss below, AMLs in need of significant remediation are limited in number and not expected to increase. They comprise mines that were developed and abandoned before the advent of modern environmental laws in the 1970s and 1980s, and regulations that were updated as recently as 2001, including current comprehensive regulatory programs at both the federal and state levels that require mining companies to provide financial assurance to ensure that, at the end of exploration and/or mining operations, sufficient funds will be available to reclaim the sites if the operator becomes bankrupt or otherwise is unable to reclaim the sites.

Moreover, the Western Governors' Association (WGA), the Bureau of Land Management (BLM), the U.S. forest Service (USFS) and the non-partisan Center of the American West are all agreed that the vast majority of AMLs pose no dangers or, at most, safety rather than significant environmental hazards.

That being said, the mining industry supports the creation of a new federal AML fund, to be financed from royalties owing under any mining law legislation enacted by the Congress, to augment the monies available to State AML funds to address safety and, where needed, environmental hazards at AML sites. The industry also continues to strongly support the enactment of comprehensive Good Samaritan legislation that would allow mining companies with no previous involvement at an AML site to voluntary remediate and reclaim that site, in whole or in part, without the threat of potentially enormous liability under CERCLA, the Clean Water Act, and other federal and state environmental laws.

The mining industry has long been front and center in trying to deal responsibly with AMLs. Some of these efforts are documented in a study researched and authored by two of our members, Debra W. Struhsacker and Jeff W. Todd, and published in 1998 by the National Mining Association entitled "Reclaiming Inactive and Abandoned Mine Lands—What Really is Happening." (A copy of this study is being included in the record and is hereinafter cited as the "NMA Study"). This study presents compelling evidence that given the right opportunity, the mining industry can play a significant role in eliminating the safety hazards and improving the environment at abandoned and inactive mines.

ABANDONED MINE LANDS ARE HISTORIC

It is important to understand that when we talk about hardrock abandoned mine lands we are talking about a problem that was created in the past due to mining practices used at sites that were mined prior to the enactment of modern environmental laws and regulations. Table 1 lists the dates of development of many of the major mining districts in the country compared to the dates of enactment of many of the federal and state environmental laws and regulations that govern hardrock mining activities. As is clearly seen from this table, mining in the U.S. dates back to the 1820s, with significant historic mine development throughout the remainder of the 19th century and into the early part of the 20th century. Many of the AML sites that need attention were created in this timeframe.

It also is important to note during World Wars I and II, the federal government took over operations at many mines to produce the metals and minerals necessary for the war efforts. The focus was on maximizing production and winning the war—not on using mining methods that were designed to protect the environment. The metals mined from these sites greatly benefited U.S. society by contributing to the country's victories in both wars. What we are left with today, however, are the environmental impacts created by these unregulated mining activities. Some of these war-efforts mines are now abandoned. Because the American public benefited in the past from mining of these sites, we now have a public responsibility to develop policies and funding mechanisms to reclaim these sites.

Modern mining started in the mid-1960s at about the same time that the country was developing an environmental awareness and when Congress was starting to enact environmental laws. Thus, as is readily apparent from Table 1, the U.S. environmental statutory and regulatory framework is a recent development compared to the history of mining in the U.S. Moreover, it is important to recognize that many of the laws and regulations governing hardrock mining are quite new—some are less than 20 years old. For example, Nevada's state reclamation law went into effect in 1990, only 17 years ago. BLM's regulations for hardrock mining, the 43 C.F.R. Subpart 3809 program, went into effect in 1981 and were substantially updated just six years ago in 2001.

The body of federal and state environmental laws and regulations shown in Table 1 has had a significant and positive impact on the way mining is now conducted in the U.S., resulting in a substantial reduction in environmental impacts and dra-

matic improvements in reclamation. As a result of these laws and regulations, the domestic hardrock mining industry of today is highly regulated and environmentally and socially responsible. Also, because these regulations require exploration and mining companies to provide financial assurance to guarantee reclamation at the end of the project, mines today will not become future AML sites. In the event a company goes bankrupt or defaults on its reclamation obligations, state and federal regulatory agencies will have bond monies that will be available to reclaim the site. Thus, the AML problem is a finite and historical problem and not one that will grow in the future.

As shown in Table 1, the U.S. Forest Service adopted the 36 C.F.R. Part 228A surface management regulations governing hardrock mining operations on National Forest Lands in 1974. Six years later, in 1980, BLM enacted the 43 C.F.R. Subpart 3809 surface management regulations, which were substantially expanded and updated in 2000 and 2001. Both BLM's 3809 regulations and the U.S. Forest Service's 228A regulations require that all exploration and mining activities above casual use provide federal land managers with adequate financial assurance to ensure reclamation after completing the exploration or mining project. Because the underlying purpose of the financial assurance requirement is to ensure reclamation of the site in the event an operator goes bankrupt or fails to reclaim a site for some other reason, the amount of required financial assurance is based on what it would cost BLM or the U.S. Forest Service to reclaim the site using third-party contractors to do the work.

In addition to mandating reclamation and establishing financial assurance requirements, these comprehensive federal regulations also require compliance with all applicable state and federal environmental laws and regulations to protect the environment and to meet all applicable air quality, water quality and other environmental standards.

Additionally, all western public land states have enacted comprehensive regulatory programs that govern hardrock mining operations in their respective state. Like the federal financial assurance requirements, these state regulatory programs require the posting of adequate financial assurance or reclamation bonds in an amount equal to the cost that would be incurred by the government if it had to contract with a third party to remediate and reclaim the site. In many states, federal and state regulators with jurisdiction over mining work together to jointly manage the reclamation bonding programs. For example, in Nevada, the BLM, the U.S. Forest Service and the Nevada Division of Environmental Protection/Bureau of Mining Regulation and Reclamation have entered into a Memorandum of Understanding (MOU) that establishes procedures for coordinating the federal and state regulatory programs for mining. This MOU specifies that the federal and state agencies will work together to review reclamation cost estimates and to agree upon the required bond amount.

Table 1
Chronology of U.S. Mine Development and Enactment of Environmental Regulations

Year	Commencement of Mining Activities	Enactment of State and Federal Environmental Laws Affecting Mining
Historic Mining		
1825	Upper Mississippi Valley lead mining (Southwestern Wisconsin and adjacent Iowa and Illinois)	
1849	California - gold mining	
1858	Colorado - precious metals mining	
1859	Nevada - Comstock Lode silver and gold mining	
1862	Montana - gold mining	
1863	Utah - copper mining	
late 1860s	Upper Mississippi Valley zinc mining (Southwestern Wisconsin and adjacent Iowa and Illinois)	
1875	South Dakota - Black Hills gold mining	
1877	Colorado - base metal mining	
1877	Arizona - copper mining	
1882	Montana - copper mining	
1906	First gold produced from Round Mountain, NV	
1917	Colorado - molybdenum mining	
Modern Mining		
1965	Nevada - Carlin-type gold mining started	
1966		National Historic Preservation Act
1967		Air Quality Act
1969		National Environmental Policy Act (NEPA)
1970		Occupational Safety and Health Act (OSHA) Clean Air Act
1971		CA Environmental Quality Act (CEQA)

Table 1
Chronology of U.S. Mine Development and Enactment of Environmental Regulations

Year	Commencement of Mining Activities	Enactment of State and Federal Environmental Laws Affecting Mining
		MT Metal Mine Reclamation Act MT Environmental Policy Act (MEPA)
1972		Federal Water Pollution Control Act/Clean Water Act
1973		Endangered Species Act
1974	Mining begins at Henderson, CO	U.S. Forest Service Mining Regulations
1975	Modern mining begins at Round Mountain, NV	CA Surface Mined Land Reclamation Act (SMARA)
1976		Federal Land Policy and Management Act (FLPMA) Resource Conservation and Recovery Act (RCRA) Clean Water Act Amendments CO Mined Land Reclamation Act
1977		Mine Safety and Health Act (MSHA) Surface Mining Control and Reclamation Act (SMCRA) WI Metallic Mining Reclamation Act ID Surface Mining Act
1979		Archaeological Resources Protection Act
1980	Mining begins at Jerritt Canyon, NV	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA – Superfund)
1981		U.S. Bureau of Land Management Hardrock Mining Regulations
1982		SD Mined Land Reclamation Act
1984		Hazardous and Solid Waste Amendments
1985	Mining begins at McLaughlin, CA	
1985	Mining begins at Sleeper Mine, NV	
1986	Mining begins at Goldstrike Mine, NV	Superfund Amendments and Reauthorization Act
1987	Mining begins at Stillwater Mine, MT	UT Mined Land Reclamation Act
1989		NV Water Pollution Control Law NV Mined Land Reclamation Act
1990 - Present	On going development of Nevada's gold mining industry	Clean Air Act Amendments

Table 1
Chronology of U.S. Mine Development and Enactment of Environmental Regulations

Year	Commencement of Mining Activities	Enactment of State and Federal Environmental Laws Affecting Mining
2001		Updating of BLM's 43 C.F.R. 3809 regulations to include mandatory bonding requirements for all surface-disturbing activities

In 1999, the National Academy of Sciences National Research Council, in response to a request from Congress to assess the adequacy of the regulatory framework for hardrock mining on federal lands, found that—[t]he overall structure of the federal and state laws and regulations that provide mining-related environmental protec-

tion is complicated, but generally effective." Thus, these state and federal comprehensive regulatory programs together with financial assurance requirements work together to ensure that modern mining is environmentally responsible and that today's mines will be reclaimed.

THE VAST MAJORITY OF AML SITED DO NOT POSE SIGNIFICANT ENVIRONMENTAL PROBLEMS

It is important to understand that the vast majority of all hardrock AML sites are not problematic. The 1998 WGA report mentioned above estimated that more than 80% of AML sites create neither environmental nor immediate safety hazards. Where problems do exist, safety hazards are the primary problem although some AML sites have both environmental and safety issues.

The Center of the American West released a study in 2005 entitled "Cleanup of Abandoned Hardrock Mines in the West." The Center, which is affiliated with the University of Colorado, states at page 31 of its report that "only a small fraction of the 500,000 abandoned mines [identified by the Mineral Policy Center] are causing significant problems for water quality."

The 2007 USFS/BLM report cited above estimates that as many as 10% of the AML sites on USFS- or BLM-managed land may include environmental hazards and that the balance, or approximately 90%, are landscape disturbances or safety hazards. The finding that landscape disturbance and safety hazards comprise the bulk of the AML problem is consistent with other reports.

Although much of the public debate about the AML problems typically focuses on environmental issues, it is really safety hazards that deserve our immediate attention. Nearly every year, the country experiences one or more tragic accident or fatality at an AML site where somebody has fallen into or become trapped in an unreclaimed historic mine opening. AML safety hazards pose a far greater risk to the public than AML environmental problems. Therefore, we should focus first-priority AML funds on eliminating safety hazards at abandoned mine sites located near population centers and frequently used recreation areas.

The 1998 NMA Study includes a comprehensive discussion of the types of safety hazards and environmental problems that exist at AML sites. Table 2 summarizes this discussion and lists the safety hazards and environmental problems that may occur at AML sites and the techniques used to address these hazards and problems. As stated above, landscape disturbances and safety hazards are the dominant problem at most AML sites. However, some sites may have a combination of landscape disturbance, safety hazards, and environmental problems.

Table 2
Generalized Characterization of Issues at AML Sites

Types of AML Problems	Examples of Typical Response Measures
Landscape Disturbances • Surface Disturbance that detracts from the aesthetic or natural appearance of the site, • Discarded equipment, abandoned buildings in disrepair	• Regrading and recontouring disturbed areas to blend in with the surround topography • Revegetating regraded areas with native species • Removing and properly disposing of discarded materials • Dismantling and disposal of buildings
Safety Hazards • Unrestricted and hazardous openings (shafts, adits, portals, stopes) • subsidence features and exploration excavations • Dangerous highwalls and open pits • Unsafe structures and dilapidated buildings	• Partial or complete backfilling of mine openings • Installation of gates, grates, and doors to impede access into mine openings, • Fencing around mine openings and hazardous highwalls and open pits • Signage to warn the public to avoid dangerous mine openings and highwalls • Removal of unsafe buildings.
Environmental Problems • Erodible waste rock dumps, tailings deposits, and smelter wastes • Acid rock drainage form mine openings, waste rock dumps, and tailings deposits • Blowing dust from tailings piles • Contaminated soils, • Chemical contamination from processing reagents	• Removing mine wastes and contaminated soils and placing in an authorized engineered structure, • Stabilizing the wastes in-situ with engineered covers to prevent wind erosion and to minimize infiltration of precipitation • Rerouting drainages to avoid contact with mine wastes • Installing plugs in portals with drainage

Although many of the above listed measures are expensive—especially those used to remediate environmental problems—they are technically straightforward, well

understood, and are generally quite effective in improving environmental conditions at AML sites. The NMA Study identified a number of AML sites with safety hazards and/or environmental problems that were substantially reduced through the use of one or more of the measures listed in Table 2. It is important to understand, however, that each AML site is different. The measures shown in Table 2 to address landscape disturbance, safety hazards, and environmental problems at an AML site must be custom-tailored to fit the site-specific conditions of a particular site. A cookie-cutter, one-size-fits all approach will not achieve optimal results and may even fail to address the problem.

AML policy discussions have had a tendency to focus on the worst and most complex AML sites. This mischaracterization of the global AML problem has probably contributed to the lack of progress in developing federal policies and programs to solve the AML problem. The legislative dialogue about enacting Good Samaritan legislation has perhaps been made more difficult by focusing on sites with very serious or complex environmental and liability issues such as sites with acid drainage from underground mine openings which typically require extensive and costly remediation efforts. Although this type of site is serious and deserving of our immediate attention, it is not representative of the safety and environmental concerns at most AML sites. NWMA urges the Congress to take a closer look at the universe of AML sites in developing a Hardrock AML program and in addressing Good Samaritan legislation. Focusing solely on the most challenging AML sites is likely to produce programs with unwarranted complexity and costs.

HOW MANY AML SITES ARE THERE?

Historic abandoned hardrock mines have long been an issue of concern to industry, government and the public. Nearly everyone—especially the mining industry—agrees that eliminating AML sites is an important public policy objective. Past estimates of the scope of the historic AML problem range considerably, with various state and federal agencies and NGOs, estimating the number of unreclaimed hardrock mining sites. Part of the reason for the apparent disparity in these estimates is that these inventories have defined the term "site" in an inconsistent manner. Some AML inventory efforts have considered a "site" to be any single opening, mining or exploration disturbance or mining related feature. Other state AML programs and the mining industry define "site" to include multiple features that can be addressed with coordinated and consolidated reclamation and remediation measures. Continued debate over a universal definition of AML "site" and development of a comprehensive hardrock AML inventory diverts attention and resources from the real issues that need to be addressed. Moreover, the progress being made in reclaiming AML sites demonstrates that it is not necessary to count every site prior to designing effective programs to address the problem.

In 1998, the Western Governors' Association compiled an inventory of hardrock AML sites. This effort confirmed the results of earlier efforts—because each hardrock AML site varies in geology, geography, climate, terrain, hydrology, and types of AML features, and because there are different definitions of what constitutes an AML site, it is very difficult, if not impossible to produce a complete inventory of hardrock AML sites.

The most recent estimate of the number of AML sites is the just released U.S. Forest Service/ BLM report entitled Abandoned Mine Lands: A Decade of Progress Reclaiming Hardrock Mines. This report estimates that there are approximately 47,000 abandoned mine sites on more than 450 million acres of federal land managed by those two agencies.

While the desire to have a complete inventory of hardrock AML sites in the western U.S. was perhaps an appropriate focus ten or fifteen years ago, we believe that enough is now known about the scope of the problem. This knowledge coupled with the fact that on-the-ground progress is being made towards solving the problem suggests to us that inventory efforts have reached a point of diminishing returns—it is time to stop counting sites and to focus all of our energy upon reclaiming them. Further efforts to develop a comprehensive inventory will not add much value or contribute anything new to solving the AML problem. The focus should thus be on-the-ground remediation and reclamation of known hardrock AML sites. We therefore urge this Subcommittee to eliminate or modify the provision in H.R. 2262 Section 403(c) that requires the Secretary to develop another AML inventory.

CURRENT HARDROCK AML PROGRAMS

Every western public land state, the BLM, the Forest Service, and the Army Corps of Engineers have abandoned mine land programs that address abating safety hazards, remediating environmental problems, and reclaiming disturbed landscapes

associated with abandoned hardrock mining sites. The 1998 NMA Study cited above found that

> ...state AML programs and industry-sponsored efforts have abated, reclaimed and remediated a number of high priority AML sites throughout the west. Private funding, equipment and labor for mining companies have been responsible for reclaiming and remediating many AML sites. Mining companies have spent tens of millions of dollars of voluntary on-the-ground cleanups and abatements of AML sites. (NMA Study at ES-2)

The Nevada Division of Minerals Abandoned Mine Lands program is representative of an effective state AML program. Nevada's AML program receives funding from a $1.50 fee on county mining claim filings and a one-time fee of $20 per acre of new permitted mining disturbance. The program is supplemented by small grants from BLM's abandoned mines program. In 2006, Nevada's AML program secured 540 hazards with approximately $350,000 in funding. The bulk of the work includes fencing or closing mine openings on federal public land. Since the inception of the program in 1987, the Nevada Division of Minerals has secured over 9,000 dangerous abandoned mine openings.

The Nevada Division of Minerals also serves as lead coordinator of the Nevada Abandoned Mine Land Environmental Task Force. The task force was formed in 1999 and is comprised of 13 state and federal agencies. The task force has overseen reclamation activities at 21 abandoned mines sites. The Army Corps of Engineers Restoration of Abandoned Mine Sites (RAMS) program has provided $4 million since 2000 to support development of closure plans and small, innovative, on-the-ground demonstration projects related to AML remediation and reclamation.

In addition to these efforts, a partnership, known as the Nevada Mine Backfill Program, between the BLM, the Division, the Nevada Mining Association and member companies, and others has resulted in the backfilling of 265 hazardous mine openings in Clark, Esmeralda, Nye and Washoe counties since 1999. This program received the Northwest Mining Association's Environmental Excellence Award in 2000 for protecting public health, safety and the environment through government/industry cooperation.

As demonstrated by the Nevada AML programs, much progress has been made by existing state AML programs, the BLM, USFS, RAMS and the industry. Mr. Tony Ferguson, Director of Minerals and Geology Management, USFS will be testifying to the excellent progress the BLM and USFS have made over the past decade in remediating and reclaiming abandoned mine sites.

INDUSTRY SUPPORTS CREATING A FEDERAL HARDROCK AML FUND

The mining industry supports creating a federal hardrock AML fund using revenue generated from a net royalty on new claims to support, augment and expand the existing AML programs that have proven to work. The fund also should allow for donations by persons, corporations, associations and foundations, and other monies that are appropriated by the Congress of the United States. These funds should be distributed to the states with hardrock AMLs to be administered by the respective state AML program. States that generate royalty revenues should be the first in line to receive federal AML funds.

While federal oversight might be appropriate, we do not support the establishment of a new, separate federal hardrock AML program or delegating the responsibility for hardrock AML remediation and reclamation to the Office of Surface Mining. This would be an inefficient use of the monies collected and would prevent the maximum amount of money going into on-the-ground remediation and reclamation. Hardrock AML sites are unique in their geology, geography, terrain and climate and a uniform, one-size-fits-all program will not work. The state AML programs are in the best position to prioritize where federal AML funds should be spent within the state and to carry out hardrock AML hazard abatement, remediation and reclamation, in cooperation with the industry and other groups, including NGOs. The NMA Study describes a streamlined interagency regulatory approach that was in place at the time in South Dakota that proved to be particularly effective in facilitating AML cleanup activities by minimizing protracted regulatory reviews and permit requirements and emphasizing on-the-ground measures.

THE NEED FOR GOOD SAMARITAN LEGISLATION

Although, as discussed above, some progress has been made by industry and existing State and federal AML programs in reducing safety hazards and remediating and reclaiming hardrock AMLs, the number one impediment to voluntarily cleanup of hardrock abandoned mine lands is the potential liability imposed by existing federal and state environmental laws, in particular the Clean Water Act (CWA), the Comprehensive Environmental Response, Compensation and Liability Act

(CERCLA) (commonly known as Superfund), the Resource Conservation & Recovery Act (RCRA), and the Toxic Substances Act. Under these laws, a mining company, state or federal agency, NGOs, individuals or other entities that begin to voluntarily remediate an abandoned mine site could potentially incur "cradle-to-grave" liability under the CWA, CERCLA, and other environmental laws, even though they did not cause or contribute to the environmental condition at the abandoned mine land site.

Furthermore, they could be required under the CWA to prevent discharges to surface waters from the AML in perpetuity, unless those discharges meet strict effluent limitations and do not result in exceedences of stringent water quality standards, something that may not be possible; and in any event, may be so expensive that no company, individual, or other entity would undertake a voluntary cleanup.

Virtually everyone who has looked at the AML issue in the west has recognized and documented the legal impediments to voluntary cleanup of AMLs and have urged that those impediments be eliminated. These groups include the Western Governors' Association, the National Academy of Sciences, and the Center for the American West.

The time has come for Congress to adopt the recommendation from the National Academy of Sciences National Research Council's 1999 report to Congress and enact effective Good Samaritan legislation that will create a framework, with incentives and liability protection for numerous entities, including mining companies, local, state and federal agencies, NGOs, and tribes to voluntarily remediate of environmental problems caused by others at abandoned hardrock mine sites in the U.S. Several Good Samaritan bills have been introduced in the past, but only S. 1848, introduced last year by Senators Salazar and Allard, passed out of committee. We strongly supported, and continue to support the Salazar/Allard approach to Good Samaritan legislation.

No one knows more about reclaiming and remediating mine sites than the mining industry. The mining industry has the desire, the resources, expertise, experience, and technology to effectively and efficiently assess the environmental and safety issues present at an AML and to properly remediate, reclaim and secure those sites. This often can be done in conjunction with reclamation activities at nearby active mines which the company operates, resulting in an efficient use of resources to improve the environment and enhance public safety.

In some cases, processing tailings, waste rock piles and other historic mining materials at AML sites may be the most efficient and least costly means of cleaning up a site. The waste from any reprocessing or remining activities would then be disposed of in a modern engineered facility that complies with current environmental standards and practices. Remining/reprocessing is thus an environmental remedy in the form of resource recovery and source reduction, both of which are EPA-favored responses for environmental cleanups and waste management. The net result would be an efficient use of resources to increase the ultimate recovery of metals the U.S. needs for strategic and economic purposes while improving the environment.

Given the desirability of achieving the resource recovery and source reduction that can result from reprocessing and remining, Good Samaritan legislation should allow the reprocessing, remining, and reuse of ores, minerals, waste rock piles and other materials existing at an AML, even if this results in the mining company or other Good Samaritan recovering metals from such materials and making some cost recovery and perhaps a little profit on its Good Samaritan operations. Given the volatility and cyclical nature of metal prices, it is just as likely that the costs of any Good Samaritan project would exceed the revenue generated by removal and reprocessing. In any event, these activities should be allowed as part of a Good Samaritan project only if the overall result would be an improvement in environmental conditions at the site.

The Mining and Minerals Policy Act of 1970 (30 U.S.C. § 21(a)), specifically establishes the Congressional intent "to foster and encourage private enterprise in the development of economically sound and stable domestic mining, minerals, metal, and mineral reclamation industries." Including remining and reprocessing authority in Good Samaritan legislation is consistent with and promotes this Congressional intent.

SUPERFUND IS NOT THE ANSWER

Some Members of Congress and NGOs argue that instead of enacting Good Samaritan legislation, Congress should fund the Superfund program and EPA, under the Superfund program, should address all hardrock abandoned mine lands. In our opinion, this is an inappropriate, inefficient, and costly approach to remediating and reclaiming historic abandoned mine lands. Moreover, the Superfund program is clearly not designed to address the most pressing and prevalent AML problem—abatement of safety hazards.

Superfund does not have a very good track record at mine sites. Superfund was not designed to address natural processes that result in contaminated watersheds at AMLs. The historic mining communities of Aspen and Leadville in Colorado, Butte, Montana, Triumph, Idaho and the Bunker Hill site in northern Idaho's Silver Valley all have experienced first hand the failures of Superfund and the costly results of misguided policies and millions of dollars wasted on legal delays and repetitive studies. Of the billions of dollars spent of Superfund efforts, only 12% of those moneys have actually gone into cleaning up the environment while the balance went to legal and consulting fees.

In each of the Superfund sites noted above, cleanup has cost three to five times more than reasonable estimates of what it should have cost. Bunker Hill is a prime example of the waste that occurs when an EPA-led Superfund effort is undertaken at mine sites. This can be demonstrated by comparing Bunker Hill with another example from the Silver Valley in northern Idaho.

There are many historic mining sites on Nine Mile and Canyon Creeks just outside the Bunker Hill Superfund site. Two mining companies working together with the State of Idaho were able to cleanup and remove historic mine wastes, tailings and waste rock piles from Nine Mile and Canyon Creeks, and restore fish habitat on the two creeks. This work was accomplished at cleanup costs that were one-fourth to one-fifth of the cleanup costs on a per-cubic-yard of material removed basis compared to EPA's Superfund costs.

I have visited these sites on three occasions and can personally testify to the outstanding remediation and reclamation on Canyon and Nine Mile Creeks, and the substantial improvement in water quality as a result of these efforts. And, the work has been completed, unlike the work at Superfund sites which seems to never end.

Finally, at the risk of stating the obvious, the Superfund legal procedures to identify Potentially Responsible Parties (PRPs), to assign joint and several liability, and to recover costs are premised on the concept that the site in question has owners who can be identified and compelled to pay for the cleanup. None of these provisions are appropriate for AML sites, which by definition, no longer have an identifiable owner. Thus, the Superfund Program is not an ideal or even applicable template for most AML sites.

There may be some sites for which Superfund is the appropriate remedy, but let's not limit the tools we have in the toolbox. Thoughtful and effective Good Samaritan legislation that encourages and incentivizes Good Samaritans is an important tool to add to the Abandoned Mine Land remediation and reclamation toolbox.

CONCLUSION

Industry wants to see abandoned mines cleaned up. After all, they are our dirty pictures, and an albatross hanging around our neck. Mining opponents use pictures of historic, unreclaimed abandoned mines to foment public opposition to new mine proposals. But it is time for this recrimination and finger pointing to stop and to start working together to solve this problem.

Industry wants to see AMLs remediated and reclaimed as much as anyone, but we need your help. The mining industry has the desire, the experience, the technology, the expertise and the capital to remediate and reclaim AMLs. In fact, the mining industry has more experience and expertise than all other potential Good Samaritans put together. A federal hardrock AML fund using revenue generated from royalties on new claims combined with effective Good Samaritan legislation to encourage private-sector reclamation efforts offers the best opportunity to expedite safety hazard abatement, remediation and reclamation of hardrock AML sites, and create a win-win-win-win for the environment, for the Good Samaritan, for the community, and for society.

We applaud the Chairman for holding this hearing and look forward to working with him to produce constructive amendments to the Mining Law that will provide the certainty, financial and regulatory framework necessary to maintain a prosperous domestic mining industry that will be able to generate revenues from a royalty on new claims to provide an additional funding source to augment existing state, federal and industry AML remediation and reclamation efforts. Good Samaritan legislation is essential if we truly want to address the historic AML problem.

I thank you for this opportunity to testify on this important issue and will be happy to answer any questions.

[The response to questions submitted for the record by Ms. Skaer follows:]

October 10, 2007

The Honorable Jim Costa
Chairman, Subcommittee on Energy and Mineral Resources
U.S. House of Representatives
Committee on Natural Resources
Washington, DC 20515

Dear Mr. Costa:

Thank you for your October 4, 2007 letter and the additional questions for the record with respect to the legislative hearing on October 2, 2007. Our answers to your three questions are set forth below.

1. H.R. 2262 Proposes that reclamation funding go first to sites where there are public health and safety issues. Do you support that provision in Title IV?

Answer:

We believe AML sites that present public health and safety issues should be the first priority for funds distributed to the states, BLM, USFS, and ACOE RAMS AML programs. As set forth in our written testimony, we believe the funds should be distributed directly to existing state/federal AML programs. There is no need to create a new federal AML program that would be administered by the Secretary.

While we believe abating public health and safety issues associated with hardrock AMLs should be the first priority for AML funds, we do not support Section 402 as drafted. We especially are concerned with the language in § 402(b)(1) that makes addressing surface water and ground water contamination the highest priority and equates this contamination with "extreme danger." There is no "extreme danger" to the public resulting from contamination of surface water and ground water by abandoned mines. In marked contrast, there is extreme danger posed by unsecured mine openings. The USFS/BLM study states that there is an average of 25 deaths per year due to people falling into abandoned mines (see page 21). There are not 25 deaths per year from exposure to high levels of heavy metals in water downstream from AMLs. We do need to address surface water and ground water contamination from AMLs, but it should not be our highest priority for the expenditure of moneys from the AML Fund. Addressing physical hazards and unsecured mine openings should be our first priority in order to protect public health and safety.

2. Would you recommend that we use the National Mine Lands inventory that Mr. Ferguson from the Forest Service mentioned in his testimony as the starting point for use of any new reclamation funding?

Answer:

NWMA believes the National Mine Lands inventory Mr. Ferguson mentioned and is referenced in the joint BLM/USFS report entitled "Abandoned Mine Lands: A Decade of Problems Reclaiming Hardrock Mines" is a good starting point and should be combined with the abandoned mine lands inventories the various western states have conducted. We believe it would be prudent to use both the National Mine Lands inventory Mr. Ferguson mentioned together with the state inventories, and that state AML programs are in the best position to prioritize the use of any new AML funding.

3. Does NMA now support the prohibition against self-guarantees for bonds that was incorporated in

3809 rule changes? Do you think Nevada should take action to conform with the prohibition for all mined lands?

Answer:

We do not believe it is necessary for Nevada to conform to the 3809 approach to corporate guarantees. The Nevada Division of Environmental Protection (NDEP) carefully considered the viability of the corporate guarantee as an assurance mechanism in the 2001-2002 timeframe, contemporaneous with and after the BLM revised its 3809 regulations. Nevada chose to retain its corporate guarantee program, with certain significant enhancements. The following enhancements have been made to the Nevada program:

- The regulations now make clear, and the policy of the NDEP is that even if a company satisfies the minimum financial criteria to qualify for a corporate

guarantee, it does not mean that it is entitled to post a corporate guarantee for a full 75% of the surety amount. Rather, NDEP retains the discretion to accept a lower percentage of corporate guarantee. It would do so, for example, where a corporate guarantor barely satisfies the financial criteria or where its financial results show a negative trend.

- The regulations provide for an annual review of the certified financial statements of a corporate guarantor by an independent third-party accounting firm. This allows NDEP to detect changes in the financial condition of a corporate guarantor and if necessary, take appropriate action, such as increasing the percentage of the financial assurance that must be satisfied by a surety bond or letter of credit. The corporate guarantor is required to pay a fee to NDEP to cover the cost of the third-party review.
- The regulations also established a process fluid stabilization trust fund. NDEP recognized the need to be able to access immediate funds to ensure containment of process fluids in the event of an operator's financial failure. The funds have been paid and are in NDEP's possession. If NDEP ever has to access the funds, it then repays the trust fund from the proceeds of the operator's financial assurance.
- NDEP, in coordination with the BLM State Office in Nevada, has also established the standard unit cost estimator model for reclamation cost calculation. This cost estimator is updated annually to reflect current labor (Davis/Bacon wages), materials and fuel costs. This tool assures that true third party costs are used in the calculation. The tool also ensures that all of the cost line items are transparent and verifiable. By regulation, operators must update the cost estimate for each project every three years.

We believe the approach taken by NDEP is appropriate and has proved to be capable of protecting Nevada's interest in a sound yet flexible financial assurance system.

Thank you for the opportunity to provide additional information. Do not hesitate to contact us if you have further questions or if we can be of assistance on these issues.

Sincerely,

/s/ Laura Skaer
Executive Director

Mr. COSTA. Thank you very much, Ms. Skaer, for giving us a better description as to the size of the breadbox, as I like to describe it.

For members of this panel and for members of the committee, we have been noticed that there are going to be votes at 4:30, two votes today, and it is the Chair's intent when the first roll call comes in that we will complete our round of questioning, and whoever is questioning at that time, we will allow you to complete your questioning, and we will close it at that point, and then we will submit any written questions for members of the panel, but I think everybody is going to get at least their five minutes, and we will see how much longer it goes from there.

So don't start yet on me, Holly. OK? You can start now.

I am going to have the National Conference of State Legislatures put together something on what different states are doing. When we were in Nevada with Mr. Heller, it was clear to me, and actually I think you were there, Ms. Skaer, as well, that Nevada is doing a lot since the inception of the reform of their own mining law in the 1980s, and I think we need to develop some sort of a matrix as to what states are doing so that, in essence, we try not to reinvent the wheel. So I will suggest to staff both on the majority and minority side to try to work with NCSL to try to get a handle and see how that fits with the Good Samaritan legislation.

Senator Lind, I was interested in your comments because all of us, especially if you are from the West, understand how precious our water resources are.

Has Montana attempted to put—I mean, you talked about the price tag on the three mines you cited, but the full potential of the impact or the cost of cleanup on water quality and abandoned mines in Montana?

Mr. LIND. Mr. Chairman, Members of the Committee, the numbers I have come from our Abandoned Mine Lands Program and they are not comprehensive.

Mr. COSTA. Is your state doing that?

Mr. LIND. I have looked for that information recently and I will be happy to get back to the committee. I don't have that before me. The total package, it was not available in the last couple of days.

Mr. COSTA. OK. Mr. Ferguson, there was a description by Ms. Skaer that talks about the size of the abandoned mine problem, and Mr. Hanlon and Mr. Ferguson, I would like to get both from you if you, first of all, agree with the numbers that you used, roughly, that the overwhelming majority are safety issues, or hazard issues as opposed to water quality issues. Do your numbers, your research, concur with her testimony?

Mr. FERGUSON. Mr. Chairman, I can——

Mr. COSTA. I mean, when you look at the size of this document here as I was perusing it.

Mr. FERGUSON. I would like to agree with the complexity of the numbers. I think Laura mentioned that there is a whole variety of numbers, and I think that has to deal with sort of a lack of consistency among the various reporting agencies back from the Bureau of Mines and the way the states characterize, so there is a large number.

Mr. COSTA. How would you describe today the collaboration between your Forest Service and the states in assessing this problem?

Mr. FERGUSON. Well, we work very closely with the states. We are trying to do more and more. One of the efforts that we are underway right now with the BLM is we are transferring all of our geospatial data on Forest Service lands to the BLM who will be entering that into a geo-communicator which will be available for the general public to see where these locations are.

We approach all of our reclamation efforts, and especially the ones that involve water on a watershed basis, so we look at that mixed ownership. We work with the state and we want to be sure that we are looking at sort of the headwaters when we start because if you start working and doing reclamation at a lower level in the watershed, you may not be making any kind of accomplishments, and with the mixed ownership patterns, we do work with the states.

Mr. COSTA. All right. My time is quickly eroding. Mr. Hanlon, part of my difficulty is the wide variety of the cost of cleaning up. Even though regardless of the percentage, and it seems like we can agree on the percentage, I have heard a price tag $30 billion out there, and I have heard it as high as double that. How do we get a better handle on this? Again, I am trying to get a understanding of how long it is going to take to clean these up, and how many resources it is going to require.

Mr. HANLON. I am not sure I have a sort of capsulated answer for you this afternoon, Mr. Chairman. I think the complexity of the challenge that states across the country and EPA regions are dealing with is both within the Superfund program and outside of it.

Mr. COSTA. Well, can you suggest how we might work on that, give that some thought, and I will submit it to you in written question?

Ms. Skaer, before my time is gone, you talked about not abandoning—no pun intended—the Good Samaritan process. Any words of advice on that?

Ms. SKAER. Well, I think if you look at S. 1848 from last year that passed out of the Senate Environment and Public Works Committee, I think that provides an excellent framework for Good Samaritan legislation that will be effective in getting work done on the ground. It needs to work on the ground, and I think that provides the model for the committee to look at.

Mr. COSTA. OK. My time has expired. The gentleman from New Mexico, Mr. Pearce.

Mr. PEARCE. Thank you, Mr. Chairman.

Mr. Hanlon, the staff shows me pictures like this when I say, you know, what are we really doing on cleanup today, and they will show things like this. Is this reflective of cleanups that are really happening?

In other words, you describe and Mr. Ferguson describes a project beyond the Animas, but can we say that the industry or that the problem is moving this direction rather than having more sites that are untouched? Which direction are we going?

Mr. HANLON. I am not personally familiar with the pace of the individual sites. I think there is real progress being made in some locations, both under the Superfund program and outside of that with some Good Samaritan examples, but again they are just examples. I am not in a position to give you a comprehensive answer to that.

Mr. PEARCE. And again, if I heard you correctly, that Good Samaritan would probably facilitate the cleanup of sites rather than make it harder, is that correct?

Mr. HANLON. Yes, sir.

Mr. PEARCE. OK. Ms. Skaer, you heard Mr. Lind in the first sentence of his testimony say that the need for reform of the 1872 mining law is clear, and then goes on to present the problems that they are encountering. As I understand it, the permitting actually isn't covered under that law of 1872, that it actually occurs under the BLM 3809 regulations and the Forest Service 288 regulations.

Can you address what has been done by the different regulatory agencies and Forest Service, the BLM with regard to those permittings and in the minds that previously could have gotten access to mine without sufficient bonding? Can you talk about that for me from an industry perspective just a little bit, and the safeguards that are in place now that might not have been in place when Mr. Lind's problems began to occur?

Ms. SKAER. I think there is a detailed description of this in my written testimony. As I said, prior to the 1970s, actually prior to NEPA there were no environmental laws, and mines—you know, there weren't even permits required for most industries, not just

mining, and with the advent of NEPA and the Clean Water Act, Clean Air Act, and then the Federal Land Policy Management Act, in 1974, the Forest Service enacted their 288 regulations. BLM's were first in 1980. They were significantly updated in 2001, and what we have seen, as industry has learned more and as the regulatory agencies and land management agencies have learned more, they have modified and adopted their regulations with the increased knowledge.

So what you have today is a very comprehensive set of regulations that ensure that water quality is protected. Both the Forest Service and the BLM, in order to receive your permit, you have to demonstrate that your project will comply with applicable state and Federal environmental laws. It is incorporated into the regulations and unless you can comply with the different environmental laws you will not get your permit.

Industry supports those regulations, and actually, in 2000-2001, a lot of changes were made in terms of how bonds are calculated so that now financial assurance is calculated so that the cost you have to bond for is not the costs that it would be for the mining company to reclaim, but what would it cost the BLM or the Forest Service or the state if they had to hire a third party contractor, paying Davis-Bacon wages, et cetera, and so the bond amounts are set now so to make sure that they cover all of the contingencies that could occur in the event of a default or a bankruptcy.

Mr. PEARCE. Mr. Ferguson, do you find varieties in what Ms. Skaer is saying, that the agency is much more protected so the burden doesn't fall on the agency from the problems after these new regulations?

Mr. FERGUSON. I agree with her description. That is the process, yes.

Mr. PEARCE. So the problems that Mr. Lind is experiencing there are fixes already in the system that seem to be working much better than the permitting before?

Mr. FERGUSON. I can't specifically address those cases he cited, but in the current permitting process, we do have those processes in place that Ms. Skaer described.

Mr. PEARCE. As we look at the document here, I will tell you that there is probably no one in the Congress more critical of the Forest Service, and if you would take back that myself, if you would take back that your testimony today feels sound, and we see things that are actually happening that should be happening, and they may not care but I suspect they will be interested that I am passing along positive comments about the Forest Service. So just let me give you my compliments for—we are trying to sort through a very difficult problem, and the same goes to Mr. Hanlon, for you all, that these are extraordinary complex things, and there are people who want to drive it to the extreme, that if you don't get it to perfection, then we are going to be held accountable, and we are seeing there that incremental improvements can be made. The whole situation gets somewhat better.

Mr. Chairman, if we get the second chance, I have one more question, but other than that I am pretty well finished. Thanks.

Mr. COSTA. Well, just a quick question. I know some of you may not have the familiarity or the experience on the issue that Ms.

Skaer relates as related to the bond, but I did have a question before your comment, and maybe you can respond to it.

Because of the present day requirements for bonds on permitting on mines, is it accurate for me to think of it in these terms as a layperson for new mines developed for the bonded requirement, there is a coverage to clean up the facility afterwards? If the company goes bankrupt, that bond is there to provide the cleanup, is that correct?

Ms. SKAER. That is correct, to ensure that the taxpayer doesn't bear the burden.

Mr. COSTA. OK. So in my attempt to visualize this into two categories, the problem of which this bill attempts to address one issue, and that is a royalty payment that would be first prioritized for cleanup, would be the category of abandoned mines that previously did not have a bond requirement. Would that be correct?

Ms. SKAER. Right, because the mines were—the properties were mined and abandoned before there were bonding requirements in the regulations.

Mr. COSTA. So when we are trying to get the size of the breadbox in terms of the descriptive on how much cleanup is out there that is required, we have to put those into two categories, in essence, based upon those that were prior to bonding requirements and those that now have bonding requirements. Does it suffice to say now that all mines in the United States are required to have bonding requirements before they are allowed all of their permits to go ahead?

Ms. SKAER. Absolutely.

Mr. COSTA. OK, and it is based upon the criteria that you described a moment ago?

Ms. SKAER. Yes. Correct.

Mr. COSTA. Thank you for that. I am going to defer the balance of my time to the gentleman from Idaho, Mr. Sali. You will get your total five minutes. It is just I am not using all of my five minutes.

Mr. SALI. Mr. Chairman, I will be very brief.

Ms. Skaer, I was looking at the end of your written testimony, your discussion about Superfund not being the answer, and in there you refer to some who are interested in funding Superfund again as opposed to working on Good Samaritan legislation. I don't suppose you would want to speak for them, but I would like a better understanding of who is it that would be opposing the Good Samaritan legislation and what are the reasons, if you know?

Ms. SKAER. Well, I recall last year when S. 1848 was marked up in the Senate Environment and Public Works Committee that Senator Boxer from California opposed the Good Samaritan bill, and actually stated in the record that she believed that rather than enact Good Samaritan legislation that Congress should reauthorize Superfund and ensure that there was sufficient monies in there, and that that was the appropriate remedy for these abandoned mines.

We completely disagree with that, and I think if you look at all of the data that shows that between 80 and 90 percent of these are either safety hazards or landscape disturbances, Superfund is a totally inappropriate tool to address those sites.

Mr. SALI. As you go through your discussion in your written testimony, you make the point that, first of all, the Superfund tends to be much, much, much more expensive than the efforts, for example, of the state working in the Silver Valley in Idaho on a couple of abandoned mine issues there. But I am struck by your statement as well that the difference for abandoned mine lands is that they have been abandoned.

Ms. SKAER. They have been abandoned. There is no owner.

Mr. SALI. There is no one to identify as a potentially responsible party. How would we continue to address that using Superfund for a bunch of these abandoned mine lands where, for example, you have pointed out they are just safety issues?

Ms. SKAER. In my view, it would not work. It would totally be a waste of money and kind of a circular process to try to find a potential responsible party for a site that, by definition, has no owner. It is abandoned. It is orphaned. So it seems to me that a better approach is the approach that was laid out in the Good Samaritan legislation of Senator Salazar last year, and also utilizing the existing state abandoned mine land programs and the BLM and the Forest Service and the Army Corps of Engineers program to go out and address these sites. It can be done more efficiently.

As I stated in my testimony, I am familiar with the Silver Valley of northern Idaho. I have testified on these issues. I have visited the site, and the State of Idaho working in cooperation with two mining companies completely cleaned up, remediated and reclaimed tailings that were in two creeks, 9-Mile and Canyon Creek, and they did it for about one-fifth of the cost that the Superfund site around Bunker Hill, and so if we want to get these sites cleaned up and into the ground and not into the pockets of lawyers and consultants.

Mr. SALI. Mr. Chairman, I was going to yield the balance of my time to the gentleman from New Mexico, but I see my time is just about up, and I yield back.

Mr. COSTA. That is OK. The gentleman from New Mexico and I have an understanding. He has always got as much time as he needs.

Mr. PEARCE. We are not called to vote until 4:45, Mr. Chairman. I really appreciate that.

Mr. COSTA. Let me amend my statement.

[Laughter.]

Mr. PEARCE. OK. First of all, I want to compliment the Chairman and the staff. Both panels today have been very effective. Mr. Lind adequately talks about the burden on the states for problems. I think both agencies are very well represented, and began to talk about curing problems, not how can we drive the discussion to the extremes, but how do we begin to cure that, and Ms. Skaer's comments about the dirty pictures of the industry. You know, recognition is the first, I think, step toward a solution, and when I hear that, I believe that we are all on the road to where we need to be on, rather than just using each other for political points or whatever. So I really appreciate both panels, Mr. Chairman.

My only question, Ms. Skaer, is going to be to you. I mean, you have heard the testimony about the Good Samaritan legislation, and again considering the testimony of Mr. Lind, which is very

compelling with the problems that we have, if the Good Samaritan legislation were in place, do you think the Pegasus bankruptcy would have occurred or do you think there would have been the ability to solve the problem in the format of the Good Samaritan legislation that you have referred to?

Ms. SKAER. Yes, certainly the framework would have been there. I do know that of another situation in which several mining companies offered to provide the equipment, provide water treatment, provide consulting services to address potential pollution problems, but they needed that Good Samaritan protection in order to do it because they didn't want to acquire cradle-to-grave responsibility for the site, and that protection was denied, and the site ended up becoming a Superfund site.

So I think that while I don't have this great crystal ball, I can tell you that I believe if Good Samaritan protection was in place the ethic that the industry has today to be an environmentally and socially responsible industry, you know, it doesn't do a responsible mining company any good to have another site that goes bad, because that site then is going to become the dirty picture that is used every time you go to permit a new mine.

So I think it is in the industry's—I think the industry would look at it as it is in their best interest to come together in a cooperative way and address those sites so they don't become problems.

Mr. PEARCE. Mr. Chairman, again I find that statement just as compelling that there were mines willing to take on the responsibility, and lend their money and expertise to solve a problem, and yet they would have become then owners of the full problem, so that is an effective picture as well as your missions up front.

Again, Mr. Chairman, great panel. Appreciate both of these, and I yield back.

Mr. COSTA. Thank you very much the gentleman from New Mexico. I concur with you. We had some excellent testimony this afternoon, both panels. This is, as we say, a work in progress, and so we shall be continued. I think we got some greater clarity on the different options as it relates to royalties, and how we try to strive toward doing something that is fair and equitable, and I want to thank the minority staff and the majority staff for their hard work in putting this hearing together today.

I really am going to urge that we try to get a better handle on what states are doing and develop that matrix so that the Subcommittee has that information, because there is good work taking place in places like New Mexico and Montana, and I know California and Nevada as I witnessed with Congressman Heller, and so we certainly want to collaborate in a meaningful way and not reinvent the wheel. So we need to get that information at hand as well, and we will continue to work at this.

Thank you very much. The Subcommittee is now adjourned.

[Whereupon, at 4:27 p.m., the Subcommittee was adjourned.]

[Additional material submitted for the record follows:]

[A statement submitted for the record by the San Xavier District of the Tohono O'Odham Nation follows:]

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STATEMENT OF THE SAN XAVIER DISTRICT OF THE TOHONO O'ODHAM NATION AND THE SAN XAVIER ALLOTTEES ASSOCIATION

IN SUPPORT OF HR 2262
THE HARDROCK MINING AND RECLAMATION ACT OF 2007

Before the House Natural Resources Committee
(October 3, 2007 hearing)

The San Xavier Indian Reservation consists of 71,000 acres of Indian trust land adjacent to the city of Tucson on the City's southwest side. The San Xavier Reservation is one of 11 districts of the Tohono O'odham Nation. Most of the Tohono O'odham Nation occupies a much larger reservation forty miles to the west. The San Xavier Reservation includes the ancient O'odham Village of Wa:k on the banks of the Santa Cruz River, as well as the famous Mission San Xavier del Bac. The Reservation was created in 1874 by Executive Order of President Grant. In 1891, approximately 41,000 acres of the Reservation were divided into individual Indian trust allotments pursuant to the Dawes Act of 1883.

The San Xavier District is a local unit of government of the Tohono O'odham Nation with its own Chairman and District Council. The District government is responsible for the welfare and protection of the residents and lands of the San Xavier Reservation. Austin Nunez is the Chairman of the District Council.

The San Xavier Allottees Association is a non-profit corporation organized to represent the interests of the owners of individual Indian trust allotments on the San Xavier Reservation. The Association has approximately 1,200 individual Indian trust allotment landowner members and is governed by a seven member Board of Directors. Philbert Bailey is the acting President of the Association.

In 1959, approximately 5,000 acres of allotted lands on the San Xavier Reservation were leased by the Bureau of Indian Affairs (BIA) and the individual Indian landowners to the American Smelting and Refining Company, now the Asarco mining company, for the purpose of copper mining. The majority of these leased lands are now covered with hundreds of millions of tons of mine mill tailings and waste rock dumps, or are included in one of two large open-pit copper mines excavated by Asarco. The mine, called the Asarco Mission Complex, continues to operate, although Asarco filed for Chapter 11 bankruptcy on August 9, 2005. Asarco is still in bankruptcy, and has not yet filed a reorganization plan.

At the time the San Xavier / Asarco mining leases were approved by the Interior Department, applicable regulations did not require that Asarco operate under a Bureau of Land Management (BLM) approved Mining Plan of Operations, including a reclamation plan. On October 7, 1988, the Interior Department promulgated 43 CFR 3592.1, which requires that a mine operator on federal lands, including Indian lands, have a BLM-approved Mine Plan of Operations, including a reclamation plan, before conducting operations. Since Asarco had already been mining on the San Xavier Reservation for nearly 20 years without a Mine Plan of Operations, the BLM notified Asarco that it did not have an approved mine plan for its operation within the San Xavier District and that a plan should be submitted within 60 days that would include reclamation provisions and a groundwater contamination monitoring plan. Asarco appealed, as it has virtually every one of the many notices of non-compliance or deficiency issued to it by the BLM or BIA over the last forty years. During the administrative proceedings, Asarco filed a series of "voluntary" and "involuntary" Mine Plans of Operation, all of them deemed inadequate by the BLM, the San Xavier District and the San Xavier Allottees Association.

Asarco's mining operations have resulted in the complete destruction of over 4,000 acres of individual Indian trust allotment lands on the San Xavier Reservation, and the contamination of approximately 100,000 acre-feet of groundwater underlying an even larger area. Asarco's tailings ponds are unlined and are designed to drain tailings water heavily contaminated with sulfate and total dissolved solids (TDS) directly into Reservation groundwater.

The San Xavier District and the San Xavier Allottees Association strongly support HR 2262 for the specific reason that the Funds established by §§401 and 421 could potentially provide funds for the reclamation of mined lands on the San Xavier Reservation in the event that Asarco does not reclaim these lands or provide a reclamation fund sufficient to adequately reclaim the San Xavier lands. There is no reclamation plan or reclamation fund for the reclamation of Asarco's Mission Complex Mine on the San Xavier Reservation, or for the monitoring and remediation of sulfate groundwater contamination emanating from Asarco's unlined tailings ponds both on and adjacent to the San Xavier Reservation.

We recommend, however, that the bill be amended to clarify that the funds established by §§401 and 421 can be used for mined land reclamation and groundwater contamination remediation on Indian trust lands, including individual Indian trust allotments. §403(a) reads:

> Eligibility- Reclamation expenditures under this subtitle may only be made with respect to **Federal land or Indian lands or water resources** that traverse or are contiguous to Federal lands or Indian lands .... [Emphasis supplied.]

However, §§402(a) and (d) seem to limit the use of the §401 and 421 funds in such a way that they could not be used for reclamation on Indian lands. §402(a) states:

> In General- The Secretary is authorized, subject to appropriations, to use moneys in the Fund for the reclamation and restoration of land and water resources adversely affected by past mineral activities on **land the legal and beneficial title to which resides in the United States**, ... [Emphasis supplied.]

§402(d), "Other Affected Lands," again requires that the United States hold both legal and beneficial title for lands to qualify for the use of Fund monies.

It is not clear why the United States must hold both "legal and beneficial title" to lands for such lands to qualify for the use of §401 and 421 funds. In the case of Indian trust lands, including individual Indian trust allotments, the United States holds the legal title and the tribal or individual Indian landowners hold the beneficial title. Therefore, Indian lands do not appear to qualify for reclamation expenditures from either of the Funds.

We request that HR 2262 be amended to delete the references in §§402(a) and (d) requiring that the United States hold beneficial as well as legal title; or, in the alternative, that the language of those sections be modified to except Indian lands from the requirement that the United States hold both beneficial and legal title.

We thank you for your kind consideration of our comments.

10/9/07
Austin Nunez, Chairman
San Xavier District
Tohono O'odham Nation

Philbert Bailey 10/9/07
Philbert Bailey, Acting President
San Xavier Allottees Association

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