S. HRG. 106–955

GOOD SAMARITAN ABANDONED OR INACTIVE MINE WASTE REMEDIATION ACT

HEARING

BEFORE THE

SUBCOMMITTEE ON FISHERIES, WILDLIFE, AND WATER

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

ONE HUNDRED SIXTH CONGRESS

SECOND SESSION

JUNE 21, 2000

ON

S. 1787

A BILL TO AMEND THE FEDERAL WATER POLLUTION CONTROL ACT TO IMPROVE WATER QUALITY ON ABANDONED OR INACTIVE MINED LAND

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C O N T E N T S

GOOD SAMARITAN ABANDONED OR INACTIVE MINE WASTE REMEDIATION ACT

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON FISHERIES, WILDLIFE, AND WATER,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:05 a.m., in room 406, Dirksen Senate Office Building, Hon. Mike Crapo, (chairman of the subcommittee) presiding.

Present: Senators Crapo, Reid, and Baucus [ex officio].

OPENING STATEMENT OF HON. MICHAEL D. CRAPO, U.S. SENATOR FROM THE STATE OF IDAHO

Senator CRAPO. The subcommittee will come to order.

This is the Subcommittee on Fisheries, Wildlife, and Water's hearing on S. 1787, the Good Samaritan Abandoned or Inactive Mine Waste Remediation Act. I appreciate our witnesses joining us here today to explore the issue of remediating and reclaiming abandoned and inactive mine sites and to reflect on S. 1787, introduced by Senator Baucus.

Throughout the United States, we have several hundred thousand mine sites that lie undisturbed as a legacy of another time when mining practices were less sophisticated than our current industry standards and when today's rigorous environmental stewardship laws were not yet a glimmer on the horizon. In other areas, the Federal Government directed mining companies to extract resources quickly and without regard for ecological consequences to support war efforts and economic growth. Although operated in full compliance with governing laws at the time, many abandoned and inactive mines pose environmental threats to surrounding watersheds and downstream interests.

However, because of the economic uncertainties of the mining industry, the vast majority of these abandoned mine lands lack a viable owner with the resources to remediate them. Others lie on public lands where State and Federal agencies lack the incentives and funds to adopt and remediate them. And still others are truly abandoned with no identifiable owner in sight.

As such, Federal policy should encourage Federal agencies, States, and private parties to volunteer themselves to clean up the abandoned mine lands that would otherwise remain unremediated. In other words, we should help them to become good Samaritan and promote voluntary stewards of the environment. If unconnected parties step forward to address these sites, everyone wins.

I believe there is little disagreement that this is a policy to which we should all aspire. But how do we achieve this policy?

Clearly, a combination of two factors must be addressed. First, the current legal and economic disincentives for identifying good Samaritans need to be eliminated. Today's witnesses are expected to highlight the multitude of legal barriers, including the Clean Water Act and Superfund liability, that discourage parties from taking actions. The existence of unnecessary regulatory burdens may also dissuade potential good Samaritans because of the time, cost, and hassle of the bureaucratic process.

Second, it should be the Federal policy to invite as many good Samaritans as financially viable to contribute to the repair of our environment. Neither a needy charity nor a worthwhile environmental cause would reject the contribution or assistance from a willing donor. Is our environment any less worthy a cause?

To do so, we should err on the side of establishing as many incentives as possible to identify good Samaritans. Federal, State, and local agencies could be parties, as well as private companies and not just mining sources. Any combination of the following would be created for this purpose: Federal or State funding, tax incentives, permission to offset costs for undertaking voluntary remediation, a trust fund, just to name a few.

For so many years now, we have heard that we can spare little expense when it comes to healing Mother Nature. Is it fair to shortchange her now when many are willing to voluntarily help?

It is also appropriate to spend a few moments addressing matters that would play an important part in whatever policy is created. First, creating limitations on States' rights and prerogatives in the managing of the environment, in my opinion, is counterproductive. In other words, States should retain full authority to set water quality guidelines, issue permits, and act as cleanup agents to ensure the environment is served. Moreover, the current record of the EPA in reviewing and issuing NPDES permits seems to be lacking.

Second, the overly complicated rules proposed under the bill seem to preclude certain actors from cleaning up sites on particular stretches of the property. This may, in fact, scare potential good Samaritans away from volunteering themselves for cleanups on properties of mixed ownership involving Federal, State, and private parties.

Third, if certain sites are a particular threat to the environment, even to the level of warranting Superfund Program attention, those areas should not be excluded from cleanup by volunteers. If by nature these sites represent the highest caliber of threat to human health and the environment, shouldn't these sites be the ones that are open to cleanup by willing parties? Especially if the State or the Federal Government identifies them as priority sites. Unless the search for liable parties finds in the preponderance of cases identifiable parties who will actually clean up the site, shouldn't a volunteer source be welcomed instead of discouraged?

Fourth, with what external activities should a potential volunteer be saddled? In other words, Is it good policy to expect a good Samaritan to expend their limited resources to undertake ownership searches rather than cleanups? Is that the responsibility of the good Samaritan?

Fifth, is it appropriate to treat good Samaritans as untrust- worthy in their willingness to remediate discharges not of their fault by insisting on a lengthy and potentially expensive permit application process? Given that the good Samaritan is volunteering itself where others will not step forward, what should the Federal policy be with regard to reviewing permits?

Sixth, what is the appropriate level of cleanup to hold the good Samaritans to? If a party lacks the resources to restore a site to pristine conditions, should it be precluded from contributing to a lesser cleanup that will benefit the environment but is as much as it can afford?

Finally, if we establish a policy that calls for only rigorous cleanups to be pursued and excludes marginal improvement, should we allow good Samaritans to offset their costs in the process of remediation activities?

These are a number of the issues I would like to explore today and I am sure the witnesses will bring up others. I look forward to an educational and enlightening hearing and one that will explore the multitude of issues that involve the remediation of abandoned mine land.

I welcome our witnesses here today. We will discuss with you the procedure of the hearing after the opening statements have all been given.

Senator CRAPO. Senator Baucus.

OPENING STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM THE STATE OF MONTANA

Senator BAUCUS. Thank you very much, Mr. Chairman.

First of all, I thank you very much for holding this hearing. This is a much needed bill. I also very much appreciate the list of questions that you just mentioned because I think they are good ones. They are questions that we obviously have to consider.

At the outset, I want to say that this bill is a good bill, but it is, by definition, not perfect. No bill is perfect. Certainly this bill can be improved. By saying that I don't mean to be defensive. I think it is a very good way to encourage cleanups of abandoned mine sites. I very much welcome new ideas and any other ideas people have to improve upon it.

I think it will only happen, too, Mr. Chairman, if we have a bipartisan consensus. And I do think that that is entirely achievable.

Let me back up for a minute and just try to fit a couple of things in context, particularly with an example. An example I will use is the Alta Mine in Corbin, MT. It is about 15 miles south of our capital city of Helena.

The Alta Mine was mined heavily from 1883 to 1886 and intermittently until the late 1950's when it was abandoned. I might say, as a little bit of Montana history, it is the reason for our railroad. It was such a big mine and the mine had such prospects that the Great Northern was going to build a line from Great Falls, MT all the way down to Helena. The primary reason for the line was this mine. As I said, in the 1950's, it was abandoned.

So there it sits, an open shaft collecting ground water, which then discharges heavy metals into the ground water and also into the surface water.

I might say that there are elevated levels of arsenic, cadmium, lead, mercury, and other heavy metals. The pollution runs down Corbin Creek into another creek called Spring Creek and then into Prickly Pear Creek, which runs into East Helena, MT. It is downhill into the valley and then eventually into the Missouri River.

For at least 7 miles downstream, there is very serious environmental harm. I visited the mine just last year with a fellow named Vic Anderson, who runs the Abandoned Mine Cleanup Program in the State of Montana. The waters are very colored.

This stuff is nasty stuff. It is full of all the metals I mentioned. It also stinks and it has contaminated the drinking water system in Corbin, MT. Corbin is not a big metropolis. There are about 11 homes in Corbin. But our State had to spend about $300,000 to replace the drinking water supply simply because this stuff is coming down the creek.

Why isn't somebody doing something about this? In fact, Montana is doing a lot. Vic Anderson and his crew are removing structures. They are closing adits, capping contaminated soil. But it would also like to do something about the water. For example, they could construct wetlands for filtration, or they could use limestone to neutralize acid wastes. They have a lot of ideas. But the trouble is that there are some problems.

Here are all the ideas Montana has. The engineers say that it will work. But the lawyers say that it won't. The lawyers say that by diverting the water the State will become liable under the Clean Water Act. We will have to get a full NPDES permit, and the permit would require permanent treatment. As we all know, under the Clean Water Act, it is prohibitively expensive. So as we speak at this very moment, acid mine drainage continues to flow directly into the Prickly Pear.

This is not an isolated example. This is just an example of the Alta Mine. You can see the adit there and the water is coming out. It is a huge operation there to reclaim the area around the mine, but the State can't touch the water because to do so they would have to clean it up to Clean Water Act standards and they can't do it, so the water just continues to come out of the mine site.

As I said, this is not an isolated example. There are more than 400,000 abandoned mines across our country—400,000 abandoned mines across the United States of America. In Montana, there are 6,000. By the map up there, the red dots indicate where the abandoned mines are. There are at least 245 in our State that are within 100 feet of a stream.

Now, according to the Western Governors' Association and many other people, that same problem that is occurring at the Alta Mine is occurring at other abandoned mines all across the West. States and other good Samaritans are prevented from cleaning sites up to reduce water pollution.

This is a map of the country where a lot of these sites occur, and you can tell they are all over. The more dense the red, the greater the concentration of mines.

The bipartisan that I and Senator Campbell have introduced is designed to address this problem. The title of the bill is the Good Samaritan Abandoned or Inactive Mine Waste Remediation Act, which tells a lot about the bill's objectives. In a nutshell, the bill

will allow States and some others, who did nothing to cause the water pollution problem, to clean up an abandoned mine under a special permit tailored to the conditions of the site.

Under the bill, a State can apply for a permit from EPA by submitting a plan describing how the State would improve water quality. EPA reviews the plan to determine whether the plan will improve water quality to the maximum extent practical, given the resources and cleanup technologies available to the good Samaritan, a standard that is much lower than under the Clean Water Act, but not too low to be sure that there is some significant improvement in the water quality.

The goal here is to improve the water quality. That is the goal here. And to significantly improve the water quality and draw the line so that there the water quality can be improved to a good high standard, but not so high—as is today in the case—so that no States, municipalities, counties, nobody does anything about it.

That is the basic framework. Obviously we will get the details later, Mr. Chairman, but one final point—I think this is a good bill. It is not perfect and can be improved. I think our witnesses will have good suggestions. But let us not allow the perfect to be the enemy of the good. Let us not insist that the bill address every single issue on our wish list because that would be a recipe for a stale mate. I think we can do a lot better in working together with the States, industry, and environmentalists to solve the narrow, but important problem.

Senator CRAPO. Thank you very much, Senator. All of us do share that common goal. Hopefully, we can work forward to achieve that objective. I think you have stated the objective very well.

We will now begin with the witness panel, so let me indicate to those here that the hearing will consist of four panels. The first three panels will be one witness per panel, and our first panel will be Hon. William J. Janklow, the Governor of the State of South Dakota.

We welcome you here with us, Governor.

He will be testifying on behalf of the Western Governors' Association.

The second panel will be Mr. Chuck Fox, the Assistant Administrator of Water for the Environmental Protection Agency.

Welcome, Mr. Fox.

Our third panel will be Ms. Katherine Kelly, the administrator of the Waste Management and Remediation Program of the Idaho Division of Environmental Quality.

Then our fourth panel will have four witnesses: Mr. William Goodhard, the director of Reclamation and Environmental Affairs of Echo Bay Mines, from Englewood, CO, testifying on behalf of the National Mining Association; Mr. Jack Lyman, the executive director of the Idaho Mining Association; Ms. Sara Kendall, of the Western Organization of Resource Councils; and Mr. David Gerard, a research associate with the Political Economy Research Center from Bozeman, MT.

I would like to remind all the witnesses that we want to have as much opportunity to have a give-and-take discussion with you and questions, so we encourage you to remember the rule of trying

to keep your oral presentation to 5 minutes. To assist you in that regard, we have a system of lights here. The green light will be on for 4 minutes, the yellow light will come on when there is 1 minute remaining, and when the red light comes on, we ask you to try to summarize what you have to say.

If your experience is like that of most of the witnesses we have, the yellow and the red light will come on long before you are finished with what you have to say. I just assure you that you will have an opportunity to elaborate with us as we ask questions and so forth. So we ask you to wrap up so that we can have the time for the give-and-take with the panel.

With that, we will begin with Governor Janklow.

Senator BAUCUS. Mr. Chairman, if I might just also welcome the Governor——

Senator CRAPO. Sure. Go ahead.

Senator BAUCUS. First of all, we claim him as a westerner. Second, I know from Senator Daschle what a good job you have done, Governor, and know that the two of you have a good, solid relationship. He wanted me to make sure that you are welcomed.

Senator CRAPO. We do very much welcome you here, Governor. We know of your busy schedule.

STATEMENT OF HON. WILLIAM J. JANKLOW, GOVERNOR, PIERRE, SD, ON BEHALF OF THE WESTERN GOVERNORS' ASSOCIATION

Governor JANKLOW. Thank you very much, Senator Crapo and Senator Baucus.

If you look at Senator Baucus' map up there, Idaho, Montana, and South Dakota—there is a lot of red in those maps and there is a lot of very dark, dark red in those maps—three States that are vitally affected by the mining issue question.

My State, frankly, is not unlike your two States. South Dakota, combined as a State, has less people than Greater Kansas City, MO. We have 88,000 square miles or 88-million square acres in our State. We are a State that really doesn't have a great deal of wealth.

Like a lot of Western States, we were developed as a resource State, and as those things have changed dramatically, it has had a huge impact on the economics in our State.

I am here today for two purposes. One is to submit the testimony on behalf of the Western Governors' Association—which I do at this point in time, Senators—and I would like to make just a couple of brief comments with respect to South Dakota and this bill.

We found ourselves in the position the last couple of years dealing with a mine called the Brohm Mining Company, a mining company that when the price of gold got to a couple of dollars an ounce went bankrupt. It left a huge open pit mine when they went bankrupt. The State was able to get a cash bond for several years. When I came back into office and became aware that there could be a problem, we put them on a cash bond. But unfortunately, they went bankrupt before we got enough cash in the bond fund.

The point is that we now have 130 million gallons of acidic water in the pits out there that we are treating at a cost of about—they were paying $200,000 a month and it is costing us about $100,000

a month. When I went to Home State Gold Mine, which is a neighbor less than a mile away, when I went to Wharf Resources, a neighboring mining company within 2 miles of this mine, both of them refused to help me because of CERCLA and other Federal laws because of the perpetual liability.

I invoked powers that we have in our State that a Governor has to deal with an emergency situation. They got to the point where they would have conversations with me and they actually made cash donations to the State where they gave us cash donations and suggested how we ought to spend it to start some of the remediation process. But they refused to become intricately involved, even though they are absolute experts at how to deal with this particular rock and geology of this particular location, because of the perpetual liability that currently exists under existing Federal laws.

This bill, S. 1787, is really a very good start in its attempt to try to deal with the questions of liability. Some people have suggested to me that they want definitive standards written and they don't want any flexibility in terms of issuing permits. That to me is like saying that unless a cancer treatment is guaranteed to reach a certain level, people won't take it. The reality is that people will take cancer treatment at any level to try to remediate the situation they have.

So the point I am trying to make is that we need the help of industry. We need the resources that could be made available to clean up our water. Frankly, I would just as soon clean it up 25 percent rather than 0 percent if that is all I can get done under current economics and current resources. But it is stupid to suggest that we ought to leave it 100 percent bad because no one wants to get involved with having liability forever with respect to these situations.

That is where we are with respect to these bills. We were unable to get industry to help us. EPA Region 8 has been very good in providing assistance to us, but it is nonsense that all those resources sitting right there within 4 square miles of the location have been unable to really step forward and help us because of the liability issues.

The State of South Dakota doesn't have the resources to do this. We frankly don't have the expertise to do it. We don't have the economics to do it.

As briefly as I can, that is the situation in which we find ourselves. Senators, I will be glad to answer questions.

Senator CRAPO. Thank you very much, Governor.

I just have a couple of questions with regard to your testimony. What was the name of the mine again?

Governor JANKLOW. Brohm Mining Company.

Senator CRAPO. As I understood your testimony, you actually highlighted a couple of concerns that I have and I just want to pursue that with you.

You indicated that one of your difficulties—in fact, as I understood you, the main difficulty you had in getting the industry experts involved—was their fear of CERCLA liability.

Governor JANKLOW. That is correct, sir. They would not get involved for that reason, other than as giving us cash donations and

then suggesting how we do it. They even cut that off because they didn't want to leave their fingerprints on it.

Senator CRAPO. I assume from that, then, that you would agree that the legislation should provide exemption from CERCLA liability for a volunteer.

Governor JANKLOW. I would suggest that it be done if it is mandated by governmental action, which could be State action pursuant to the bill. As long as government steps forward and authorizes it or demands it—they wouldn't even do it if we demanded it under our laws, sir. So I think there ought to be something to protect them.

Senator CRAPO. My reading of the bill is that it does not at this time—unless we amend it—provide any protection from CERCLA liability for volunteers.

Governor JANKLOW. That is correct, sir. I like this bill, but I think it ought to go farther. But recognizing what democracy is and compromise, the first step is a terribly important step.

Senator CRAPO. But that is a pretty big issue. If I understand it correctly, if we pass the bill as is, it wouldn't solve your problem with the Brohm Mine. You still would not be able to get industry——

Governor JANKLOW. Some would argue that if a contractor is operating under State action, there would be protections. I don't personally think it is all that clear. I would like to see it made clear because I just want to—and I don't want to sound editorial. I am getting to be an old man and I have grandchildren who drink this water, bathe in it, and their mom cooks in it. I want it to be better than it is. Montana puts that water he is talking about from that mine into the Missouri River, which goes right through the middle of my State. I would just as soon they cleaned it up and made it a little better in Montana before they send it down.

Senator CRAPO. Can you see any reason not to have an exemption from CERCLA liability?

Governor JANKLOW. I do not, sir. I am not practical by Washington standards, but I do not see any down side to it at all. The alternative is that it is going to continue to be a 100 percent problem. I would just as soon make it a 70 percent problem and then we can deal with it from there.

Senator CRAPO. Well, that gets me to the next issue that I wanted to visit with you.

You used the example of a person seeking a cancer treatment and if they couldn't get a 100 percent solution, they would still want to have whatever help they could get.

Governor JANKLOW. Yes, sir.

Senator CRAPO. The standard in the bill—and I don't have the exact language in front of me, but I believe it is that the permit applicant seeking to be a good Samaritan must clean up the site to the maximum extent practicable. If a volunteer came forward and said that they didn't have the resources to do that, but they have the resources to give 10 or 20 percent improvement and they are willing to do it, shouldn't we encourage that?

Governor JANKLOW. Yes, sir. I would support that.

I support anything that makes water quality better. I was an absolutist when I was younger. The older I get the less absolute I be-

come. Now I just want to start to fix problems instead of fix the whole world. I just want to fix a little drinking water and half dirty water is better than 100 percent dirty water.

Senator CRAPO. I appreciate your approach. I think it represents some of the common sense we find out among our constituencies and I think that is a good, healthy approach.

You may not know the answer to this, but——

Governor JANKLOW. That never prevented me from being an expert on it.

[Laughter.]

Senator CRAPO. The Western Governors' Association prepared a discussion draft for this type of legislation when it was looking at the issue. I don't know how involved you were with that, but in that process, the discussion draft did not include a Federal enforcement mechanism. The bill before us today does have a Federal enforcement mechanism. I was just curious if you knew why the Western Governors did not believe that mechanism should be in the bill.

Governor JANKLOW. Sir, I have been told that as a result of concern on whether or not a bill would have a chance of being passed, it was compromised and changed over time. That is the reason that something like that is not in there. It really was as a result of compromise and trying to find a consensus to move forward.

Senator CRAPO. And then just one other question.

In this whole process, should it be the responsibility of the potential good Samaritan, or should it be the responsibility of the regulatory agency, to evaluate the chain of ownership to make a search for possible responsible parties?

Governor JANKLOW. Sir, I don't mind the governmental entity making a search for owners and liable parties. I don't honestly think that is an onerous burden. It is not difficult to look back and find out who messed with the place, who owned it, or who had a deed, and things of that nature. So that is not a provision, sir, that really bothers me because we have done that with respect to the Brohm Mine. We have gone back and to the extent we can, we are going after people. But no one ever has the pockets that are deep enough to deal with it unless they have major corporate wealth.

Senator CRAPO. So if I understand correctly, you are saying that you don't think that is a burden we should put on the good Samaritan. That is something the government can handle?

Governor JANKLOW. I think the government should handle it. If the government is demanding the action, so the government ought to do those types of things. We should only use the good Samaritan to the extent they have the resources and the expertise. I don't want these companies to go in and figure out who the former owners were and start suing them. I want them to give us the expertise to clean up the water. That is what I am looking to them for. I will go to someone else for the chain of title problem.

Senator CRAPO. Thank you very much.

Governor JANKLOW. Thank you, sir.

Senator CRAPO. Senator.

Senator BAUCUS. Thank you, Mr. Chairman.

The question just now raised about whether there is continued Federal liability or not—the chairman was asking you several

questions, Governor, about whether the bill should make more clear that that is not the case, that is, that there is no Federal liability for South Dakota or for a city in South Dakota to pursue a cleanup under this bill.

Frankly, this issue is a little murky because under current law, basically, I believe that Superfund liability does not apply, and let me say why. Under current law, under section 107(j), Superfund liability does not apply to someone whose only activity at the site is part of a federally permitted lease. A federally permitted lease is defined in another part of the Act as including permits issued under section 402. The good Samaritan bill we are talking about here would issue permits under section 402.

So a reading of the statute would indicate that this is a federally permitted lease. Under another section of CERCLA, when one's only activity is part of a federally permitted lease, Superfund does not apply. It requires going to a couple sections in the law. I am not going to sit here and say that it is iron-clad clear, but it is pretty clear that under the current law, a permittee under this good Samaritan bill would not have Superfund liability. But that is something we could clear up a little bit later.

There are going to be some witnesses later, Governor, who are going to say that this bill doesn't make any difference and won't help at all. It won't help your problem in South Dakota and it won't help my problem in Montana. I don't agree with them, but that is what they are going to say. I am just curious what you would say to them.

Governor JANKLOW. Sir, there were people that told Columbus not to head West on the water because the earth was flat. There are people who also tell you that you can't try certain things because they will never work without having tried them.

Let me make a suggestion. Let's pass a bill like this and then if it doesn't work we don't have to worry about it because it will just join the reams of other laws that have been passed in America that nobody listens to.

On the other hand, this may be a law that works. It may be a law that brings about some remedy and makes things a little bit better. We don't know until we try it.

One of the great things about a democracy is that you can try something and if it doesn't work you can go back to where you were at. We all know where we are. It is where we are going that is always the debate and the argument. But we have to take the trip. We have to get the bus moving. If we take a wrong turn, we can always turn around and go back. Or we can sit and debate all year long where we are going to take our trip and then never take it.

Senator BAUCUS. I totally agree with you. It reminds me of a book I read, a biography of President Truman, and that became very clear in that biography. Let's try something. If it doesn't work, try something else.

Governor JANKLOW. Senator Daschle always quotes Harry Truman and he says that Harry Truman said one time "My mom told me a jackass can kick a barn down, but it takes a carpenter to build one. We just have a lot of jackasses in our world today."

[Laughter.]

Senator BAUCUS. Well, I can tell you are a good carpenter, Governor.

Governor JANKLOW. Well, I don't know that, but I want to try. I may not make a good building, but I want to try.

Senator BAUCUS. A third point is that some suggest that—and this gets pretty much to the basic question here—that maybe mining companies ought to be able to mine these sites while they are cleaning up. This is something that a lot of people considered quite thoroughly, as I know the Western Governors did. It is my personal view, as much as I would like to be able to help mining companies continue to mine, it is going to get awfully complicated in trying to separate the two. I would like your reactions to that.

Governor JANKLOW. Senator, I am not personally opposed to that. However, that is a good issue. It is not this issue. This issue is a cleaner water issue and what we ought to do is confine ourselves to making it a cleaner water issue. I personally would be in favor of confining the discussion here to what we can do with respect to good Samaritans to help make water quality better and leave for another day or another forum the question of remining.

I don't mind the remining issue, but it doesn't belong in here and I think it needlessly complicates the issue.

Senator BAUCUS. You just want to get on with it?

Governor JANKLOW. I just want to get on with it because as a practical matter I have run into this problem. I have 130 million gallons of acidic water that we are spending a lot of money just to neutralize every month. I am not getting rid of the problem and South Dakota doesn't have the wealth to get rid of it. The people I can call on that do have the expertise cannot be good Samaritans even under an emergency declaration in our State because they said that they don't want to clean up the whole problem. They would help us if they could, but they can't without becoming a miner of the property. They would get to clean up the mine, but not the benefit of the mining. They are not interested in that.

Senator BAUCUS. Thank you very much. I appreciate it.

Thank you, Chairman.

Senator CRAPO. Thank you very much.

Governor, we appreciate your attendance here.

Governor JANKLOW. You have been very courteous. Thank you.

Senator CRAPO. I do have to say that we appreciate your kind comments. I think also Senator Baucus would agree with me that your good, down-home common sense is very refreshing. I can see why your constituents elected you.

Governor JANKLOW. You are very nice. Thank you.

Let me just say this as I close. This is not a Republican or Democrat issue, and you all know that. This is a real issue for real people. We get criticized in the States all the time about these water policies. We are the ones that are drinking the water in our States every day. We are the ones that bathe in it. We are the ones that cook in it. We are the ones that have to live in it. We have a real interest in making sure that it doesn't get degraded. We have a real interest in cleaning it up and making it better.

We need to start the process. That is all I ask you. We don't have the tools now. Federal law prohibits us from being able to clean up some of the water. That is wrong.

The last thing I will say—a guy told me the day I took office years ago, "Janklow, every day you will deal with what is urgent and what is important. Don't waste all your time on what is urgent. You will never get to what is important. What you do that is important is what will make a difference in people's lives in the future."

Gentlemen, this is important. Thank you.

Senator BAUCUS. Thank you very much.

Senator CRAPO. Thank you, Governor.

We would now like to call our second panel, Mr. Chuck Fox, Assistant Administrator of Water for the Environmental Protection Agency. I understand Mr. Mike Cook is going to sit with you, the Director of the Office of Wastewater Management.

Mr. Fox, welcome. It has been a couple of weeks since we have had you up here.

Mr. FOX. And as you can imagine, I have been busy before other committees on our favorite subject.

[Laughter.]

Senator CRAPO. We welcome you here, please proceed.

STATEMENT OF J. CHARLES FOX, ASSISTANT ADMINISTRATOR OF WATER, ENVIRONMENTAL PROTECTION AGENCY; ACCOMPANIED BY MIKE COOK, DIRECTOR, OFFICE OF WASTEWATER MANAGEMENT

Mr. FOX. Thank you. And thank you for this opportunity to present our testimony today.

I would like to start with a special thanks to Senator Baucus and to the Western Governors' Association for their leadership on this issue. As we heard from the previous witness and in your opening statement, this is a very significant challenge confronting water quality in this country. The Administration is supportive of this legislation. I will talk in some detail about that, respecting your 5-minute rule.

We have made, as you know, great progress in improving water quality in this country, but serious water quality problems remain. The States indicate that over 20,000 water bodies are polluted and need focused attention to clean up. In fact, 180 million Americans live within 10 miles of a polluted water body.

In the Western States, one of the most serious threats to water quality is the pollution contributed by thousands of abandoned or inactive mines. Mining has a significant economic benefit to the West, but many of these former mine sites have left an unfortunate legacy of water pollution or threat of water pollution.

Exact figures are not available due to the magnitude of historical small-scale mining activities and the age of many of these abandoned mines, but estimates place the total number of abandoned mines at 200,000 to 500,000 for the entire country. An independent assessment by the Western Governors' Association places the total at more than 400,000 in the West alone. Most of these sites are classified as hard-rock mines that were developed to extract a wide variety of metal-bearing ores.

Estimates of the magnitude of the environmental impacts occurring as a result of hard-rock mining also varies significantly. Not all of these mine sites pose serious threats to human health and

the environment. The Western Governors' Association estimates that as many as 80 percent of the sites may not pose environmental or immediate public health safety concerns. However, many mine sites do create significant environmental and public health hazards, anywhere from 40,000 to 100,000 sites based on previous figures cited.

While my testimony today in this hearing focuses on inactive and abandoned mines, it is at least worth noting that active mines also pose significant threats to the environment and water quality. In fact, more than half of all mine and processing ore sites on the National Priority List under the Superfund in fact were active at some point since 1985. It gives you a flavor that this is in fact an ongoing and current problem as well.

As was previously mentioned, EPA uses a number of statutory authorities, which I won't get into, to help protect the public and the environment from these activities. But I do want to quickly turn to the Clean Water Act. There are a number of sections in the Clean Water Act that have direct bearing on regulating both active and inactive mines. Unfortunately, as we have heard, there are limitations under the Clean Water Act that often hamper remediation and restoration activities at abandoned mine sites.

In particular, the permitting requirements under section 402 of the Clean Water Act require that the permittee meet all the requirements in effluent discharge limits set out in the discharge permit. These discharge limits include water quality standards that have been established for the body of water into which the effluent is discharged. In addition, these requirements mean anyone conducting reclamation or remediation at an abandoned mine site may become liable for continuing discharges from that site.

The legislation being considered today directly addresses these problems. As I said, the Administration is happy to support this legislation. My written testimony includes a number of specific comments that we would offer to the sponsors and to the committee. I would simply like to mention a couple of points that we think are particularly important.

No. 1, the good Samaritan, acting as the remediating party, cannot have a historical or existing responsibility for the mine site. No. 2, sites are only subject to the bill's coverage if there is not an identifiable owner or operator of the mine that can clean up the site. Third, the permitting authority rests exclusively with EPA, ensuring consistency in application of this innovative approach to the environment under the Act. I suspect we might talk more about that.

Fourth, a permit may only be issued when it is demonstrated with reasonable certainty that improvement in water quality will take place to the maximum extent practicable, taking into consideration the resources available to the remediating party. And finally, we think it is very important that public participation in permit issuance and modification is included in the bill.

In closing, Mr. Chairman, as we have heard, this legislation raises many very important policy questions in how it interfaces with other Federal laws. We stand 100 percent behind the goals of this legislation and stand ready to work with the committee to come to a quick solution on these.

Thank you very much.

Senator CRAPO. Thank you very much, Mr. Fox.

Let me start out with regard to the issue of CERCLA liability.

As you saw from the previous panel, there is a question as to whether a good Samaritan acting under the statute as proposed would fall subject to CERCLA liability. Do you agree with the analysis Senator Baucus gave of the law? Do you agree that CERCLA liability would not be imposed on a good Samaritan under this bill?

Mr. FOX. We do agree with the analysis of Senator Baucus. I think the point that might have been lost in the last discussion was that currently that liability is there. But if you pass this bill and it becomes law, you now have created a permitting structure under section 402, which would in fact give the protection that Senator Baucus identified in the existing CERCLA law.

Senator CRAPO. I appreciate the fact that you said that and that you said it on the record because if this bill does become law that may become evidence in a court case some day. But wouldn't it be better for us—I have talked to lawyers who don't agree with that analysis—wouldn't it be better for us just to make it crystal clear in the law that there is no CERCLA liability? Would you object to that?

Mr. FOX. I would be happy to spend some time working with the committee on this very question. The only issue that has been raised to me that has some validity is what happens when the permit expires. Do the protections from liability still go to the remediating party after the permit has in fact expired. That is the kind of thing I think we could certainly work with the committee in trying to address.

Senator CRAPO. I am not sure I understood your answer.

Are you saying that they would have immunity from CERCLA liability as long as the permit existed?

Mr. FOX. I think that is a very clear and 100 percent agreeable interpretation. I would be surprised to find a lawyer who didn't agree with that. To me the only question comes as to what happens when the permit in fact expires. Are they still shielded from liability? That is something——

Senator CRAPO. It seems to me that is a pretty big question.

Mr. FOX. Indeed. That would be something we would be willing to sit down and discuss.

Senator BAUCUS. We can solve that one pretty easily.

Senator CRAPO. Would you object to solving that and making it crystal clear that there would be no CERCLA liability after the permit expired or during the permit's existence?

Mr. FOX. I don't think that would be a significant issue. But again, I am not the Assistant Administrator confirmed by you all to manage the CERCLA law and I would like to at least check with him on that.

Senator CRAPO. Let me go over a couple of points that you identified as critical pieces of the legislation.

Your second point was that the sites should only be subject to the bill's coverage if there is not an identifiable owner or operator of the mine that can clean up the site. Obviously, if there is an identifiable owner or operator who has the resources to clean up the site, then under current law we have the ability to achieve a cleanup. It is not really an abandoned site. But if there is an iden-

tifiable owner that doesn't have the resources to clean up the site—say, a bankrupt owner exists—should a volunteer or good Samaritan be allowed to step in and clean up the site?

Mr. FOX. The short answer is that the intent of this bill is to focus on the true good Samaritans and what I consider the true orphan sites, places where all of us can come to common agreement that some action is better than no action, just as the Governor said. This is one area where the slope starts to get slippery and things start to get complicated. Frankly, in the spirit of trying to really get some action going on out there, my recommendation would be to focus this on good Samaritan actions for truly orphan sites so that we can in fact get some action going.

I think the Governor's comments about having a different forum and different opportunities to talk about some of these related problems—we would be happy to do that. But at this point, my recommendation would be to focus just on these narrower questions.

Senator CRAPO. I don't think the Governor meant to say—of course, he is not here to clarify himself—but I don't think he meant to say that just basic common sense problems that we identify shouldn't be solved as we move forward with the legislation.

My question is, Why is it a slippery slope? What becomes slippery about this issue? If we have a site where there is an existing owner who is incapable of cleaning it up, why is that a problem just to let a volunteer to step in and help clean it up?

Mr. FOX. I think in the case you described it is probably not as slippery simply because you have made a determination that this owner or previous owner is incapable of providing the financial support necessary to do it. We have a longstanding principle, as you know, in our environmental laws, fundamentally called the polluter-pays principle, that parties that in fact create some of these problems should in fact be responsible for cleaning them up. It is that principle that I think we need to be careful and respect.

Senator CRAPO. But in our efforts to pursue this polluter, do we want to let the water stay dirty?

Mr. FOX. Absolutely not. That is obviously the overall goal of this legislation, which is why we support it.

Senator CRAPO. Let me go to your third point. I skipped your first point, which I also have a problem with, but I am going to let that one go for now.

The third point is that the permitting authority must rest exclusively with the EPA. I assume that is because you want to ensure consistency.

Mr. FOX. The legislation, as laid out, includes a report to Congress and an assessment—I don't remember the exact time period—in a few years as to how the program is operating and at that point, frankly, the next Administration might have a different view on this. But what I can tell you right now is our experience with similar variances suggests that having a national consistency is very important.

The model that immediately comes to mind is the variance procedure under the Clean Water Act for sewage treatment requirements, what is called a 301(h) waiver. It is a process whereby certain communities can bypass the basic secondary treatment requirements of the Clean Water Act. This is a national determina-

tion, if you will, made by the EPA. It is not made by the States. It helps level the playing field around the country.

States—I have all the confidence in the world that they can ultimately implement this program, but I think for the beginning of this program, so that we can get some understanding of how this is ultimately going to roll out—What are some of the key questions in our regulations? What are the key decisions we are going to have to make? It is probably appropriate to start out having it be an EPA decisionmaking role.

Senator CRAPO. I have some more questions on this and some other questions, but my time is up, so I will wait for another round and we will have a round of questions for Senator Baucus.

Senator BAUCUS. Thank you very much, Mr. Chairman.

First, I want to tell the Administration I appreciate your support.

This isn't business as usual. We are kind of plowing new ground here. This is innovative. We are taking some risks here and doing something a little different. I appreciate the Administration for bending a little bit and trying to do something a little different. This is creative, new, and something we have to do generally and specifically. This is quite helpful.

Second, on the discussion with respect to whether there is continued liability, you gave your interpretation of law. I think that is very helpful. Regardless, I think that is something we can work out quite easily, Mr. Chairman, to nail down that a good Samaritan is not liable if he or she gets a permit under the structure. That should no longer be an issue.

With respect to your good question, Mr. Chairman, about somebody who can't clean up—we know who it is and they can't clean it up—maybe we are going a little far here, but the bill actually takes care of that problem. Under the bill that is introduced, on page 4, essentially it says under subparagraph two that a person that is financially capable of compliance with the requirements of the Act is one——

Mr. FOX. I think you have hit it exactly right, Senator.

Senator BAUCUS. If they are not financially capable, then they qualify. If they are financially capable, they don't qualify.

Senator CRAPO. I thought you had to not have an identifiable owner or operator.

Senator BAUCUS. I am addressing the question of whether the responsible person is financially capable or not. Under our writing of the bill, if the person is financially capable, then they do not qualify as a volunteer.

The State delegation question I think is a very good one to discuss. I would like to see as a general principle States have more environmental authority. They are doing a very good job. I mentioned Vic Anderson earlier and I am very impressed with him and his operation with respect to the Alta Mine and the cleanup they are conducting out there. They are good.

But there are concerns here. One is substantive, as you addressed, Mr. Fox. We are starting something new here, and we do have a standard, which is a new standard environmental law, to the maximum extent practicable, considering the available resources. It is a little unclear exactly what that means. One could make the argument that it might make sense for the sake of con-

sistency to let the EPA determine what that means. We have EPA's backing of this approach in the first place, so clearly they will try to make this work.

Politically, I don't know if there were State delegation if this legislation would fly. I think a lot of environmental groups would be very upset with pure State delegation. I might add, too, that the Governors themselves did not include a delegation in their proposal. My guess is that it is probably for the same reason.

It is a good thought and a good question. But we have to exercise a little bit of discretion here. As Governor Janklow says, we need to use a little common sense and do what works as opposed to what doesn't work. My view is that since we are starting something new, let's take the first step. If we need to improve upon it in 2 or 3 years, then we will, whether it is State delegation or allowing mining companies to further mine in conjunction with the good Samaritan, or whatever it might be.

The main point is that there is such a need. There are 400,000 abandoned mines in this country. It is incredible. I mentioned that there are 6,000 in my State and they are all over the West. All over the country, according to the map there. And nothing is being done about it.

I think this bill is a good start to make some progress. It is clear from the testimony we received that this bill would do that.

I thank you again.

Thank you, Mr. Chairman.

Senator CRAPO. Senator Reid, I know you just barely got here. Did you want to ask some questions?

Senator REID. I have been here the whole time.

Senator CRAPO. I appreciate that, and we do appreciate it.

Senator REID. I have no questions.

Senator CRAPO. I am going to continue with my line of questioning, Mr. Fox.

Back to the question of State delegation, if we didn't authorize State delegation, wouldn't this be the first time under the NPDES system—and basically a precedent-setting step under the Clean Water Act—to not allow State delegation?

Mr. FOX. As I mentioned previously, there are other examples I am aware of under the NPDES permitting program where when you are talking about a waiver from Federal standards where the EPA has to make that determination. The example I gave of 301(h) was precisely one of those. I am not sure about others, but that is certainly one.

Senator CRAPO. What is the big fear about States having authority?

Mr. FOX. I think there is no fear of the States having authority. As a former State official, I couldn't agree more with Senator Baucus' characterization about their capacities and their ability to solve problems. It really gets to a new program that is going to raise a lot of questions. The set of criteria by which we will be making these determinations, as the Senator said, is a new one. Some will argue that it will be open to a lot of different interpretations. We have never before, to my knowledge, set a standard that said to the maximum extent practicable, to the extent resources allow.

The 301(h) standard I mentioned before—just to give you a flavor—the standard in the statute says that we need to issue a permit that will "maintain a balanced, indigenous, population at the end of the zone of initial dilution". This was a criteria that is, frankly, a little more precise than this one, but also raised a lot of questions about how this would be interpreted in California versus Puerto Rico and the like.

My recommendation is that this is something innovative. It is something that is generally going in the right direction. The current reporting requirements here are 9 years after the enactment of the bill, I think, as I read this. If you wanted to add language that would have us reporting back to you in a shorter period of time on this very point, that might be appropriate. It is really uncertainty that is driving me to my position.

Senator CRAPO. I sense in your answer a lack of trust of the States.

Mr. FOX. I don't mean to imply that. What I am trying to suggest is that the criteria is going to be open to a lot of different interpretations and that some national guidance for an emerging program—for example, somebody argued that they only had $5 in their bank account, so they are only going to do $5 work of cleanup. They think it will be $5 better than zero dollars. Does this warrant a permit that will protect from liability?

That is the kind of question we are going to be facing.

Senator CRAPO. I recognize that. In fact, let's get to the standard because maybe our differences of opinion on the standard are reflecting our differences of opinion on who should administer the standard.

The standard would be the maximum extent practicable. Why? Let me give you a clarification of my question.

Let's say that a good Samaritan with substantial resources comes forward—a multi-billion dollar good Samaritan—but this good Samaritan says that they are not willing to use their entire assets to clean up this mine. They are willing to put $100,000 into it, or maybe $500,000 into it. Why in the world would we want to say that since they are not willing to do the maximum extent that you can with your resources, we don't want you to help us at all? Why would we have such a standard?

Mr. FOX. I think you raise precisely the kinds of questions we are going to have to deal with in the development of regulations on this. I am not going to say it is going to be easy to define this. But to me, the practical, common sense answer to the question you pose is that of course we don't want to break the bank and have all the resources go to this. Our goal here is to get some level of cleanup going on and ultimately the judgment is going to be what is practicable and it wouldn't be practicable to have a $1-billion asset corporation spend all its money on mine reclamation. It might be practicable that they spend $100,000 or $200,000 on it.

Senator CRAPO. What if the EPA decided that it was practicable for this entity to spend $1 million of their $2 billion, and the entity said, "We don't care what you think is practicable. We have had a meeting and we are willing to contribute $500,000 to this"? Why should we even get ourselves into this discussion of whether we

have squeezed the last possible ounce out of a good Samaritan who is willing to come forward and contribute some resources?

Mr. FOX. First, just a point of clarification. The way the bill is structured, the good Samaritan basically must be a governmental entity. So we are talking——

Senator CRAPO. That is another issue I have, but go ahead.

Mr. FOX. So the resource determination is a little bit different than the example we have been talking back and forth of ABC Corporation.

Senator CRAPO. Let me change it to that example. What if the State Legislature of Idaho—which has budget problems like every other State—their Appropriations Committee says that they are willing to take $500,000 out of their budget this year and put it toward this issue. The EPA looks at their budget and thinks that they could probably squeeze a little more out of it.

Why do we get into this discussion? Why don't we let the States Legislature—if it is going to be a State, or whoever it is that is appropriating the dollars or has the dollars in their fund to do it—why don't we let them decide what they believe is the right step they will take? If we don't, we don't have the ability to force them to do this, so the question is zero or what they are willing to do.

Mr. FOX. I think that is precisely the intent of the legislation. I have to believe that my successor is going to interpret that as the intent and is going to take that $500,000 from the Iowa State Legislature and say let's apply this to that problem, that is practicable, let's get on with the next one.

Senator CRAPO. Why not make it so that your successor doesn't have any discretion not to accept the $500,000? Why should a bureaucrat—whether it is a State or Federal bureaucrat deciding the issue—even get into that issue? Why is it a relevant issue?

Mr. FOX. I think it is a relevant issue because, as Senator Baucus said in describing this legislation, we are trying to craft some environmental outcome that is somewhere between the pristine, the perfect, the existing water quality standard and do nothing. The reality is that we are trying to do what we can to improve water quality and get it as close to the national environmental standards that we have established. We want this to have a good environmental outcome.

This is the challenge: defining this place somewhere above the standards and at the same time saying that we are going to do something. If we simply said that all you have to do is move the bar a little bit, I am not sure that is solving many problems throughout the country.

Senator CRAPO. It does move the bar a little bit, though.

Mr. FOX. Again, I would respectfully suggest that we have built a pretty solid and successful foundation of environmental laws in this country. We need to be mindful that when we are making significant changes like this and allowing fairly significant waivers from the program, we need to do that with the respect of a pretty strong environmental outcome.

Senator CRAPO. I understand what you are saying, but there is a very big difference I don't think you are focusing on, and that is that the environmental laws we have that you have just described are virtually—if I recall correctly—all focused on an enforcement

mechanism where the Government is stepping in and requiring a standard to be met, requiring conduct on behalf of the person subject to the statute.

We are now talking about a creative approach to trying to encourage people to volunteer. If you try to impose the mandatory aspects of current environmental law on a volunteer, I think you have missed the point of what we are trying to do. We are trying to encourage volunteerism, not bring volunteers into a system and then mandate that they use their resources in ways that they never had an obligation to do to start with.

Mr. FOX. As you know, and in the course of defining the rules under which the volunteer will volunteer, we are now in effect exempting future action consistent with other Federal standards. I am simply suggesting that we need to do so prudently and carefully.

Senator CRAPO. I still have more questions, but I will go to another round for Senator Baucus.

Senator BAUCUS. Thank you, Mr. Chairman.

I think we should focus here on what is really going on. What is really going on is we are trying to make it possible for people who want to clean up to do so. That is what we are really trying to do here. I think most people want to clean up to a pretty good standard. They don't want to do it just one milligram. They want to do what they can to the maximum extent practicable, given the resources. I think that is where most people are when they are trying to clean up. But they can't clean up now because of the provisions of the Clean Water Act. It is just too high a standard. The fishable, swimmable standards of the Clean Water Act result in standards that are much, much higher than the standard contained in this bill.

I think it is important to focus on that we are trying to help States and municipalities do what they want to do. They have the resources and they are going to do it. They want to do it, as Governor Janklow said, very strongly. He just wants to get on with it. He just wants to be able to clean up.

I think, Mr. Chairman, it is important to ask in what detail will the EPA be looking. But I think the central question is, Is the standard in the ballpark and is it about right—again, not letting perfection be the enemy of the good—and recognizing that there is a middle ground between zero and the standards of the Clean Water Act?

The environmental community would like a much higher standard than is contained in this bill. In fact, they want purity. We would like to have purity, but we can't have it. It doesn't exist. So we are trying to be practical and exercise a little common sense here.

In addition, there was some question about whether States would be working in conjunction with the EPA. I might just refer to section 4 of the bill, "The Administrator, with the concurrence of the applicable State or Indian tribe"—et cetera—"may issue". So obviously the EPA is working in concurrence. If the State doesn't want to do it, there is no permit. It is just not going to happen. It is contrary to the way the law is written right now.

The State delegation questions are good questions. But this is not the Clean Water Act here. This is something entirely different. I think it is good to take it a step at a time. I might say, too, that there is a little bit of a difference between State delegation here and State delegation of the Clean Water Act. State delegation here is delegation to the entity that would be applying for the permit. It is a little different in the Clean Water Act where it is generally a company that is applying for a permit because EPA has delegated to the States and the State sets up its own program. Obviously there are still ties with the EPA.

So in the Clean Water Act, generally a company would be applying for a permit. In the good Samaritan legislation, it would be a State applying for a permit under a program that is delegated to it.

I think off the top of a quilt work, a patchwork of different States doing lots of different things. Mr. Chairman, many, many times companies come to us and say that they need uniformity. State X is requiring this and State Y is requiring that. That is so expensive and there is so much red tape. On the other hand, we have a Federal system and we are very interested in State primacy. There is no bright line test here, just common sense. Sometimes it is one side of the line and sometimes it is the other side. Sometimes it is federally centralized and sometimes it is delegated. You just have to call them as you see them.

One program doesn't necessarily dictate the result in the other because they are different. Sometimes significantly different to require different results.

I think that discretion is the better part of valor here and at this point, in order to get a bill passed that does allow States to take the first steps, this is in the ballpark.

Mr. Fox, I would like to ask you the same question I asked Governor Janklow. There are going to be other witnesses coming up saying that this thing doesn't work, won't help at all, and will not do anything. It is a waste of time, a "losery". I think that is one of the words that is in the testimony of one of the next witnesses.

Do you think this is a "losery"? What do you think?

Mr. FOX. I do not. I think this is a very meaningful, solid step forward that will likely have very positive impacts. The example that you gave from Montana and the example that the Governor gave from South Dakota in my mind are both precise kinds of examples that would benefit from this legislation where under your bill there would be protections for good Samaritan actions by State governments. I think those are precisely the kinds of problems this bill will solve.

I think it is uncertain as to how much will happen. My instincts tell me that there will probably be dozens and dozens, if not hundreds, of permits that we are going to be issuing under this, just knowing what I know about the program. But that is the kind of more detailed information we might want to look at in a report a couple years from now and get back to Congress to see how we are doing.

Senator BAUCUS. Thank you.

Senator CRAPO. I will go back to some of the questions I was pursuing, but before I do so, let me ask a question along the same line you were just discussing, the question of a "losery".

Governor Janklow's testimony was that he couldn't get the private sector involved in this cleanup. Can the private sector get involved in cleanup under this bill?

Mr. FOX. My understanding of the bill is that the lead sponsor has to be a government entity, but the government entity is allowed to have cooperating parties. There is an allowance in the bill for cooperating parties.

Senator CRAPO. And you don't have any objection to those cooperating parties being private contractors or the private sector?

Mr. FOX. No.

Senator CRAPO. Do you have any objection to the good Samaritan itself being a private sector entity?

Why can it only be a government?

Mr. FOX. Again, I think this is something that I would be happy to look at, to review more data and perhaps get back to you with a more informed answer. To me, the focus of this bill was trying to solve a problem for governmental interests that want to solve these problems. Where it gets really complicated sometimes is on the remining issue that you raised in the question to the Governor.

The way this bill is written right now, it basically suggests that the good Samaritan—there could be some mining activities that happen on the site, but the revenues generated from them really have to be directed toward remediation. It was a real attempt to create a fire wall in this bill from the remining issue that creates a lot of complications on the overall environmental standards question.

My fear is that if we start dealing with private entities that we start going down this path. Again, I am happy to go down this path and I am happy to continue to have these discussions with you, but the intent of the sponsor seemed to be to really focus this on government entities desiring to do this kind of cleanup, and that seemed appropriate.

Senator CRAPO. I understand you to be saying, then, that you don't have any objection to private parties being included, it is just that you think that should be a later step?

Senator BAUCUS. Maybe I can clarify, Mr. Chairman. I don't mean to speak out of turn here, but the point here is that the governmental entity can contract with a mining company to clean it up.

Senator CRAPO. What I am referring to, though, is if we don't have a situation where it is a government entity starting it. What is wrong with letting a private sector entity be the volunteer itself?

Senator BAUCUS. Right now, under current law, they don't want to because of the liability.

Senator CRAPO. That is the point I want to get at. Why can't we simply eliminate the liability and allow an incentive to be created?

Senator BAUCUS. Well, it raises lots of questions and I don't think we have time to go into it in this hearing. It is very complicated. When is a company cleaning up and when is it remining? The point of this bill is cleanup.

This is a question we asked Governor Janklow and he said that is a separate issue that should be dealt with later. Right now, let's just clean up. If you want to have mining or remining in conjunction with the cleanup, then maybe in a year or two. But he just wants to get on with the cleanup and I think that is very reasonable.

Senator CRAPO. The Governor also indicated he was having a whale of a time getting the private sector interested in getting involved. That is the question I raised.

Senator BAUCUS. That is because of the current law, which creates liability.

Mr. FOX. I think most of the States I am familiar with, particularly in the West, have very active programs. You will hear from some of them today. I fully expect that they will be able to build some partnerships and cooperative agreements with the private sector and we will be able to make progress.

Senator CRAPO. Mr. Fox, I have a lot more questions, but I am not going to ask them all of you.

I do have one for you, and I bet you know what it is on.

Mr. FOX. I am happy to spend as much time as you like on this one, Mr. Chairman.

Senator CRAPO. I am not going to make this a hearing on TMDLs, but I can't resist this question.

I note in your testimony that you state that if the good Samaritan legislation were passed, the EPA would need not less than 3 years to finalize appropriate regulations after the bill becomes law. Yet on TMDLs, you proposed the rules last August and you are going to finish them, if you stay on the course you have described, in about a week or two. How is it that on TMDLs you can do it in 9 months or so and on this bill it is going to take you 3 years?

Mr. FOX. In fact, on TMDLs, we spent more than 4 years on it. That is the short answer. There was an enormous amount of work that went into the proposal beforehand. We had a Federal advisory committee for the better part of 2 years. We had a lot of dialog with the States beforehand. So we really did use more than the time allotted in this bill for TMDLs.

Senator CRAPO. Let's get back to the 3-year timeframe. Why does it take 3 years? To most people across the country, that is mind-boggling, why it takes an agency 3 years to promulgate rules and regulations on an issue that is of such importance as this.

Mr. FOX. I would be happy to work with the committee on trying to shorten that timeframe and I can spend more time with my staff and then see what we can come up with here. It really fundamentally comes down to budget issues. I can tell you personally I have felt that this issue of mining has been unaddressed by EPA for some time. I have had one heck of a time trying to find the resources in a declining budget to try and invest in these kinds of problem.

Again, I am happy to have that discussion. I think at a minimum we are probably looking—between notice and comment and the way we want to do these things—at closer to 2 years. If we can bring that down simply because we would want to spend some time figuring out what the regulations should be, put them out in draft form, take public comment on that, and then ultimately finalize

them. It could be done in maybe a little under 2 years, but that is pretty standard for the regulatory process.

Senator CRAPO. I may submit the other questions I have in writing and would ask you to respond to those in writing.

Mr. FOX. Certainly.

Senator CRAPO. I have no further questions.

Senator Baucus.

Senator BAUCUS. Just to clarify an earlier issue.

The original Western Governors' Association draft, and the early draft of my bill, along with Senator Campbell, did include mining companies as qualifying private parties. It was in the bill. It was in my bill and it was in the Governor's bill. But as the Western Governors and I and others began to discuss this issue with the mining industry and others, it became very murky and very unclear. In fact, it would require safeguards to assure that a company that is already responsible for a site and should clean up the site under current law doesn't establish an affiliated company in order to use this bill as a loophole. Everyone agrees that is a concern.

So we built safeguards, fire walls, into our bill and the Western Governors' draft also built safeguards and fire walls into their bill. Essentially, the language was taken from the Surface Mine Reclamation Act, which it turns out has been quite controversial. It got to the point where the mining industry itself suggested to us that it might be simpler to drop the provision in the bill and limit the bill to States, tribes, and local governments.

So we took it out at the request of the mining industry because it got awfully complicated. Now it appears that the industry has changed its mind. The simple question is, Can one establish safeguards and fire walls in a way that is not unnecessarily complicated but doesn't prevent the goals that we are trying to pursue here while at the same time allow a private company to proceed to mine?

It is very difficult. I am going to just mention an example of an earlier draft of the Western Governors' bill. There is a clause that indicates whether or not a person is a remediating party. Anybody who met that definition would not be a remediating party.

It just gets awfully complicated to build that fire wall, a fire wall everybody agrees should be there. As I said, that was in an earlier draft of my bill and an earlier draft of the Western Governors' bill. But both of us decided that it just isn't worth it. It is too complicated. We need to just get on with the cleanup with the good Samaritan.

As Governor Janklow said, maybe at a later time someone might think of a good way to deal with this issue. But so far, the majority have not found a clean enough way to deal with this issue that would allow both objectives.

Senator REID. Mr. Chairman.

Senator CRAPO. Yes, Senator.

Senator REID. I think that this is a perfect example of not letting the perfect stand in the way of the good. I think this is good legislation. It is imperfect, but it is good legislation and it is badly needed. We need to be able to have entities—there are court cases on bad things that have happened when people have tried to step forward and do the right thing. This legislation would correct that

and I think that we can in the future look to bringing in mining companies and others. I think presently we need to move forward as quickly as we can.

I would hope that we could have this subcommittee move on this, the full committee, and really try to do something. The only way we can do with legislation like this is to do it unanimously. Send something to the House right away.

We talk about drawing regulations. We know it will take a long time, and each month that goes by is more degradation of our environment. While this legislation is not going to correct all of it, it will lead to a lot of corrections, even in the State of Nevada. In the State of Nevada, we don't have a lot of water. So even though we have thousands and thousands of abandoned mines, we are not troubled like you in Idaho and you in Montana because you have a lot more water than we have. With the growth taking place in Reno and Las Vegas, we are now coming into contact with these abandoned mines. We need to be able to have government do something about it.

I would hope that we would follow the leadership of our ranking member. I have joined with him in sponsoring this legislation. We should move this as quickly and as expeditiously as we can.

Senator CRAPO. Senator Reid and Senator Baucus, I appreciate your comments. I don't disagree that we should not let the perfect get in the way of the good.

In that context, though, it seems to me that—going back to Governor Janklow's testimony—we should not let the argument that we shouldn't let the perfect get in the way of the good stop us from making good fixes to a bill as we move the process forward. To simply use that argument to say that there is no room for improvement of the legislation—and I know that is not what you are saying because Senator Baucus has already said that he is willing to work on making improvements to the bill.

I am suggesting that we identify areas where there is no reason that we can't make improvements right now as we move something good better. There is no reason not to make something good much better if we can identify those ways and pass forward.

The example that Governor Janklow gave was being a builder or a carpenter. If someone were constructing a home and a very good idea was brought forward to improve the structure of the home, it would seem to me that they would incorporate that into their plans. That is all that I am asking that we consider here.

Any other questions for Mr. Fox?

[No response.]

Senator CRAPO. Thank you very much, Mr. Fox.

Mr. FOX. I would like to offer one apology on the TMDL front. I made a decision on Monday to publish the TMDL rule in our docket so that it was available for public comment. It is my understanding that the appropriate notifications to your committee and staff did not take place. I apologize for that.

Senator CRAPO. I hadn't even been made aware of that, but we accept that apology. I am sure it was just an oversight.

Thank you.

Senator CRAPO. Our third panel will be Ms. Katherine Kelly, the administrator of Waste Management and Remediation Program of the Idaho Division of Environmental Quality.

Ms. Kelly, we appreciate you being with us today. You have heard already the instructions with regard to watching the lights, but again, we have your written testimony and have reviewed it and appreciate your being here with us. You may proceed.

STATEMENT OF KATHERINE KELLY, ADMINISTRATOR, WASTE MANAGEMENT AND REMEDIATION PROGRAM, IDAHO DIVISION OF ENVIRONMENTAL QUALITY, BOISE, ID

Ms. KELLY. Thank you. I appreciate being invited here.

My name is Kate Kelly. I am the administrator of the Waste Management and Remediation Program at the Idaho Division of Environmental Quality. Included in the scope of my responsibilities is the remediation of contaminated sites in Idaho. A big chunk of that includes old mine sites. Those would be the ones that were inactive.

We have worked very well with other State agencies and Federal agencies to work toward addressing some of the worst inactive mine problems in Idaho. Two examples of that would be the Triumph Mine and the Blackbird Mine, which have had successful cleanups, if not completed at least good steps made toward those cleanups. We are real pleased about that.

We are also working toward putting in place enough plans for several other major mining areas that would include the Coeur d'Alene Basin and the phosphate mining district down in southeastern Idaho. But the mining issues are very significant to DEQ and to the State of Idaho in general. We are encouraged by any step that can be taken on the Federal level to facilitate these mine cleanups and to attempt to maximize incentives and minimize disincentives for these kind of cleanups. In that sense, I think that the State of Idaho is supportive of the principle behind the good Samaritan proposals, and this bill in particular.

On the other hand, we see some pretty serious flaws in the bill, as currently written. Understanding that perfectionism is something we are not going to achieve with this legislation or with any legislation necessarily, there are perhaps a couple of areas that are deserving of attention before this would move forward. Certainly from the States' perspective these need to be addressed. These have been touched on, but I will just cover them very quickly.

This legislation as written creates a precedent of giving EPA the authority to issue these permits. Admittedly, it does say in the statute that there will be State concurrence in this process, but we have found that this bill fails to acknowledge the existing State authorities that are in place in the Clean Water Act in terms of setting water quality standards and issuing NPDES permits. Somehow this legislation needs to cross-reference that and acknowledge that the States retain a major say in what water quality requirements are going to be put in place in any given permit.

To give EPA the authority to issue these permits in that area without qualification just throws a wrench into a system that already exists that has the State included in the process, if not out in the front of the process. I don't think that that is providing an

inconsistency that isn't already inherent in the system by giving States as much authority as they have right now. But that authority needs to be recognized in the bill.

The other major issue, which has also been touched on, is the failure to reference CERCLA liabilities and failure to coordinate it all with that process that exists there and the liabilities that are created under CERCLA. In terms of making a useful bill, it really is necessary to directly cross-reference those and try to mimic, hopefully, some of the liabilities and processes that are already existing in CERCLA.

As someone who works daily trying to achieve mine cleanups and get in place systems that address mining issues, the process and procedure that we need to go through in working with other agencies and within our own agency to get in place a cleanup—not to mention when you throw in responsible parties and are negotiating with mining companies and so on—the process needs to be streamlined as much as possible. So the extent to which we can make sure that we are cross-referencing CERCLA and existing authorities and that kind of thing and hopefully not creating too many new standards would make this bill something useful to us.

There are other issues with it that may go more toward a fine-tuning, such as funding and the fact that it doesn't really address the issue of Federal lands, which is a major issue in Idaho. But given its narrow scope, it is acknowledged that it cannot be all things to all people.

I would stress that we would hope that some of the major flaws could be fixed before it moves forward.

Senator CRAPO. Thank you very much, Ms. Kelly.

The first question I have is with regard to the question of delegation to the States. Right now, under the Clean Water Act, isn't the standard that the States have delegation generally in that they operate the system?

Ms. KELLY. Depending on the State, yes. There is definitely an ability for the State to have NPDES authorization. The State also certifies under section 401 to ensure that State water quality standards are met when any permit is issued. The State plays a very big part of that process. It is more than just a concurrence role. It is important.

Senator CRAPO. Does the State in that process get involved in issuing permits to itself or to lands operated by the State or clean water permits relating to State operations?

Ms. KELLY. Yes.

Senator CRAPO. Has anybody at any time ever raised the question that that was inappropriate for the State to be permitting itself in this situation?

Ms. KELLY. The State, as does a Federal agency, gets into situations where it is both the regulated party and the regulator. There are systems in place within the bureaucracy that allow for that.

Senator CRAPO. It is commonplace today under the Clean Water Act, isn't it?

Ms. KELLY. Yes.

Senator CRAPO. The reason I ask is that some concern has been raised here in the hearing today that it would be inappropriate for the States to be allowed to issue permits on issues that they were

involved in. To me, that seems to be a very new direction, contrary to the precedent that we have under the Clean Water Act. That is why I raised that issue with you.

You also raised the question of whether the statute applies to Federal lands. I know you were running out of time, so you didn't get into that very much, but could you elaborate on that?

Ms. KELLY. The statute is directed at governmental entities doing cleanups and seems to be particularly focusing on State cleanups, which is something we would obviously encourage and that we are interested in.

One of the issues we face in Idaho—and I know other Western States face it as well—is that many, many inactive mine sites are on Federal land. Ironically, you run into the situation where the EPA as the regulator is again regulating a sister Federal agency as a Federal land management agency.

But because a lot of these—either the mine sites or releases coming off the mine sites—are on Federal land, it becomes a very big complex issue of negotiating with Federal agencies in trying to get the Federal agency—both as the responsible party and as the regulator in the case of EPA—to agree to how to clean up things and what the process is going to be and what standards are going to apply.

The legislation, as we have read it, eliminates the possibility of applying this incentive to Federal cleanups on Federal lands as well as State cleanups on State lands.

Senator CRAPO. Isn't part of the reason because the Federal Government cannot qualify as a good Samaritan on land that it owns?

Ms. KELLY. That is correct because under CERCLA they would be a responsible party.

Senator CRAPO. So in Idaho, at least, two-thirds of the land would be subject to—this statute would not be a source of assistance.

Ms. KELLY. Yes.

Senator CRAPO. And to follow the line of argument that was brought up earlier, if we don't want the same agency issuing the permits under this statute as is the agency which is the good Samaritan, if somehow a Federal agency managing land in Idaho were to be able to qualify somehow as a good Samaritan, then the EPA would be the one issuing the permit to it and you would have the Federal Government supervising the Federal Government. Is that correct?

Ms. KELLY. That is correct.

Senator CRAPO. I have no further questions.

Senator Baucus.

Senator BAUCUS. Mr. Chairman, I think this line of thought is an interesting one. In fact, I think it is something we should explore. I think it is a good point. Again, being realistic, if we want to get this passed, the farther we go down that road the more opposition we are going to have from other groups around the country.

Ms. Kelly, I understand your other points. I think we cleared up the liability reference—we will, anyway, when we pick up this bill later. Your earlier point is basically one of complexity and red tape and all those kinds of things that are involved in the Clean Water Act and potentially under this statute as well. But as I hear you

and listen to the music as well as the words, I don't hear a significant problem. Maybe to state it differently, if these issues can be dealt with reasonably, do you think this could help clean up some abandoned mines in Idaho?

Ms. KELLY. Potentially. If we could get these clarifications. But the caution with that response is that if some of these clarifications aren't made, the bill and the ensuing regulations and the ensuing EPA permits that could potentially be issued and have to go into a concurrence process could potentially detract a large amount of agency—both Federal and State—time on more process rather than cleanup. That is a big——

Senator BAUCUS. Right. Recognizing this is all voluntary—that is, you don't have to comply if you don't want to—it is up to the State to decide whether or not it wants to participate.

Ms. KELLY. But I am just talking about implementing the bill, just putting in place regulations and if someone applies for one of these permits and the State needs to get involved with EPA in doing that, there is the potential for——

Senator BAUCUS. But it is the State that applies for the permit under the bill.

Ms. KELLY. Or a municipality.

Senator BAUCUS. Right, but it is their choice if they want to get into this or not.

Ms. KELLY. Right.

Senator BAUCUS. You are saying that with some suggestions maybe they would more likely get into it?

Ms. KELLY. Yes.

Senator BAUCUS. And that would help in Idaho?

Ms. KELLY. Potentially.

Senator BAUCUS. Well, why wouldn't it?

Ms. KELLY. Well, whether or not we decide to go down this route, I guess.

Senator BAUCUS. But if Idaho were to decide to go down this route, it would help clean up some abandoned sites?

Ms. KELLY. It could potentially.

Senator BAUCUS. And that would be good for Idaho?

Ms. KELLY. Absolutely.

Senator BAUCUS. Thank you.

Senator CRAPO. We thank you very much for your participation. Please relay my personal thanks, as the Senator from Idaho, to the Idaho Division of Environmental Quality for their concern on this bill and the issues they have raised. I think they are very helpful. Thank you.

Ms. KELLY. Thank you.

Senator CRAPO. We will now move to our fourth panel. And we do have the name tags up there. First will be Mr. William Goodhard, the Director of Reclamation and Environmental Affairs of Echo Bay Mines. We welcome you here.

Second is Mr. Jack Lyman, executive director of the Idaho Mining Association; Ms. Sara Kendall, from the Western Organization of Resources Councils; and Mr. David Gerard of the Political Economy Research Center.

To each of the witnesses, we will go in the order I have just identified and will also remind you of the instructions. Try to keep your eye on the lights up here.

Thank you very much.

STATEMENT OF WILLIAM GOODHARD, DIRECTOR OF RECLAMATION AND ENVIRONMENTAL AFFAIRS, ECHO BAY MINES, ENGLEWOOD, CO, ON BEHALF OF THE NATIONAL MINING ASSOCIATION

Mr. GOODHARD. Chairman Crapo, Senator Baucus, my name is Bill Goodhard and I appear here today on behalf of Echo Bay Mines and the National Mining Association. My comments are based on my 24 years of experience in the minerals industry. For the last 12 years my responsibilities have included mine reclamation and mine closure. The work has included negotiating and working with local, State, and Federal agencies as well as with watershed and stakeholder groups.

I have been personally involved in discussions along with the Western Governors Association, which led to the introduction of this bill. I appreciate the opportunity to share my thoughts on the Abandoned and Inactive Mine Waste Remediation Act, S. 1787.

First, I want to thank Senator Crapo for today's hearing and providing an opportunity to hear from the mining industry on an issue that the industry considers very important. I want to thank Senator Baucus and his colleagues and cosponsors—Senators Daschle, Campbell, and Reid—for advancing the debate on good Samaritan issues with the introduction of the bill.

Although the introduction of the bill presents an opportunity to open dialog, I must emphasize that the bill is a good starting point and with a few key changes you can accomplish the goal of facilitating AML cleanup and improving water quality at more sites. It is my belief that the bill will need to provide more meaningful liability relief to both private and public sectors who might otherwise be in a position to improve the environment in an inactive or abandoned mine to accomplish the cleanups. Therefore, I do not believe the bill in its current form will do much, if anything, to encourage cleanup.

I say this from the ground level working up, not the policy level working down.

My written comments provide a comprehensive list of areas I believe need to be addressed in order to provide a more meaningful piece of legislation. In the remainder of my time today I will focus on the following areas: provide protection to contractors and agents of remediating parties so that they will be able to do the work on the sites without incurring liability; allow the Federal, State, Indian tribes, and municipalities protection for cleanup at the sites for which they are not responsible; accept the concept of net environmental gain in lieu of maximum extent practicable and use existing site conditions to define baseline against which net environmental gain will be measure; and provide liability protection from Clean Water Act citizen lawsuits at sites where cleanup activities resulted in incremental water quality improvement where the activities may not meet the water quality standards.

I believe these simple but critical changes can be made while preserving the intent of the Clean Water Act. The good Samaritan approach is a good tool that fosters voluntary cleanups of abandoned and inactive mines resulting in positive environmental gains and improved water quality. But the overall goal of any good Samaritan legislation should be to address as many of the sites as possible and provide equal opportunity for all parties who wish to participate.

The assertion that significant progress can be made toward solving the AML problem if the private sector were granted good Samaritan liability relief is not conjectural. The private sector has already helped to clean up numerous abandoned and inactive mines throughout the West. Some of these private sector efforts are documented in a study published in 1998 by the National Mining Association entitled "Reclaiming Inactive and Abandoned Mine Lands: What Really is Happening?"

I would like to request that this study be placed in the hearing record.

Senator CRAPO. Without objection, that study will appear in the record.

Mr. GOODHARD. The NMA study presents compelling evidence that given the right opportunity the private sector can play a significant role in improving the environment at abandoned and inactive mines. The NMA also documents that the State and Federal agencies have claimed AML cleanups.

The definition of remediating parties must be expanded. The first step in developing a good Samaritan liability relief proposal must be founded on the clear understanding of the universe of parties who may potentially undertake an AML cleanup effort. The private sector, State regulatory agencies, and Federal land management agencies have all performed AML cleanup projects in the past.

It seems logical that under the proper circumstances, these three stakeholder groups are likely to be the remediating parties of the future. For example, State and Federal Governments will contract with third parties to perform the actual engineering and site construction work. Therefore, it is important that liability relief extend to these entities in addition to those already included in the bill, if we are actually to achieve cleanup of sites.

The bill can be expanded to clarify that liability protections that apply either to the State or Federal agency also extend to the private sector contractors charged with executing the on-the-ground work. These State and Federal agencies will be able to keep cleanup costs down and cleanup results optimized.

The focus to identify PRPs is inconsistent with the good Samaritan concept. Most historic mining districts are comprised of a complex mixture of private and public land.

I appreciate the opportunity to present to this committee my views and the views of the National Mining Association. I believe the bill serves to further the discussion regarding the good Samaritan concept. However, as currently written, I believe the bill will fall short of achieving its intended goal: that of increasing voluntary cooperative efforts toward cleaning up AMLs.

I wish to encourage this committee to work together to revise the bill accordingly to provide a workable and meaningful bill. It is my

personal opinion that with a few significant changes this could be a good bill for Federal and State governments, Indian tribes, and municipalities. And with more changes—such as less limitations on liability protections—the class of remediating parties could be broadened, which would allow for a much greater number of voluntary water quality improvement projects.

Senator CRAPO. Thank you very much, Mr. Goodhard. This clock seems to work faster than in regular life.

Mr. Lyman, we appreciate you being here. Since you are from Idaho, I will give you a special welcome. I appreciate you coming.

STATEMENT OF JACK LYMAN, EXECUTIVE DIRECTOR, IDAHO MINING ASSOCIATION, BOISE, ID

Mr. LYMAN. Thank you, Mr. Chairman.

As a point of personal privilege, I would appreciate it if the record would reflect that I appear here today on the eve of my upcoming wedding.

[Laughter.]

Mr. LYMAN. When I am done with this committee, I will be returning to Idaho and traveling to Sun Valley, with the woman I love, to be married on Saturday.

Senator CRAPO. Congratulations.

Mr. LYMAN. While this is a very important event in my life today——

[Laughter.]

Mr. LYMAN [continuing]. It isn't the most important in my life this week.

Senator CRAPO. And you would rather that we keep the questions brief so you can catch a plane, right?

Mr. LYMAN. Well, I am going to spend the afternoon here.

The Idaho Mining Association supports the remediation of abandoned mines through a good Samaritan program. S. 1787, however, is seriously flawed and will not achieve the desired objective of remediating such areas. Idaho has a long history of mining, and as a result the State has a large number of abandoned mines. Our industry is aware of the challenges presented by these abandoned mines and has worked closely with the State of Idaho to address these challenges.

Good Samaritan legislation at the Federal level could be a powerful and effective tool for addressing abandoned mines. Legislation should be crafted that provides significant incentives for parties to be engaged in remediation and that removes existing obstacles. Unfortunately, S. 1787 doesn't either.

We have numerous concerns with this bill. Today I will only be able to highlight three.

First, the program is far too limited with respect to the areas that qualify and the entities that may engage in remediation. Second, the bill establishes a standard for water quality that is so stringent as to be in and of itself a disincentive to cleanup. Third, the bill contains other disincentives, particularly the potential exposure to liability under CERCLA.

The bill has an overly restrictive definition of abandoned or inactive mine land. It excludes areas that are on CERCLA's national priority list, areas that are proposed for the NPL, and areas that

are the subject of planned or ongoing response or natural resource damage action. For example, the Coeur d'Alene Basin in Idaho, where there is a heavy concentration of abandoned mines, would be excluded from eligibility. This is an area that would benefit from a good Good Samaritan program.

The bill also unduly restricts the parties that are eligible to participate. In addition, the bill provides that a remediating party cannot apply for a permit if the abandoned mine is owned by that party. The legislation needs to be less restrictive and the definition of remediating parties should include private entities as well as governments, governmental agents, and contractors.

Second, a remediation plan must demonstrate under the proposed bill with reasonable certainty that it will result in an improvement in water quality to the maximum extent practicable, taking into consideration the resources available. This is an overly stringent standard. We believe the standard should instead be an improvement in net surface water quality.

Third, the bill contains other disincentives to participation. It allows the party to remediate abandoned mines without incurring liability under the Clean Water Act; the bill fails to provide similar protection under CERCLA. I know there was a discussion earlier today. We believe that a more explicit release from liability under CERCLA would clarify that problem instead of having everybody lawyer-up as they try to figure out whether a section 402 permit provides that release from liability. But as currently written, we are afraid that a number of remediating parties will be fearful of the draconian liability system and the fact that liability could attach to any person who owned, operated, or otherwise controlled activities at the sites.

Also, while CERCLA sites are not eligible for remediation, there is no guarantee that today's non-CERCLA site won't be a CERCLA site tomorrow. We see examples of that all the time in Idaho. The ultimate disincentive to remediation under the bill is that every remediating party could face the prospect of being subject to CERCLA.

In closing, let me reiterate that we support the remediation of abandoned mines through a good Samaritan program. We believe that such legislation should apply to a maximum number of areas, should have a broad definition of remediating parties. It should provide clear and reasonable remediation standards and it should provide incentives to participation. S. 1787 fails on all three of these counts.

Thank you for the opportunity to testify today, Mr. Chairman. We look forward to working with you and Senator Baucus to craft legislation that will create meaningful and effective good Samaritan programs.

Senator CRAPO. Thank you very much, Mr. Lyman.

Ms. Kendall.

Senator BAUCUS. Mr. Chairman, I apologize to you and to the witnesses, I have to leave.

Senator CRAPO. I will ask your questions for you.

[Laughter.]

Senator BAUCUS. Here are the questions I want you to ask. I want you to place in the record a letter from the Colorado Mining

Association in favor of the bill, a letter from the Governor of Montana—a good man—in favor of the bill, a letter from the Western States Water Council in favor of the bill, the Association of Water Administrators in favor of the bill, the Association of Metropolitan Sewage Agencies in favor, and the Western Regional Council in favor of the bill. If you could put those in the record, I would sure appreciate it.

Senator CRAPO. Without objection, the referenced letters will appear in the record.

Senator BAUCUS. I might also say, Mr. Chairman, that the whole goal here is to reach consensus. I appreciate, Mr. Lyman, some of the concerns you have, as well as the concerns of others. I believe we have already addressed the Federal liability issue. The chairman and I both said we can write an amendment to deal with that one.

The other points you made, again, get down to the basic question that Senator Reid said, "Either we are going to reach consensus on this or we are not." There are a lot of abandoned mines out there waiting to be cleaned up. This water is still flowing at this moment. I don't know at how many hundred thousand sites in this country this is happening.

I just urge us to find that consensus, to work together. Just the tone of witnesses in this hearing is that people want to find a solution to this thing and want us to begin to cleanup. I very much hope that we achieve that consensus so we can get a bill passed. If there is no consensus, it is a gridlock. It isn't going to happen.

Mr. LYMAN. Senator Baucus, I hope you will include the Idaho Mining Association among those witnesses who are looking to reach consensus so that we can effectively get a program.

Senator BAUCUS. I do. That is why I was looking at you. I urge you to be a part of that and I know you will.

Thank you again, Mr. Chairman. I deeply regret I have to leave.

I want to also apologize for Mr. Gerard, who will be speaking later, that I will not be able to hear his testimony. But thanks, David, for coming.

Senator CRAPO. I have read it and it is very good. You will have that opportunity with the written testimony.

Senator BAUCUS. Thank you.

Senator CRAPO. We are sorry that you are not able to be here for the remainder of the hearing, but we will leave the record open so you will be able to submit written questions as well.

Ms. Kendall.

STATEMENT OF SARA KENDALL, WESTERN ORGANIZATION OF RESOURCE COUNCILS, WASHINGTON, DC

Ms. KENDALL. Thank you.

Good morning. My name is Sara Kendall and I am the Washington, DC representative for the Western Organization of Resource Councils, WORC.

WORC is an association of grassroots, community-based organizations in six Western States, including Idaho and Montana. We work primarily on environmental and family farm agriculture issues and many of our members live and work in communities impacted by mining and abandoned mine lands. We would have pre-

ferred to have one of them here today, except for the short notice of the hearing, because they probably know more about these issues than I do.

Senator CRAPO. I am sure you will represent them very well.

Ms. KENDALL. Thank you.

I would like to start by commending Senator Baucus, Senator Crapo, and the subcommittee for your interest in addressing the persistent problem of pollution from abandoned mines, which are one of the major sources of water pollution in Western States. WORC believes that the primary obstacles that must be addressed if abandoned mine sites are to be cleaned up are the lack of sufficient funds for remediation and the minimal efforts currently being made to track down responsible parties.

But that said, we also acknowledge that it is important for States to have the authority to stretch the limited cleanup funds they do have as far as possible. In addition, we recognize that at some abandoned mine sites it would be difficult to restore streams to the applicable water quality standards due to technology constraints and other constraints.

For these reasons, we support the concept at the core of Senator Baucus' legislation, which is reducing water quality standards and liability for third parties who want to clean up abandoned sites.

I would like to express WORC's appreciation for the changes that Senator Baucus and the Western Governors' Association made from earlier drafts of the legislation to address concerns raised by our organization and others. Let me just list a few of them: eliminating loopholes that would have potentially allowed a responsible party to qualify as a good Samaritan, requiring that revenue generated through the sale of minerals be used for additional remediation, the 10-year sunset provision, the more detailed requirements for an analysis of baseline conditions, and limiting the bill to non-coal sites.

We view all these changes as positive developments that will enhance abandoned mine remediation while protecting the interests of communities and taxpayers. We continue to have concerns, however, with a couple of the provisions in S. 1787. First of all and primarily, we remain concerned that the best efforts of good Samaritans will not always succeed in improving water quality and in some cases may actually result in increased pollution.

S. 1787 would not hold good Samaritans responsible for leaving sites no worse off than they found them as long as they stick to their remediation plan. We believe that if a good Samaritan increases the pollution from a mine site they should be held liable for returning the site to the condition in which they found it.

Second, while we recognize that it would be difficult to restore streams at some abandoned sites to applicable water quality standards, and even though we support the good Samaritan approach because it does allow States to maximize their limited resources, there is a lot of concern among our members that reducing water quality standards means that we are writing these standards off with no realistic hope that they will ever actually be met at these sites, particularly, I might add, when proposals that would generate significant funding to cleanup up abandoned hard rock sites are not going anywhere in the Congress right now.

This concern is addressed to some extent by S. 1787's requirement that EPA determine that the remediation plan will result in improvement to water quality standards to the maximum extent practicable.

I would like to read the rest of this section from the bill. It does say that this must take into consideration the resources available to the remediating party, but the end of the sentence, which no one has stated this morning, is that it says the resources available to the remediating party for the proposed remediation activity. We don't see this as an opportunity for the permitting agency to insist that more funds be spent on the cleanup. But we do see it as an opportunity with existing funds to look for ways to achieve a higher water quality standard.

But we do think this concern could be better addressed through the creation of an interactive process that involves input from people in the impacted communities in order to establish a cleanup goal. There are some mechanisms in place under the Clean Water Act. We think perhaps a modified version of the use attainability assessment might be one way to address this concern.

In closing, we ask that you consider in addition to this good Samaritan legislation a more comprehensive approach to the problems associated with abandoned hard rock mines in the West. Many States still need to inventory their abandoned mine sites and set priorities for cleanup. Strategies need to be developed to remediate the high priority sites. Funds are needed to pursue responsible parties and, when necessary, to remediate pollution problems.

As you and Senator Baucus said earlier, there are hundreds of thousands of abandoned mine sites in the United States that will cost billions of dollars to clean up. Without an adequate funding source, no waiver of liability will even begin to address this problem. Although S. 1787 has the potential to facilitate the cleanup of a number of these sites, this potential is very limited because the good Samaritan approach is really just a stop gap measure.

We hope that the subcommittee will address the concerns we have raised and move forward with S. 1787, but we urge you to make it part of a more comprehensive approach to the abandoned mine problem.

Thank you for the opportunity to testify.

Senator CRAPO. Thank you very much.

Mr. Gerard.

STATEMENT OF DAVID GERARD, RESEARCH ASSOCIATE, POLITICAL ECONOMY RESEARCH CENTER, BOZEMAN, MT

Mr. GERARD. Thank you.

My name is David Gerard and I am a research associate with the Political Economy Research Center in Bozeman, MT. I am also an adjunct professor in the Department of Agricultural Economics and Economics at Montana State University.

I would like to commend Senator Baucus and his staff for introducing the bill. The Clean Water Act liability has been an impediment to abandoned mine cleanups for as long as I have studied the mining industry.

With respect to the bill, I have two primary observations. First, I am fairly optimistic about the help that this bill will give to State

abandoned mine lands programs. These programs are very active in cleanup. In fact, oftentimes they are the principal agents cleaning up abandoned mine sites. The bill has the potential to harness tremendous environmental gains at a very low cost.

Just on the types of sites Senator Baucus described, it is clear that the State agencies would like more latitude on what they can do with respect to the discharge. They don't want to touch it now—they can't.

However, the second point is that this bill is not likely to bring on any new non-governmental organizations as good Samaritans. When you think of a good Samaritan, you don't think of someone whose job it is, you think of someone you would bring in to do it as a third party.

Firms and non-profits are not likely to become sources primarily because there is a lot of uncertainty. I think CERCLA liability has been plowed over and it is worth saying that States simply aren't concerned about CERCLA liability. They are immune, so it is not a concern to them and doesn't affect them.

Second, the owner-operator search I think is a source of both cost and uncertainty. For instance, Superfund searches have been very problematic. The Forest Service's Abandoned Mine Lands Program has seen that the owner-operator search has really been a confounding element in cleanup. As a result, it is my contention that the search process is counter to the spirit of the good Samaritan idea and it is just a pure waste of resources to boot.

The third thing that hasn't been mentioned is the citizen suit provision. I think that is a source of uncertainty. I doubt I am the expert on the effect of the citizen suit. I am not certain that this will affect State abandoned mine lands programs, but it is undoubtedly a disincentive for any private party to step forward as a good Samaritan.

And of course the uncertainty about whether Federal lands is included is central. Abandoned mines are typically located on either Federal or private lands. If Federal lands aren't included, and private lands are all subject to owner-operator searches and solvency requirements, then just getting the program started will be a task in and of itself. In addition, the EPA expects a 3-year lead time to develop the regulations.

So my basic conclusion is that as it stands I think the bill is unlikely to substantially increase the number of sites addressed. I think the sites that are being addressed will be cleaned up to a greater extent. In Montana, we have a priority list of about 380 sites and I think those sites are going to get addressed right down the line. They have been prioritized, they have a number on them, they will be able to clean them up, and they will be able to clean them up to a greater extent because of this legislation. So those sites are being addressed and will be cleaned up, but it is unlikely that we will see new parties step forward to do it.

But if the goal is to provide a fire wall for the State abandoned mine land programs—which I think is a goal of the bill—then I think this legislation can be simplified greatly just by delegating that authority to the States. Then you wouldn't have to deal with this permit process.

The final thing is that if it is the goal to induce new participants, the legislation should address the many forms of uncertainty I have described before. I think ultimately this bill would have some substantial impacts and the water would be cleaned up at some sites. If we want to address the problem on the map where we have a lot of abandoned mine sites that need to be cleaned up, then I think the bill needs to be amended to address the forms of uncertainties to bring in new parties, bring in new financing, bring in new sources of expertise.

Senator CRAPO. Thank you very much, Mr. Gerard.

Let me start off first with you, Mr. Goodhard.

In your testimony, you indicated concern about the citizen suits provisions in the legislation. Could you expand on that a little bit?

Mr. GOODHARD. The feeling is that if you don't clean up to a recognized standard there could be an action brought by a third party requiring the remediating party to go back and improve that.

Senator CRAPO. Ms. Kendall suggested that if a good Samaritan actually caused a reduction in the water quality that they should be subject to liability. Do you agree with that? And could you address that concern?

Mr. GOODHARD. I think that is addressed by the plan that is used for remediation. It needs to be examined. There are mechanisms for review and comments. A lot of the Clean Water Act type of cleanups that can be done are removal of tailings from a stream, rerouting of a stream across the tops of them, instillation of a wetlands-type of remediation coming out of a portal—all those just based on their merits have to have an improvement.

Senator CRAPO. So you can get a reasonable level of certainty if you have decent permit requirements or if the permit covers——

Mr. GOODHARD. If it is covered in the remediating plan. If the plan doesn't have sound science behind it, it needs to be examined. By sound science, that includes that new and advancing technologies that should be considered. But you have to look at what the plan says. You just don't give a remediating permit and let them go dig it up and see what they have. Someone must investigate what they intend to do.

Senator CRAPO. Ms. Kendall, in the context of your concern that you raised, I want to be sure that I understand it exactly.

Were you referring to a situation in which the remediating party—in this case, the good Samaritan—followed the permit requirements but somehow it didn't work out? Or were you referring to a situation where the good Samaritan deviated from the permit and did something inappropriate?

Ms. KENDALL. Our understanding is that probably if the good Samaritan follows the permit requirements, they are released from liability, including citizen suit liabilities. So as long as they stick to their plan, they should be released from liability.

Senator CRAPO. From all liability?

Ms. KENDALL. Right.

The concern is that things don't always go according to plan. But even if they do go according to plan, the outcomes are not necessarily what was planned. Even with the best engineering, sometimes that is the case. It would seem logical that if you are just

taking tailings out of a stream that that is going to result in water quality improvements.

But for example—I am not going to pretend to be an expert on the Penn Mine case in California, but that is one of the cases where there were governmental agencies involved in the cleanup and ended up being hauled into court and required to get an NPDES permit.

What I do know about that case is limited, but what it tells me is that these are not always clear-cut cases where you can point to the evidence and say that this has definitely made a positive improvement in the site. That, incidentally, is one of the reasons why we think it is important that there be a good baseline analysis done before the permit is granted so that if a responsible party ever did come back on the scene and someone was attempting to get them to clean up the site that they wouldn't be able to say that they didn't cause the problem, it was the good Samaritan.

In that case, who is liable and who is ever going to clean that site up? I am no lawyer, but if I were the responsible party, I think I could go to court and make a good case, that I should not be required to do the cleanup.

Senator CRAPO. You raise a good point.

Did your statement earlier about the fact that if they followed the permit that they would be exempt from citizen suits and liability——

Ms. KENDALL. Right.

Senator CRAPO. Is that your understanding of how the proposed statute is written today? Or is that how you think it should be?

Ms. KENDALL. That is how it is written. We are saying that we think that even if they do follow their plan, if the water quality conditions at the site are made worse because of the cleanup, we think the good Samaritan should be liable for at least trying to return them to the original——

Senator CRAPO. So you believe the proposed statute should be amended in that context?

Ms. KENDALL. Right.

Senator CRAPO. Don't you think that is going to create a significant disincentive for a good Samaritan? If they volunteer to try to help, and they follow the permit that the Government said was appropriate to the tee, and it didn't work, why should they then be liable for trying to help by doing something that the Government agreed was a good idea?

Ms. KENDALL. That is definitely a concern, and we want these cleanups to happen. I think part of our analysis in this is that if you have a governmental entity that is cleaning up the site it is because for one reason or another they believe there needs to be a water quality improvement on that body of water.

Hopefully they are looking for the maximum extent practicable. They want higher standards and there would be a commitment to at least leaving it as they found it, or no worse off. Even if that does mean added liability.

Senator CRAPO. Back to you Mr. Goodhard, you indicated that you believe that the PRP search is problematic. I agree with you on that.

Do you think that—particularly as we try to expand this, if we do, to include private parties—that it is the responsibility of a good Samaritan to have to do a PRP search?

Mr. GOODHARD. No, I disagree with having to do that. Basically there is nothing in the good Samaritan provision that precludes any of the agencies from enforcing other elements of the Clean Water Act. If there is a potential responsible party out there, they are the ones best to identify and go after that party.

Senator CRAPO. Thank you.

Mr. Lyman, I want to talk with you about the standard of liability.

You have indicated that the standard is so high that it could be a deterrent to those who want to get involved. We discussed this a little earlier. I think in Governor Janklow's testimony, he indicated that even if you couldn't get 100 percent cure, he would like to get some cure. EPA has testified that they just want to be sure that that is the maximum extent practicable.

I just want to get your thoughts on what you think the impact would be to prospective good Samaritans if the standard they have to meet is to the maximum extent practicable.

Mr. LYMAN. I think it acts as a disincentive. I continue to go back and think—let's return to the title of this bill, the Good Samaritan. What if the traveler from Samaria, when he came upon the beaten and robbed man, had worried about whether or not a section 402 permit released him from liability, whether or not he had to do a search of potentially responsible parties, and then had to worry about whether the care he gave this poor beaten and robbed man was the maximum extent practicable given the resources he had available to him?

What we are trying to do, it seems to me, is to encourage organizations—be they State, municipal, or private—to go in and make environmental improvements. Why do we continue to look for ways to throw road blocks in their way? Why do we say that if there is 100 of something coming out of this and you can reduce it to 50, that is not good enough unless you drop it to 10?

I will tell you, Senator Crapo—and we have been involved in this before—I will go before the Joint Finance and Appropriation Committee before the Idaho Legislature and tell them to stay away from these kinds of programs when they are looking to appropriating $100,000, $200,000, or $300,000 out of an abandoned mine land fund that we helped create if, in fact, those are the kinds of standards and this CERCLA thing isn't resolved. I don't think they have any business putting their money into it.

I think part of that problem is that standard—the maximum extent practicable for the resources that have been identified for that project.

Senator CRAPO. Let me shift to Ms. Kendall for just a minute because she gave a clarification on this I want to pursue and then come back and see if there is a solution here.

If I understood you, Ms. Kendall, you indicated reading the entire sentence that your interpretation of this provision was that the permitting agency did not get to make the decision about what the maximum extent practicable was with regard to all the resources of the party, but only with regard to those resources the party was

willing to commit. Let me give an example and see if I am understanding this right.

If a fund, such as that which Mr. Lyman identified here, were created to help remediate mines, and the decision of the manager of the fund was that we were going to use $100,000 out of this fund to remediate as much as we can at a certain abandoned mine site, that the agency supervising this would not be able to say that they should have allocated more of that fund to this? They would be able only to say that given the fact that we have the $100,000 from this source, let's see what the best bang for the buck is for that $100,000.

Is that what you are saying you believe this says?

Ms. KENDALL. I am assuming that they are fully expending the resources from the fund on remediation in general, if not on one site. Yes, we do see this as an opportunity for the permitting agency, with input from the public and others, to try to leverage a higher standard with the funds that are available and not leverage more funds for the specific cleanup.

Senator CRAPO. I didn't understand Mr. Fox when he testified for the EPA to be reading it that way. Would you disagree if we clarified this in the statute so that it was very clear so that the decision of the amount of funds that would be made available for a particular cleanup project is a decision left to the good Samaritan that is willing to step forward and that the EPA—or the States if we have delegation, or whatever—would not be able to go behind that decision and say that they made the wrong decision about how many dollars provided and not authorize the permit?

Ms. KENDALL. I think the language is very clear, but I don't think our organization would have an objection to that.

Senator CRAPO. Mr. Lyman, if that were the way we defined it so that this fund that you have helped create in the State of Idaho would not be asked whether they could or would submit more, but whoever manages that fund gets to decide how much of that fund is put forward in a good Samaritan effort in a given project, would that then clear up the problem of whether we should try to use those dollars to the maximum extent practicable in terms of cleanup?

I guess what I am asking is, Would the standard then be problematic, or would we still need to review the standard?

Mr. LYMAN. It certainly helps. As the language reads today, it says the resources available to the party for the activity. I don't know who is going to define what resources are available.

Senator CRAPO. I never read it that way, either. But I can see how Ms. Kendall reads it that way. But if we clarify that so that——

Mr. LYMAN. If we clarify that, then I get a concern because I envision a circumstance—for example under the abandoned mine fund that we have in Idaho—it now has about $300,000 in it. What possible incentive is there that DEQ isn't going to go out on this cleanup and do the best job they can? They are not looking for a way to spend $100,000 and get just a marginal improvement if they could get more.

But when we impose this kind of language—maximum extent practicable—then all of a sudden we have all kinds of problems.

You end up with public hearings, you end up with citizen suits, you end up with Federal agencies saying that you can do better with the money that you have, and nothing happens.

I understand why if you are going to provide this kind of opportunity that you want to have some kind of standard to make sure it is used appropriately, but that kind of standard raises the bar so high that I am not sure that anybody can with confidence develop a plan that they feel comfortable they can accomplish with the money they have set aside. Once they take a step down that road—I now have this group over here which wants to make sure I did a really good job because if I don't improve the water quality, they are going to come in and create more problems.

What is the reason to take the first step?

Senator CRAPO. I see your point.

I want to shift to another issue, and in laying the groundwork for that, If some of the corrections we have talked about today were made—the liability concerns and the issues you have raised were resolved—and private parties were authorized to come forward as good Samaritans, do you believe that in the mining industry there would be good Samaritans who would step forward and try to help remediate mines?

Mr. LYMAN. There is no question in my mind. As I mentioned in my testimony, we have numerous concerns about the bill and I would be glad to provide those in writing back to the committee as you go through this process.

I had an example where a company went bankrupt in the Stidnight Region. I ended up with a CEO who called two other CEOs who suggested getting some trucks and equipment down there to haul some of those barrels out because winter was about ready to set and they didn't want that stuff to go in. They all three checked with their attorneys and nobody sent a truck in. They didn't are.

I have companies that want to do this. They may want to do it for good community relations. They may want to do it to assist in meeting a TMDL for a current operation they have. A lot of today's mining in Idaho is taking place where mining took place 100 years ago.

There are a lot of opportunities. Yes, I think they would step up to the plate.

Senator CRAPO. Mr. Goodhard, do you agree that in the mining community good Samaritans would step forward if these issues were resolved?

Mr. GOODHARD. I agree with that statement. But I also feel that you have all the way from a bill that is somewhat limited now—and by limited, it doesn't give liability protection to contractors or agents, the people that actually do the work. If you take that step, you will broaden the people that will use it. If you address the CERCLA issues, you will broaden it more.

As you broaden the scope of the stakeholders that can participate, you have more likelihood that those people are going to find sites and react to those sites as good Samaritans. I firmly believe that the more you broaden the language the more encouragement there is and something can happen.

Senator CRAPO. The reason I ask these questions is that—as a number of groups have pointed out—part of the problem is that we don't have enough resources made available. It seems to me that this issue of trying to broaden the availability of opportunity for good Samaritans to step forward is a tremendous source of resources from the private sector to address this issue.

Ms. Kendall, I would like to indicate to you that your plea for more funding is not falling on deaf ears up here. We have legislation in another arena on the TMDLs where we have put $500 million, I think, into section 319 and $250 million into section 106. It is my understanding that those resources could be used for abandoned mine cleanup or other cleanup as necessary. It wouldn't all be that way.

That is just one area we are looking, but we do recognize that need.

I don't remember your testimony exactly, but did you testify or does your association take a position against expansion of opportunity in this legislation for private parties to be good Samaritans?

Ms. KENDALL. As Senator Baucus mentioned earlier, it was actually the National Mining Association that had advocated removing private parties from the scope of the bill. We do have three concerns—and we don't have any problem with the idea of private parties, industry, or other private companies being a good Samaritan—but we think there are three things, and two of them have been mentioned.

One is that responsible parties should not be allowed to be good Samaritans. This does get into some very dicey issues of ownership and control language and that sort of thing, which was one of the things that led Senator Baucus to take it out of the bill. So that does have to be addressed. Whether that can be addressed in the timeframe that you want to move a bill to the satisfaction of both sides here is——

Senator CRAPO. Let me ask you a question in that context, the context of whether a responsible party should be allowed to be a good Samaritan.

I can understand the concern that a responsible party should not get exemption from liability by qualifying as a good Samaritan. No argument there. But if the statute were written properly so that a responsible party who is, I assume, litigating—which is what happens now under Superfund and other statutes—or negotiating or working with the State to try to deal with their liabilities—if that responsibility party were willing to start putting some money toward improving the water quality as a volunteer, why not? Why not, assuming they don't get exempted from liability, let them step up and start cleaning up the water?

Ms. KENDALL. Couldn't they do that in the context of an NPDES permit?

Senator CRAPO. I don't know. I am not enough of an expert on this to know.

Ms. KENDALL. I am not sure that I am, either. I am not sure that I see the benefit to the responsible party.

Senator CRAPO. In other words, they may already be able to do so?

Ms. KENDALL. It seems to me that the reason they would want to get a good Samaritan permit is to qualify for a reduced standard and waiver of liability. If you are not going to reduce the standard or waive the liability——

Senator CRAPO. Right. I see your point.

So they could get an NPDES permit, but in that process of getting one, not every PRP agrees that they are liable for everything.

Ms. KENDALL. So maybe they are arguing that they are not fully liable?

Senator CRAPO. There may be a PRP who is saying that they have a portion of this liability and I am not agreeing with the EPA or whoever else it is that I have all of this or that, but while we are fighting over that and you are not giving me the permit, can I be a volunteer and start helping things out?

Ms. KENDALL. When we actually starting talking about this issue, one of the ideas we proposed to the Western Governors' Association was to keep the current cleanup standard but allow a longer period of time or phase-in or that sort of thing. I think we would be willing to talk about these ideas, but I hope you appreciate how they get really messy really fast.

Senator CRAPO. Yes, I do.

Ms. KENDALL. Let me mention the two other points we are concerned about with allowing private parties.

The second is this remining issue. We have no problem with the idea that minerals or other resources from a good Samaritan site would be developed, but we think this is a voluntary program for "good Samaritans" and they shouldn't profit from the development of one of these sites. Therefore, the proceeds from those sites should be redirected back into remediation either of this site to a higher standard or to another site.

And the third issue, which actually just jumped out at me as I was looking at the bill before this hearing—there is a provision in the bill that says that you can qualify for a good Samaritan permit for a site that you own if you bought it for the purposes of remediating the site. I think when we start to get into allowing private parties to be good Samaritans and permitees that it raises lots of issues as to whether they would be allowed to own the site.

If you are going to be a good Samaritan on a site you own, I think it is very questionable that you are ever really going to try to meet Clean Water Act standards. When would that ever really happen if you are exempting the owner of the property? Senator Crapo. When would somebody buy property in order to be a good Samaritan?

Ms. KENDALL. I was looking over the list of examples that the Western Governors' Association put together of some prospective good Samaritan sites, and I noted that one of them in California—I think it was the State—the State was proposing to purchase a site from Alta Gold and they would do some remediation and turn it into an off-road vehicle park. So they wouldn't be reaching Clean Water Act standards, but they wanted to purchase the site for that use.

Senator CRAPO. So it seems to me that if the objective is to clean the water up—you are saying that you don't want to create a sys-

tem in which we achieve a lower standard and say that is good enough?

Ms. KENDALL. Well, I think with this specific case—yes, that is definitely true. With the case of the land purchase, we would be concerned. Why would a mining company purchase a site for clean-up only and not with the intention of mining it someday to profit?

Senator CRAPO. If they had good lawyers, I don't think they would.

[Laughter.]

Ms. KENDALL. Not under current law.

Senator CRAPO. You have peaked my interest on remining, so I want to ask you another question. I am going to get to you, Mr. Gerard, so don't worry.

You indicated—and I think correctly so—it doesn't really sound like a good Samaritan if somebody wants to profit from the operation. I understand that and agree with the point you are making.

On the other hand, if our objective is to clean the water, and an incentive can be provided to someone—so maybe they are not a good Samaritan, they are a businessperson—and we can say to this businessperson that they can make some money cleaning up the site and they will achieve a higher standard of water quality where we have a lower standard and we will let them benefit from it.

What is the harm in allowing that? If our objective is to have water cleanup and we are not going to have any otherwise, what is the harm in allowing someone to profit from cleaning up the site if they are willing to put their resources into it as a business enterprise?

Ms. KENDALL. We think they should meet Clean Water Act water quality standards and get an NPDES permit. I will also add—I am speaking a little beyond the balance of my expertise here—there is a provision called the use attainability assessment process in the Clean Water Act that allows for variances from water quality standards. This process has been criticized as expensive and very time-consuming and frustrating, so we are not holding it out there as an ideal.

But perhaps in the case that you are talking about might have some merit in our view is that the good Samaritan could claim credibly that the site could not be cleaned up for some technological reason, that they could not meet Clean Water Act standards. If they can not meet the standard, we think there shouldn't be a profit. The money should go back into meeting that standard. If they can meet the standard, then they can get an NPDES permit and they mine at a profit, and that is great.

Senator CRAPO. Mr. Gerard, let me ask you the same question.

I know you may not profess to be an expert on this issue, but let's assume a hypothetical. Let's assume an abandoned mine site on Federal land—which is a very common thing in Idaho—and let's assume that there are no other statutory barriers, that we fixed the statute so that Federal land qualifies and that a private party could remediate, but nobody is stepping up to the bar to volunteer.

But one entity—let's say it is a mining company—comes forward and says that they don't have resources just to volunteer, but this site could be operated as a mineral-producing site and that if they are allowed to use the profits of that to clean up the mine as well

as have a profit margin, they would be willing to step in as a business enterprise and clean up the water quality.

Let's assume that they can't clean it up to Clean Water Act standards, but they can get a significant improvement. Wouldn't that be a proper way to get resources put toward cleaning up that water?

Mr. GERARD. I think that is correct. As an economist, you ask what is really happening here. Someone is making a profit. Is that bad? Maybe. Is the environmental quality higher? Maybe. But there is a whole laundry list of concerns. I think the reason this got struck is that it just brought in such a host of other issues that remining got dropped. But in principle, if you are concerned about environmental quality, then I don't understand why you should be concerned that someone is making a profit along the way.

Senator CRAPO. If I understand your testimony correctly, the thrust of it is that this bill, as written, will provide some relief for States. But as to Federal or private entities, there really isn't much likely that it will result in any activity in terms of volunteerism to improve the water quality. Is that a fair statement?

Mr. GERARD. I think that is precisely correct. The types of sites that Senator Baucus identified—Alta Mine—you talk to those guys about what they are doing and they are doing something, but they can't do everything that they should be able to do.

Senator CRAPO. With regard to property they own?

Mr. GERARD. With regard to the State abandoned mines cleanup. They are already working on these sites. Why can't they affect a discharge that will result in a higher water quality? The answer is that they don't affect it because they don't want to be subject to meeting the full standards of the Clean Water Act. So just by loosening that liability there, the State will make marked improvements in the sites that they are addressing.

But concerns have been brought up today with respect to CERCLA liability, with respect to the ownership search, with respect to the maximum extent practicable, with respect to citizen suits. These things act as a disincentive, whether attorneys say that it is clear that CERCLA is—"if you just read this line here, it is clear that CERCLA is not applicable here." If you are a mining company, maybe you don't believe that. As long as it is the perception of the people who may step up as good Samaritans that there are these disincentives built in, there is a possibility of CERCLA liability, there is a possibility of citizen suit, you are not going to see these people step up.

If you are a non-profit and you want to apply for a $100,000 grant to improve water quality in a municipality, what is the likelihood that that grant will be approved if there is uncertainty as to whether the permit will be issued in the first place? If it is the case that 20 to 30 percent of it will go to an ownership search, or you have to budget 10 percent of it to determine solvency of the operator—these are the kinds of things that will confound true good Samaritan cleanups. Again, however, State abandoned mine lands programs will truly benefit under this, in my opinion.

Senator CRAPO. You mentioned the owner-operator search again. I think I recall that in your written testimony you had some statis-

tics about just how that works and what kind of cost it imposes. Could you review that?

Mr. GERARD. I don't have the statistics right in front of me, but basically the idea was that the Forest Service, on their properties—and this bill doesn't apply to the Forest Service as it stands now—but they are looking for properties to clean up and they have a budget for that. What happened was that they concentrated on properties where there was no owner, so they had about 335 sites identified as sites where there were water quality problems and basically needed remediation.

The Inspector General reviewed that in 1996. The Department of Agriculture Inspector General basically said that because they were concentrating onsites where there is no identifiable owner-operator and the Forest Service is the only responsible party, they have only been able to clean up 16 over the course of the 7 or 8 years. So the Forest Service has this list of 335 priority sites and they cleaned up 16.

They also went out and conducted PRP searches to try to find people. They did indeed find people and they found people and billed them $42 million for cleanup efforts. What in fact happened was that no one paid up so they got about $2 million, most of it from one party.

So the question you have to ask with respect to the good Samaritan legislation is, Why put barriers in place with this owner-operator search when we can have cleanup today? If I am a private organization and I want to clean up today, that does not exonerate the owner-operator from liability under the Clean Water Act. They are still responsible. But we can clean up the Alta Mine today as opposed to getting the owner-operator to pay up someday.

Senator CRAPO. There is a principle called "polluter pays" which we hear a lot about. I don't think there is a lot of disagreement in society in the United States with the principle that if there is an identifiable polluter that caused the pollution that, all other things being equal, they are liable under current Federal law for the cleanup.

Sometimes, it seems to me, though, that we spend so much time focusing on making sure we find that polluter that we spend undue resources seeking out the polluter when we have somebody standing ready to help remediate the problem with the environment.

From an economic perspective, I recognize that we will need to have resources put in to identifying responsible parties. But is there any reason that you can see—in principle or economics—that would justify putting the burden of trying to identify the responsible parties on a person or entity that would be willing to step up as a good Samaritan?

Mr. GERARD. As a good Samaritan, no, because the whole concept is that they want it cleaned up and they are willing to put their finances down to do it. If I am a private party, maybe I can put a lien on the property, I am not certain. But if I am a State, certainly, and I start doing this—and I think there might be a responsible party here—why can't the State later sue to recover to those damages? We start down the path of cleaning it up now and it gets cleaned up today as opposed to maybe getting cleaned up later.

I think there are concerns that people will try to duck out of their responsibility, but the bill as written clearly states that nothing absolves responsible parties from their existing liability in the Clean Water Act. I don't see why a good Samaritan who wants to put their resources toward cleanup should have to spend one penny trying to identify an owner-operator or trying to determine the solvency of that owner-operator.

Senator CRAPO. My last question I want to ask of both Mr. Lyman and Mr. Goodhard. I realize it is possible that neither of you will be able to answer this, but it relates to the issue raised earlier that it has been stated here that the National Mining Association requested that private parties be taken out of this legislation.

You are here representing the National Mining Association, Mr. Goodhard, although I realize you may not have been a part of whatever took place in previous negotiations on the bill. Mr. Lyman, the Idaho Mining Association is at least an affiliate of the National Mining Association.

I am going to ask both of you if have any knowledge of whether that is in fact what took place. If so, why?

Mr. LYMAN. Mr. Chairman, I was notified of that yesterday at the NMA offices. While we have followed this issue in Idaho over the last several years as this effort with the Western Governors and the other groups proceeded, it wasn't one of our priority issues. So while I followed it, I wasn't deeply involved in it.

As I was told yesterday of the issue Senator Baucus mentioned to create all these fire walls and come up with all this owner-operator affiliate language, it got to be quite a morass. I believe that our association could support the development of that kind of language to allow private parties to be good Samaritans under this bill, or would at least be willing to participate in another effort to try to come up with that language.

But again, as we have heard from David, at some point we become bogged down in process and in an attempt to write page after page after page of owner-affiliate and all kinds of other language on the off-chance that some potentially responsible party might try and find a loophole to skip through, then we lose a tremendous opportunity.

In addition, I don't believe that that effort by the Western Governors and other groups ever included a more explicit release from CERCLA liability so that there was perhaps less incentive from the industry, given the fact that even if we could jump through all these hoops on the owner-operator-affiliate kind of process, if we still don't have explicit CERCLA release, then what does it matter? Go ahead and pull us out of the bill and go to the States.

Maybe merging those two together might resolve that in a way where you will be able to have the industry come up with language on that owner-operator-affiliate kind of thing if we had explicit release from CERCLA.

Senator CRAPO. Mr. Goodhard.

Mr. GOODHARD. I was involved in parts of the discussions at that time. The concept, as initially proposed by the Western Governors' Association is the ownership and control language that was so incredibly one-sided that the industry took great exception to that.

We spent a lot of time and effort to bring the bill up to the point that that could be left out. At that point, we still wanted to be participating parties, but it was still a very contentious issue, very hard to resolve.

In the interest of trying to move the concept forward, we withdrew at that time with the understanding that there would be further discussions later on. That has never happened.

Senator CRAPO. Let me ask the two of you—in fact, anyone on the panel who would like to pitch in on this is free to do so—if we were to expand—I am referring to issue of this complication of trying to close every loophole if we allow private parties to be good Samaritans.

Why couldn't we simply have a very straightforward phrase—maybe even one sentence—that said that if a PRP or responsible party is identified that anything they may have done as a good Samaritan does not exempt them from a liability for the cleanup? In other words——

Mr. GOODHARD. We actually proposed language similar to that where it would be a self-certification that the company and its subsidiaries that is acting as a private party certifies that they have not had an interest in the abandoned or inactive property. Recognizing the other provisions of the Clean Water Act that if it comes to light not only have you fraudulently entered into the good Samaritan program, you also still have your preexisting Clean Water Act responsibilities.

There is nothing in the bill that precludes any of the other portions of the Clean Water Act.

Senator CRAPO. And that proposal was rejected?

Mr. GOODHARD. I am not sure how far along that went. But I did see language and I know it was submitted. I was not involved at that time.

Senator CRAPO. Any other comments from the panel on that?

[No response.]

Senator CRAPO. I know it has gone way past the time we had allocated for the hearing, but I feel that the information brought forward has been very helpful. I want to again extend my thanks to each of you.

We are going to leave the record open for 10 days to receive written testimony from any groups that are interested in submitting testimony on this issue. We will be trying to find a way to move forward some good legislation. I didn't say perfect legislation, but some good legislation. We may have some disagreements on that as we move along, but I think we have identified a lot of areas where we will be able to find consensus.

With that, and again with my thanks to all of you for the effort you have put into this, this hearing is adjourned.

[Whereupon, at 12:42 p.m., the subcommittee was adjourned to reconvene at the call of the chair.]

[Additional statements submitted for the record follow:]

STATEMENT OF GOVERNOR WILLIAM J. JANKLOW, STATE OF SOUTH DAKOTA

Mr. Chairman, and members of the committee, thank you for the opportunity to appear before you today to discuss an issue of great importance to Western States—the cleanup of abandoned or inactive mines. Abandoned or inactive mines are responsible for many of the greatest threats and impairments to water quality

throughout the Western United States. Thousands of stream miles are severely impacted by drainage and runoff from these mines, often for which a responsible party is unidentifiable or not economically viable. At least 400,000 abandoned or inactive mine sites occur in the West.

Regulatory approaches to address the environmental impacts of abandoned or inactive mines are often fraught with difficulties, starting with the challenge of identifying legally responsible and financially viable parties for particular impacted sites. Mine operators responsible for conditions at a site may be long gone. The land and mineral ownership patterns in mining districts are extremely complex and highly differentiated. The surface and mineral estates at mine sites are often severed, and water rights may exist for mine drainage. It is not uncommon for there to be dozens of parties with partial ownership or operational histories associated with a given site.

In view of the impacts on water quality caused by these abandoned mines and the difficulties in identifying responsible parties to remediate the sites, states are very interested in undertaking and encouraging voluntary "Good Samaritan" remediation initiatives, i.e., cleanup efforts by states or other third parties who are not legally responsible for the existing conditions at a site. However, states currently are dissuaded from taking measures to clean up the mines due to an overwhelming disincentive in the Clean Water Act. The bill before you would amend the Act in effort to reduce those disincentives.

I would like to offer you an analogy to the situation states are experiencing with our attempts to clean up the runoff from these abandoned mines. Imagine, if you will, a neighborhood, perhaps your own neighborhood, with houses and yards, trees lining the street, kids and dogs playing, families barbequing. Now imagine a house, perhaps next door to your own house, that has been abandoned. The paint on the outside walls has long worn off. The windows are all broken out. The front door flops open and shut in the wind. The yard has not been mowed or kept, and has years of debris collected in its high weeds. Add an old refrigerator to the broken down front porch and a beat up old car in the side yard. It is an old house that has been abandoned, and it is in your neighborhood.

Now, let's just say you have had enough of the eyesore. It is impacting the value of your home; it is a safety and health hazard for the kids in the neighborhood curious to explore it; and it is a constant source of debris blowing into your yard. You decide to take some actions to clean up the house—to mow the lawn and pick up the trash. Move the fridge inside. Nail the door shut and board the windows. Actions that do not cost you much, but that result in significant improvements.

Now, imagine that after you have completed these modest improvements someone in your community takes you to court claiming that the actions you have taken make you liable to bring the house up to code and up to the covenants of the neighborhood, and make you responsible for maintaining the condition of the property indefinitely into the future. And they win! You had nothing to do with the disrepair that the abandoned house had fallen into, and yet, because you made an effort to clean up some of the mess, you are now legally obligated for very costly renovation and maintenance of the house.

This is the situation states find themselves in with regard to their efforts to clean up abandoned or inactive mines. To date, Environmental Protection Agency (EPA) policy and some case law have viewed abandoned or inactive mined land drainage and runoff as problems that must be addressed under the section 402 National Pollutant Discharge Elimination System (NPDES) permit program. One such example involves the Penn Mine in California, an abandoned copper and zinc mine. A portion of the Penn Mine property was acquired by the East Bay Municipal Utility District to construct a reservoir. Subsequently, the utility and a California Regional Water Quality Control Board constructed a facility to contain toxic runoff from the site and minimize its impact on downstream waters. Neither the municipal utility nor the Regional Board had any previous involvement in the mining operation but were at the site for the purpose of cleaning it up. Because the new facility did not eliminate all discharge to downstream waters, the municipal utility and the regional board were later sued by an environmental group alleging that the facility was discharging pollutants without an NPDES permit. This position was upheld through the 9th Circuit Court of Appeals, with the result that costly further cleanup requirements were imposed on the municipal utility and the regional board. This particular example has had a severe chilling effect on the interest of other "Good Samaritans" in pursuing similar cleanup efforts in several Western states.

States have found that there are many instances where a reasonable investment in a cleanup project at an abandoned mine site will result in substantial improvement in water quality, even though all impacts from the site will not be eliminated. However, there is currently no provision in the Clean Water Act which protects a

remediating agency—or "Good Samaritan" who does not otherwise have liability for abandoned or inactive mine sites, and that attempts to improve the conditions at these sites, from becoming legally responsible, under section 301(a) and section 402 of the Clean Water Act, for any continuing discharges from the mined land after completion of a cleanup project. This potential liability is an overwhelming disincentive to voluntary remedial activities financed or conducted by public entities to address the serious problems associated with abandoned or inactive mined lands.

The Western states have found a high degree of interest and willingness on the part of Federal, State and local agencies, volunteer organizations and private parties to work together toward solutions to the multi-faceted problems commonly found on inactive mined lands if an effective Good Samaritan provision were adopted. Consequently, since 1994 Western states have endeavored to develop a proposal for amending the Clean Water Act, to eliminate the current disincentives that exist in the Act to restore and protect water quality within watersheds through Good Samaritan cleanups of abandoned or inactive mines. From the outset, this has been a truly bipartisan effort, and an effort in which the states have sought to involve the full spectrum of stakeholders, including EPA, the environmental community, the mining industry, and other interested parties. Each of these groups has brought important perspectives and considerations to the discussions. Over several years, the proposal evolved substantially as it was refined in response to issues and concerns raised. S. 1787 uses the WGA proposal as its starting point, while including further refinements crafted by the bill's sponsors.

This bill offers a starting point from which to work to resolve the liability disincentive problem that is currently preventing many potential Good Samaritan cleanup projects from going forward. The key provisions of the bill are consistent with WGA policy resolution 98–004, "Cleaning Up Abandoned Mines," a copy of which is attached.

- It provides a process to assure that proposed projects make sense from an environmental standpoint and that they will not be authorized unless there is a sound basis to conclude that they will result in water quality improvements at a site.
- It provides assurances that a remediating party will carry out a project as approved, in an environmentally sound manner, without imposing unnecessary and infeasible standard NPDES permit requirements.
- It provides that after a remediation project is completed a remediating party can terminate its permit without open-ended, continuing responsibility for remaining discharges at a site.
- At the same time, it assures that the existing legal liability of those properly responsible for discharges at an abandoned or inactive mine site, prior to a Good Samaritan project, is not affected in any way.

The Western Governors' Association has expressed its support for S. 1787 in the attached letter dated October 19, 1999, although we believe two issues need further consideration: (1) CERCLA liability; and (2) contractor liability.

The current proposal has been criticized both as too narrow and as too broad. Some who see the proposal as too narrow would like the provisions regarding who can be a remediating party to be expanded, so that more entities can pursue Good Samaritan projects. Some who see the proposal as too broad believe that all remediation efforts should be subject to a specific cleanup standard, or that no exceptions should be allowed to the usual Clean Water Act requirements.

What is important is that some variation on the current proposal be adopted soon. Few, if any, other revisions to the Clean Water Act would result in such immediate or certain improvements to water quality as the prompt adoption of an effective Good Samaritan provision. Projects in various stages of planning and design are ready to move forward in several Western states if the current disincentives to such remediation projects can be eliminated. A list of several examples of such projects is attached as an addendum to this testimony. On the other hand, if action on this bill is delayed by those that feel it does not give them 100 percent of what they want, no projects will go forward and our Western streams will remain polluted.

It is important to note that this bill would not be and has not been represented as a comprehensive solution to the environmental problems created by abandoned or inactive mines. In particular, it does not provide any new resources, which is another major constraint to further progress in obtaining cleanup. However, there are some resources currently available and meaningful cleanup projects will go forward if the current liability cloud is removed. For example, section 319 of the Clean Water Act provides one source of project funding that was used by states to help undertake these projects until the liability issue was recognized. The provision in S. 1787 that would assure that this funding source remains available for these projects in the future is a critical element of the proposal. Additional funding sources will be needed in the future. However, until the liability issue is resolved,

there is very little incentive for states or others to initiate major efforts to identify potential additional resources for abandoned or inactive mine remediation.

The Western Governors commend the sponsors for introducing the "Good Samaritan Abandoned or Inactive Mine Waste Remediation Act" in an effort to eliminate current disincentives to voluntary, cooperative efforts aimed at reducing water quality impacts from abandoned or inactive mines. WGA remains willing to work with those that seek to improve this concept.

Adoption of a Good Samaritan bill will result in immediate and significant improvement in the water quality of some of our country's most polluted streams. Inaction will result in continued degradation for the foreseeable future of many Western streams impacted by historical mining activity. On behalf of the Western Governors' Association, I therefore urge passage of Good Samaritan legislation by this Congress, so that states may once again get on with the business of cleaning up our proverbial neighborhoods.

ATTACHMENT

EXAMPLES OF ABANDONED OR INACTIVE MINES WHICH HAVE BEEN ASSESSED FOR REMEDIATION IN WESTERN STATES

The following cleanups have been postponed due to potential NPDES liability.

CALIFORNIA

Penn Mine Copper Mine, Calaveras County

Because of a lawsuit in the 1990's, the Central Valley Board was compelled to do major remediation because the court found the Board was an NPDES discharger based on remedial work it did in the 1970's. Remediation is nearly complete, but the Board risks liability for residual seeps and other discharges.

Walker Mine Copper Mine, Plumas County

Regional Board spent over 30 years unsuccessfully suing the mine owner to clean-up acid mine drainage discharge that sterilized a creek. Finally, the Board plugged mine shaft and accepted settlement from mine owner's estate. The Board remains liable for any point source discharge that may occur from the plug.

Buena Vista/Klau Mine Mercury Mine, San Luis Obispo County

Central Coast Board has unsuccessfully tried to secure cleanup from mine owner for over 20 years. These mines are the source of 80 percent of mercury pollution in Nacimiento Reservoir, which is under a fishing advisory. US EPA is willing to do cleanup on condition California takes over the long-term operation and maintenance. The State is unwilling to accept liability for NPDES discharges at site and so relieve the recalcitrant mine owner of responsibility. Cleanup may be delayed until potential State liability is resolved.

Mt. Diablo Mine Mercury Mine, Contra Costa County

Owner discovered mine after spending entire savings to buy land for a residence. Mine pollution has sterilized a creek and caused a fishing advisory in a nearby reservoir. With liability protection, a government agency could do partial remediation to significantly reduce pollutant discharges from the site. Without liability protection it is likely no remediation will occur.

Stowell Mine, Keystone Mine, and Mammoth Mine, Shasta County

In 1991, the Board secured $1 million from the State Cleanup Account to hire consultants to perform remedial work at those three mines. Although a responsible party eventually came forward to take remedial action, the Board decided to return the funds rather than apply them to mine cleanup because of liability concerns (brought on by the Penn Mine case.)

Balaklala and Shasta King Mines, Shasta County

These mines discharge abandoned mine drainage to West Squaw Creek, a tributary to Shasta Lake. Impacts include elimination of aquatic life in the stream below the mines, frequent fish kills where the stream enters Shasta Lake and degradation of recreational/aesthetic uses in this part of the National Recreation Area. The owner, Alta Gold Company, has performed some remedial work but final site restoration is probably beyond their capability. There is a unique opportunity here for Alta Gold to sell the property to the public resource agencies for development of an off-road vehicle park with funds from the sale to be used for mine drainage control.

This arrangement could provide substantial funds for problem solution but is presently not being actively pursued due to the liability issue.

Mammoth Mine, Shasta County

This large abandoned copper mine discharges abandoned mine drainage to Little Backbone Creek and Shasta Lake. Impacts are similar to those previously described for the West Squaw Creek mines. The owner, Mining Remedial Recovery Company, has implemented a comprehensive mine sealing program but the results to date have been disappointing. Substantial modification of the sealing program or a new control strategy, such as collection and treatment, will be required to address the problem. The issue is further complicated by a lawsuit filed by the California Sport Fishing Protection Alliance. We believe that a cooperative effort at Mammoth Mine between the owners, resource protection groups, and the agencies would be more effective than lawsuits and enforcement orders.

Greenhorn Mine, Shasta County

This acid mine west of Redding discharges abandoned mine drainage to Willow Creek which is a tributary to the Wiskeytown Lake National Recreation Area. The discharge impacts aquatic life and recreational uses in the area. There is no responsible owner capable of implementing a control program. A reclamation feasibility study has been prepared by the Department of Water Resources (under contract to Regional Board), but no work has been done. Water quality and beneficial use improvements could be achieved through a combination of surface drainage control and mine sealing.

Corona Mine and Abbott Mine, Lake County

These two mercury mines would each benefit from actions to contain tailings and solid wastes and to divert surface waters. Staff estimates a cost of $1–2 million per mine.

Afterthought Mine, Shasta County

Proposed actions at this mine include sealing the multiple portals, removing and covering the tailings pond, and rehabilitating the access road.

Bully Hill Mine, Shasta County

Staff proposes solid waste containment and portal scaling at this site.

• S. 1787 would also support watershed cleanups. US EPA is working on regulations to permit publicly owned sewage treatment works (POTWS) to cleanup pollution within a watershed as an alternative to removing pollutants that exist at very low levels in the POTWS' discharge. This will provide much greater removal of pollutants from watersheds and will help California comply with its mandate to implement Total Maximum Daily Load allocations. However, POTWS are not likely to cleanup abandoned mines under a watershed program unless they get some liability protection.

COLORADO

St. Kevin Gulch, Lake County

The St. Kevin Gulch project is located northwest of Leadville in the small perennial drainage known as St. Kevin Gulch. Mine drainage from the lower Griffin Tunnel flows as a series of springs from the waste rock pile approximately two miles above the confluence of St. Kevin Gulch and Tennessee Creek. The mine drainage has a pH of 2.6 to 2.9 and has rendered St. Kevin Gulch virtually devoid on any aquatic life below the drainage, and has an adverse effect on trout reproduction in Tennessee Creek. The mine drainage is to be treated using a combination of an anoxic limestone drain and a sulfate reducing bioreactor (wetland). An interceptor trench has been completed to help site the treatment system. The project is in the final design state. Commitments for materials, labor, services, and cash were obtained from local individuals, Lake County, and the USGS. These commitments have at least partially been withdrawn and the project postponed because of concerns about assumption of liability. The estimated construction cost is $122,300.

McClelland Tunnel, Clear Creek County

The McClelland Tunnel project is located along Interstate 70, one-half mile southeast of the town of Dumont. The McClelland Tunnel drains approximately 15 gallons per minute of metal laden water into Clear Creek. The site also contains mine and mill waste along Clear Creek, a county road, and a State Highway. The Colorado School of Mines, Department of Transportation, Department of Public Health and Environment, Clear Creek County, and Coors have been collaborating with DMG on this project. The DMG's part of the project is to construct a small sulfate

reducing bioreactor and a small aerobic wetland to treat the mine drainage. Final designs for the water treatment aspects of the project have been prepared and are ready to be bid. The project portion has been halted because of the concern of the State for incurring perpetual liability for maintaining the treatment system. The estimated cost of this project is $26,800.

Perigo, Gilpin County

The Perigo project is located approximately 6 miles north of Central City in a small perennial steam known as Gamble Gulch. The Perigo mine drains a average of 70 gallons per minute of pH2.9–3.9 metal laden water. Gamble Gulch below the mine drainage is virtually devoid of aquatic life for six miles before its confluence with South Boulder Creek. In 1989 and 1990, a small project was completed in this drainage to remove mine waste rock and mill tailings from the steam bed in two locations and construct a test treatment system at the Perigo mine. The proposed treatment techniques for this site include an aqueous lime injection system, settling pond and sulfate reducing bioreactor, which will be capable of treating all the mine drainage. The design for the project is completed but will not be bid out for construction until additional baseline information of the watershed is collected. If liability issues are not resolved at that time, the project will not proceed. These estimated cost for this project is $114,640.

Pennsylvania Mine, Summit County

The Pennsylvania Mine project is located just east of Keystone ski area on Peru Creek. Acidic metal laden water drains from caved mine workings making the creek biologically dead. Though a 319 grant from EPA, DMG has installed an innovative hydro-powered water treatment mechanism and a settling pond. The drainage water is diverted from the mine adit into a hydropower turbine, thus generating the power to drive a feeder that doses limestone to buffer the water. Once in the pond, metal precipitate can settle out and the effluent progresses through three wetland cells. Here, sulfate reducing bacteria and low oxygen waters remove much of the remaining acid and metal. The project is 80 percent complete with only a redesigned feeder mechanism necessary. The project is on hold pending resolution of NPDES liability issues.

Animas River Mine Sites, San Juan County

The Division of Minerals and Geology in conjunction with the Animas River Stakeholders Group has investigated hundreds of mine sites in the vicinity of Silverton. The resulting feasibility reports for Mineral Creek, Cement Creek, and the Animas River have identified at least two dozen sites having a significant impact on the Animas River water quality. Treatment recommendations have been made but project work can not proceed until the NPDES issue is resolved.

MONTANA

The State of Montana has inventoried its abandoned non-coal mine sites. Thus far, Montana has found 245 abandoned mines which have the potential to impact surface waters because they are within 100 feet of a stream. Of these, 71 sites have discharging adits (mine entrances emitting acid mine drainage into the environment). 89 of 245 sites are already known to be degrading water quality. These 89 sites have caused downstream water quality samples to exceed at least one Clean Water Act parameter—either the Maximum Contaminant Limits or Aquatic Life Standards.

Given recent developments in Federal case law, Montana officials are gravely concerned that cleanup projects addressing abandoned mines which are known to be seriously degrading the state's water quality will be halted due to Clean Water Act liability concerns.

NEVADA

Tybo Tailings Site, Nye County, Nevada

The Tybo Tailings Site is located in the Tybo mining district in Nye County, Nevada. It is approximately 58 miles east of Tonopah on U.S. Highway 6 and thence 6.5 miles northwest on the Central Nevada Test Sites Base Camp access road. The site is located in the Hot Creek hydrographic basin. Tybo Creek flows from Tybo Canyon in the Hot Creek Range and then easterly into the Hot Creek Valley. The tailings are the result of mining activity, which began around 1866. Silver, lead, zinc, copper, mercury, and small amounts of gold were recovered. By 1877, Tybo was the second largest lead producing area in the United States after Eureka, Nevada. Production continued on an intermittent basis until around 1940. Some very minor

production occurred in the 1950's and early 1960's. Total recorded production from the district is valued at over $9 million.

The tailings impoundment is located just downstream from the mouth of Tybo Canyon. The actual impoundment is located in an ephemeral wash and is about 1,000 feet long and up to 600 feet wide (approximately 12 acres total). The dam has been breached, allowing tailings to migrate down the creek for at least 6 miles. The tailings appear to be about 20 feet thick at the dam. The tailings are highly acidic (surface water on the tailings has a pH of 1–3), have a strong sulfur smell, and are stained brown-orange to purple, red and black. Surface water has eroded channels into the tailings. All vegetation along the migration path from the impoundment is stressed or dead for at least 3 miles downstream.

Preliminary studies have detected arsenic and lead range up to 10,000 ppm, zinc up to 7,500 ppm, and copper up to 233 ppm. At this time, the State of Nevada has recommended evaluating groundwater use and the habitat of threatened and endangered species. Additional recommendations include measures to prevent wildlife from drinking surface water, and restricting site access by fencing and gating. NDOW has expressed concern about the effects on plants and wildlife and groundwater.

Rip Van Winkle Mine, Elko County, Nevada

The Rip Van Winkle Mine site is located in the Merrimac mining district, Elko County, Nevada. The site is located at approximately 7,000 feet above mean sea level on Lone Mountain in the Independence Mountains, and is situated in the Maggie Creek Area hydrographic basin, which flows into the Humboldt River near Elko, Nevada. The Rip Van Winkle Mine recorded first production in 1918. It was the only active producer in the district after 1949 with limited production of lead, zinc and silver through 1966.

The mine site consists of shafts and underground workings, a mill, building foundations and several cabins, waste dumps and tailing impoundments. The tailings impoundments cover approximately 3 acres and contain acid-generating materials. Vegetation on the site is sparse and in the vicinity of the tailings, plants show signs of stress. Impacts to Humboldt River flows are unknown at present, but may be impacting endangered species.

Norse-Windfall Mill Site, Eureka County, Nevada

The Norse-Windfall Mill Site is located 5 miles south of Eureka, Nevada. It is located in the Diamond Valley hydrographic basin in which perennial springs are prolific in the mountainous regions south of Eureka, with many flowing springs existing at the mill site. The Windfall Mine was discovered in 1908, and was operated intermittently for about 30 years as an underground operation with a cyanide vat leach facility. Around 1968, Idaho Mining Corp. acquired the property and mined the same ore body via open pit methods. Between 1975 and 1978 the Windfall Pit, and associated cyanide heap-leach piles, waste dumps, mill process building, office and laboratory were constructed. The last operator of the site was Norse Windfall Mines, Inc. The site has been abandoned since 1989 and little or no reclamation has occurred. In July 1994, the Nevada Division of Environmental Protection conducted a compliance inspection of the site and noted that unmaintained process components and materials left scattered about the property may have the potential to cause environmental damage by degrading the waters of the state.

Springs located within the site exceed the Nevada Water Quality Standards for arsenic, mercury, nickel, and cyanide. Within a 4-mile radius of the site, six municipal springs and one domestic well provide drinking water for Eureka. Water from the nearby springs are blended and pumped into 2 water tanks located just outside of Eureka. This water serves as the main water supply for the entire town.

SOUTH DAKOTA

South Dakota has been working on reclaiming two small hardrock mines that occur in the Black Hills with EPA and the Federal agencies that administer the land upon which the mines are located. They are the Minnesota Ridge mine (Forest Service and private land) and the Belle Eldridge mine (BLM land).

South Dakota also recently completed an inventory of abandoned hardrock mines occurring in the Black Hills of western South Dakota in conjunction with the South Dakota School of Mines and Technology. Approximately 900 mines were identified in a four-county area (about 700 on private land and about 200 on Federal land). The inventory purpose was primarily to identify abandoned mine locations, so little or no assessment work was completed for many of the mines identified. Many of these historic mines pose significant safety hazards, and some pose environmental

problems, including impacts to water quality. The Good Samaritan bill would certainly be an incentive for getting some of these mines cleaned up.

OCTOBER 19, 1999.

Hon. MAX BAUCUS,
U.S. State,
Washington, DC.

DEAR SENATOR BAUCUS: The Western Governors commend you for introducing the "Good Samaritan Abandoned or Inactive Mine Waste Remediation Act." As stated in WGA Resolution 98–004 (attached), the Western Governors believe that there is a need to eliminate current disincentives in the Clean Water Act for voluntary, cooperative efforts aimed at improving and protecting water quality impacted by abandoned or inactive mines. We believe your bill would effectively and fairly eliminate such disincentives, and we therefore urge its passage this Congress.

Inactive or abandoned mines are responsible for threats and impairments to water quality throughout the western United States. Many also pose safety hazards from open adits and shafts. These historic mines pre-date modern Federal and State environmental regulations which were enacted in the 1970's. Often a responsible party for these mines is not identifiable or not economically viable enough to be compelled to clean up the site. Many stream miles are impacted by drainage and runoff from such mines, creating significant adverse water quality impacts in several western states.

Recognizing the potential for economic, environmental and social benefits to downstream users of impaired streams, western states, municipalities, Federal agencies, volunteer citizen groups and private parties have come together across the West to try to clean up some of these sites. However, due to questions of liability, many of these Good Samaritan efforts have been stymied.

To date, EPA policy and some case law have viewed inactive or abandoned mine drainage and runoff as problems that must be addressed under Section 402 of the CWA—the National Pollutant Discharge Elimination System (NPDES) permit program. This, however, has become an overwhelming disincentive for any voluntary cleanup efforts because of the liability that can be inherited for any discharges from an abandoned mine site remaining after cleanup, even though the volunteering remediating party had no previous responsibility or liability for the site, and has reduced the water quality impacts from the site by completing a cleanup project.

The "Good Samaritan Abandoned or Inactive Mine Waste Remediation Act" would amend the Clean Water Act to protect a remediating agency from becoming legally responsible for any continuing discharges from the abandoned mine site after completion of a cleanup project, provided that the remediating agency—or "Good Samaritan"—does not otherwise have liability for that abandoned or inactive mine site and implements a cleanup project approved by EPA. The Western Governors support this bill, and urge that it be enacted this Congress.

Sincerely,

MARC RACICOT,
Governor of Montana,
WGA Lead Governor.

BILL OWENS,
Governor of Colorado,
WGA Lead Governor.

MICHAEL O. LEAVITT,
Governor of Utah.

POLICY RESOLUTION 98–004—CLEANING UP ABANDONED MINES

(Sponsor: Governor Roy Romer)

A. BACKGROUND

1. Inactive or abandoned mines are responsible for threats and impairments to water quality throughout the western United States. Many also pose safety hazards from open adits and shafts. These historic mines pre-date modern Federal and State environmental regulations which were enacted in the 1970's. Often a responsible party for these mines is not identifiable or not economically viable enough to be compelled to clean up the site. Thousands of stream miles are impacted by drainage

and runoff from such mines, one of the largest sources of adverse water quality impacts in several western states.

2. Mine drainage and runoff problems are extremely complex and solutions are often highly site-specific. Although cost-effective management practices likely to reduce water quality impacts from such sites can be formulated, the specific improvement attainable through implementation of these practices cannot be predicted in advance. Moreover, such practices generally cannot eliminate all impacts and may not result in the attainment of water quality standards.

3. Cleanup of these abandoned mines and securing of open adits and shafts has not been a high funding priority for most State and Federal agencies. Most of these sites are located in remote and rugged terrain and the risks they pose to human health and safety have been relatively small. That is changing, however, as the West has gained in population and increased tourism. Both of these factors are bringing people into closer contact with abandoned mines and their impacts.

4. Cleanup of abandoned mines is hampered by two issues—lack of funding and concerns about liability. Both of these issues are compounded by the land and mineral ownership patterns in mining districts. It is not uncommon to have private-, Federal-, and State-owned land side by side or intermingled. Sometimes the minerals under the ground are not owned by the same person or agency who owns the property. As a result, it is not uncommon for there to be dozens of parties with partial ownership or operational histories associated with a given site.

5. Recognizing the potential for economic, environmental and social benefits to downstream users of impaired streams, western states, municipalities, Federal agencies, volunteer citizen groups and private parties have come together across the West to try to clean up some of these sites. However, due to questions of liability, many of these Good Samaritan efforts have been stymied.

(a) To date, EPA policy and some case law have viewed inactive or abandoned mine drainage and runoff as problems that must be addressed under the Clean Water Act's (CWA) Section 402 National Pollutant Discharge Elimination System (NPDES) permit program. This, however, has become an overwhelming disincentive for any voluntary cleanup efforts because of the liability that can be inherited for any discharges from an abandoned mine site remaining after cleanup, even though the volunteering remediating party had no previous responsibility or liability for the site, and has reduced the water quality impacts from the site by completing a cleanup project.

(b) The western states have developed a package of legislative language in the form of a proposed amendment to the Clean Water Act. The effect of the proposed amendment would be to eliminate the current disincentives in the Act for Good Samaritan cleanups of abandoned mines. Over the 3 years that the proposal was drafted, the states received extensive input from EPA, environmental groups, and the mining industry.

6. Liability concerns also prevent mining companies from going back into historic mining districts and remining old abandoned mine sites or doing volunteer cleanup work. While this could result in an improved environment, companies which are interested are justifiably hesitant to incur liability for cleaning up the entire abandoned mine site.

B. GOVERNORS' POLICY STATEMENT

Good Samaritan

1. The Western Governors believe that there is a need to eliminate disincentives to voluntary, cooperative efforts aimed at improving and protecting water quality impacted by abandoned or inactive mines.

2. The Western Governors believe the Clean Water Act should be amended to protect a remediating agency from becoming legally responsible under section 301(a) and section 402 of the CWA for any continuing discharges from the abandoned mine site after completion of a cleanup project, provided that there mediating agency—or "Good Samaritan"—does not otherwise have liability for that abandoned or inactive mine site and attempts to improve the conditions at the site.

3. The Western Governors believe that Congress, as a priority, should amend the Clean Water Act in a manner that accomplishes the goals embodied in the WGA legislative package on Good Samaritan cleanups.

Cleanup and Funding

4. The governors support efforts to accelerate responsible and effective abandoned mine waste cleanup including the siting of joint waste repositories for cleanup wastes from abandoned mines on private, Federal, and State lands. Liability concerns have hampered the siting of joint waste repositories leading to the more ex-

pensive and less environmentally responsible siting of multiple repositories. The Governors urge the Bureau of Land Management and the U.S. Forest Service to develop policy encouraging the siting of joint waste repositories whenever they make economic and environmental sense.

5. The governors encourage Federal land management agencies such as the Bureau of Land Management, Forest Service, and Park Service, as well as support agencies like the U.S. Environmental Protection Agency and the U.S. Geological Survey to coordinate their abandoned mine efforts with State efforts to avoid redundancy and unnecessary duplication. Federal and State tax dollars should be focused on working cooperatively to secure and clean up abandoned mine sites, not working separately to conduct expensive and time consuming inventories, research, and mapping efforts.

6. Other responsible approaches to accelerate abandoned mine cleanup should be investigated, including remining.

7. Reliable sources of funds should be made available for the cleanup of abandoned mines in the West.

GOVERNORS' MANAGEMENT DIRECTIVE

1. WGA staff shall transmit a copy of this resolution and the proposed WGA legislative package on Good Samaritan cleanups to the President, the Secretary of the Interior, Secretary of Agriculture, Administrator of the Environmental Protection Agency, and Chairmen of the appropriate House and Senate committees.

2. WGA staff shall work with the mining industry, environmental interests, and Federal agency representatives to explore options to accelerate abandoned mine cleanup through remining and report back to the Governors at the 1999 WGA Annual Meeting.

3. WGA shall continue to work cooperatively with the National Mining Association, Federal agencies, and other interested stakeholders to examine other mechanisms to accelerate responsible cleanup and securing of abandoned mines.

The Board of Directors is comprised of the Governors of Alaska, American Samoa, Arizona, California, Colorado, Guam, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Northern Mariana Islands, Oregon, South Dakota, Texas, Utah, Washington and Wyoming.

All policy resolutions are posted on the WGA Web site (www.westgov.org) or you may request a copy by writing or calling: Western Governors' Association, 600 17th St. Suite 1705 South, Denver, CO 80202–5452; Ph: (303) 623–9378; Fax: (303) 534–7309.

RESPONSES BY WILLIAM J. JANKLOW TO ADDITIONAL QUESTIONS FROM SENATORS CRAPO AND BOXER

Question. Are the regulatory and administrative review processes in S. 1787 similar to those of the State of South Dakota under its abandoned mine cleanup program?

Response. The State of South Dakota does not have an abandoned mine cleanup program in the formal sense. That is, there are no specific regulatory and administrative review processes applicable to abandoned mines at the State level that would allow a comparison to be made.

A number of abandoned mines in the Black Hills have, however, been reclaimed. The State has worked with several of our active mine operators such as Homestake, Wharf Resources, and others to reclaim abandoned mines on lands they control or own. In addition, the state, in cooperation with the U.S. Forest Service, the Bureau of Land Management, and EPA, are in the process of reclaiming several abandoned mine sites on lands managed by the Federal government. Two recent examples include the Minnesota Ridge mine near Rochford and the Belle Eldridge mine near Deadwood.

Question 2. The current bill precludes sites from eligibility if they would be subject to consideration under the Superfund program. Given that many areas are as yet not surveyed, do you believe many unsurveyed areas will be viewed as so clearly not a future consideration for NPL consideration that the potential Good Samaritan will want to step in and take action? Or do you think that the considerable uncertainty out there will dissuade potential volunteers in all but the least environmentally hazardous sites?

Response. Under S. 1787 only sites already on or proposed for listing on the Superfund National Priorities List (NPL) or sites subject to a response under Comprehensive Emergency Response, Compensation and Liability Act (CERCLA) are

precluded from eligibility for cleanup under the bill. Therefore, a Good Samaritan could clean up a site under the bill that, at some point in the future, might otherwise have been determined to be subject to CERCLA.

Some Western states concluded that CERCLA was not a barrier to Good Samaritan cleanups. Colorado, for example, employed CERCLA's "on-scene coordinator" provision to get around potential CERCLA liability Additionally, the permit authorized by S. 1787 would be considered a "federally permitted release" pursuant to CERCLA's Sec. 107(j), and would, therefore, provide liability relief under CERCLA, with one potential exception. As pointed out by Chuck Fox of the Environmental Protection Agency (EPA) during his testimony, there is a question of whether this protection would still exist once the Good Samaritan permit is terminated. I support the proposed remedy to this potential exception that Senator Crapo and Senator Baucus discussed during the interchange with Chuck Fox.

Additionally, the current language in S. 1787 may be too broad an exclusion with regard to CERCLA. The definition of Abandoned or Inactive Mined Land, (1)(A)(ii) states ". . . and that is not the subject of a planned or ongoing response or natural resource damages action under that Act." Thus, "planned or ongoing" should be deleted.

Question 3. In establishing a site's eligibility for permits, the WGA discussion draft proposal uses the phrase "having no private owner of record at the time the permit plan is submitted and the permit is issued," whereas S. 1787 makes eligible sites so long as there is no identifiable owner or operator. Clearly, this is a different standard. How would you interpret this dichotomy?

Response. The Western Governors' Association's (WGA) proposal did not use the phrase "having no private owner of record . . .". Instead, the WGA proposal included the following relevant definitions:

(5) Definitions.—In this subsection the following definitions apply:

(A) Remediating party—

(i) The term "remediating party" means—

(I) the United States (on non-Federal lands), a State or an Indian tribe or officers, employees, or contractors thereof; and

(II) any person acting in cooperation with a State or Indian tribe. "Person" includes a local government that owns abandoned or inactive mined lands for the purpose of conducting remediation of the mined lands or that is engaging in remediation activities incidental to the ownership of the lands.

(ii) The term "remediating party" does not include

(I) a Federal agency on Federal lands,

(II) any person who prior to issuance of a permit under this subsection directly benefited from or directly or indirectly participated in any mining operation (including exploration) associated with the abandoned or inactive mined lands provided that persons shall not be excluded from participation as a remediating party if their participation in any mining operation was solely as (a) a county government that collected taxes based on the mining operation, (b) a non-managerial employee of the mining operation, (c) an independent supplier who provided goods or services to the mining operation, or (d) a consultant, such as an engineering or earthworks firm, whose participation at a site was limited to performing professional services for a fee,

(III) any person who is, or at any time has been legally responsible pursuant to § 301 (a) for any discharge of pollutants from the abandoned or inactive mined lands (except where any such person's legal responsibility results solely from conducting remediation activities that would otherwise qualify for a permit under this subsection),

(IV) any person who owned or controlled a person identified in clause (II) or (III) above, is owned or controlled by such person, or is under common ownership or control with such person, or,

(V) a predecessor or successor in interest to any person identified in (II), (III), or (IV) above.

(B) Abandoned or inactive mined lands.—The term "abandoned or inactive mined lands" means either lands that were formerly mined for non-coal resources and are neither actively mined nor in temporary shutdown at the time of submission of the remediation plan and issuance of a permit under this subsection, or lands that were formerly mined for coal resources and are eligible for reclamation or drainage abatement expenditures under Title IV, Section 404, of the Surface Mining Control and Reclamation Act, 30 U.S.C. § 1231 *et seq.*"

As is apparent from these definitions, the WGA proposal is different than S. 1787. The WGA approach to determining eligibility for coverage under the Act focuses on whether the prospective remediating party has some responsibility for the site. S. 1787 addresses eligibility for coverage under the Act based on the site itself and whether there is an identifiable operator or owner of the site. Both approaches appear to arrive at the same result.

Question 4. The WGA discussion draft did not include a Federal enforcement mechanism. S. 1787 states that issued permits are still liable to Section 309 enforcement authority. Why did the governors exclude this provision from their proposal?

Response. The WGA draft amendment did include Sec. 309 enforcement under (4)(A) of the proposal:

> "(iii) require that if, at any time after notice to the remediating party and opportunity for comment by the remediating party, the Administrator determines that the remediating party is not implementing the approved remediation plan in substantial compliance with its terms, the Administrator shall notify the remediating party of the determination together with a list specifying the concerns of the Administrator;
>
> (iv) provide that, if the identified concerns are not resolved or a compliance plan submitted within 90 days of the date of the notification, the Administrator may take action under section 309 of this Act;
>
> (v) provide that clauses (iii) and (iv) not apply in the case of any action under section 309 to address violations involving gross negligence (including reckless, willful, or wanton misconduct) or intentional misconduct by the remediating party or any other person;"

Question 4a. The WGA discussion draft did not include a limitation under the permit process that exists in S. 1787. Do you think this will reduce the number of abandoned mine sites that will be cleaned up under the legislation?

Response. Assuming the limitation you refer to is that the Act only allows "remediating parties" to be governmental agencies, the states concluded in drafting their proposal that "remediating parties" should not be limited solely to governmental entities. There are many other persons likely willing to contribute to Good Samaritan cleanup initiatives. However, the WGA proposed definition was broadly intended to exclude both (1) those with prior involvement at the abandoned or inactive mine site and (2) those with current or prior legal responsibility for discharges at a site. The proposal also assured that any non-remediation-related development at a site be subject to the normal National Pollutant Discharge Elimination System (NPDES) rules, rather than the Good Samaritan provision.

The National Mining Association opposed the language in the WGA proposal based primarily on the use of the concepts of "ownership and control." At their request, and with WGA concurrence, Senator Baucus limited S. 1787 to governmental entities. At the time, representatives of the National Mining Association argued that they would still be able to participate under the bill as contractors to the "remediating parties." The states believe that it is fundamentally important that mining companies be able to act as third party contractors and agree that language should be added to S. 1787 to ensure that third party contractors are exempt from liability. The following amendment to that end is suggested:

> Revise (6)(B) to read: "If a permit is terminated under subparagraph (A), the remediating party, INCLUDING ITS AGENTS AND CONTRACTORS FOR IMPLEMENTATION OF THE REMEDIATION PLAN, EXCEPT AS PROVIDED IN PARAGRAPH (7), shall not be subject to enforcement . . ."

Question 4b. Furthermore, the limitation limits remediating parties-owners to those who have purchased the land "for the express purpose of remediating pollutant discharges related to past mining activities at the land to improve water quality." Are there any other legitimate reason for a potential Good Samaritan to acquire an abandoned mine site on which that party intends to remediate?

Response. There are cases in California in which the State purchased abandoned mines with the express purpose of cleaning up the mine. The State had no responsibility in creating the discharges on those lands. S. 1787 would allow California to act as a Good Samaritan on those lands. There are other reasons why a potential Good Samaritan might have acquired an abandoned mine site where it intends to remediate but the reasons are too diverse to specify in the bill. An example might include land acquired for a purpose that was specific to the site but unrelated to the presence or absence of the mine. For example, a municipal entity might purchase a site containing an abandoned mine for a park due to its unique location.

Question 5. How many states have completed surveys of abandoned or inactive mine sites within their borders? Until such activities are completed, how will states be able to determine the water quality impacts, ownership, and priority needs of sites?

Response. All of the states and reservations in which coal is mined (and are therefore eligible for Federal funds under Surface Mining Control and Reclamation Act (SMCRA) to develop inventories of and clean up abandoned coal mines) have completed inventories of all abandoned mines (coal and hard-rock). Major hard-rock mining states not eligible for SMCRA funds include Arizona, California, Idaho, Nevada, and South Dakota. However, all of these non-SMCRA states have, or are currently developing, inventories of abandoned mines which are funded by other sources.

For example, South Dakota recently completed an inventory of abandoned hard-rock mines in the Black Hills of western South Dakota in conjunction with the South Dakota School of Mines and Technology. Approximately 900 mines were identified in a four-county area (about 700 on private land and about 200 on Federal land). The inventory purpose was primarily to identify abandoned mine locations, so little or no site- specific assessment work was completed for many of the mines identified. Many of these historic mines pose significant safety hazards, and some pose environmental problems, including impacts to water quality.

However, each State knows where the abandoned mine sites are in its State that are causing significant water quality impairment. That is because they collect water quality data under the Clean Water Act. It is this data, supplemented by site surveys and onsite water quality sampling, that would identify the priority sites for cleanup.

The Bureau of Land Management, U.S. Forest Service, and the Park Service maintain separate inventories of abandoned mine sites on lands they manage. In 1990, WGA published the first comprehensive nationwide assessment of the hard-rock abandoned mine problem in the United States The report included Federal, State, and private lands. WGA published a follow up to that report in 1998, which documented the number of sites reclaimed in each State in addition to updated data from the earlier report on the number of sites in each state. Both of those reports called for a Good Samaritan exemption to the Clean Water Act to help stimulate cleanup.

Question 6. Should it be the responsibility of the potential Good Samaritan or the regulatory agency to undertake extensive chain-of-ownership searches for particular sites as called for in the bill?

Response. During development of the WGA proposal, concern was raised that a Good Samaritan cleanup could commence without first trying to identify whether parties with liability for the site still exist. Consequently, states added a provision that the Good Samaritan "remediation plan" include a summary of the results of a "reasonable effort" to identify parties whose past activities have affected discharges at the site. The language in S. 1787 is consistent with the WGA proposal.

States do not support requiring the Good Samaritan to conduct "extensive" searches such as those that are conducted under CERCLA to identify potentially responsible parties, and it may be important to clarify what is intended by "reasonable effort."

Question 7. Given that most states are still undertaking surveys of abandoned and inactive mines, is the requirement that potential Good Samaritans undertake title searches and assessments of environmental impacts of sites actually an unfunded mandate on others?

Response. As "reasonable effort" is defined, S. 1787 should not place an overly onerous burden on Good Samaritans such that an unfunded mandate is created. Additionally, it is important to realize that Good Samaritan cleanups are entirely voluntary. The concern raised in your question is appreciated, and I would like to work with you to ensure that no such unfunded mandate is indeed inadvertently created.

Question 8. The testimony of David Gerard highlights a U.S. Forest Service Inspector General Report that observes that all Federal lands would be excluded from Good Samaritan remediation. Is this situation a problem for downstream interests?

Response. There may be some disagreement over Mr. Gerard's testimony that indicated all Federal lands would be excluded. The exclusion applies to cleanups by Federal agencies on Federal land, which recognizes the commitment by those agencies to do complete cleanups of sites on lands they manage. There may be cases where a Good Samaritan is willing to conduct cleanups on Federal land, for example at mixed ownership sites.

Question 9. What would you anticipate the impact to be of creating a public notice and public hearing option for modifications of every application?

Response. Requirements for public notice and public hearings for permit modifications should be appropriate to the permit modifications, i.e., minor modifications should require minimal notification. There needs to be sufficient flexibility to change or modify a plan in a timely manner so that cleanup can continue expeditiously.

Question 10. Is it appropriate for Good Samaritans to be subject to citizen suits under this legislation since they are not, in fact, responsible for the pollution?

Response. Citizen suit authority under S. 1787 is limited to enforcement of the terms of the permit and is not available after termination of the permit. This is consistent with the WGA proposal and is also consistent with other Sec. 402 NPDES permits. An earlier version of the WGA proposal excluded the permits from the citizen suits, but environmental groups expressed strong objection. WGA would probably not be averse to excluding citizen suit provisions from the Act.

Question 11. If a State determines that it will want to become a Good Samaritan for a site situated on land it does not own, do you envision that it will need to expend resources or time to identify another government agency to work through? Is this the most efficient use of money or time?

Response. It is very possible that states will want to clean up lands that they do not own. In such cases, coordination with other appropriate entities would be necessary and warranted. This does not appear to be a waste of resources and is consistent with WGA's Enlibra principles.

Question 12. Because so many sites in western states are found in areas of mixed ownership-sites where ownership by Federal, state, and private lands intermingle—do you believe that the preclusion in this bill for cleaning up one's own property would require separate permits for each element of a mixed ownership site? Or do you believe that the regulatory requirements in S. 1787 would discourage potential Good Samaritans from approaching such confusing mixed ownership sites?

Response. If S. 1787 is amended to allow private entities to become Good Samaritans, the regulatory requirements in the bill may very well discourage potential Good Samaritans who own portions of a mixed site from becoming a Good Samaritan for that particular site.

Question 13. Your written testimony suggests that "some variation on the current proposal (S. 1787)" needs to be adopted soon. Would the WGA support modifications to the bill to expand the definition of remediating parties and to eliminate more of the disincentives that exist under current law?

Response. WGA's proposal allowed for private entities to be Good Samaritans with the conditions discussed in my answer to question 4a. WGA has maintained its support for broad inclusiveness given that those conditions are met. At the same time, WGA's priority is for legislation to be enacted as soon as possible that will allow states to begin cleanups. WGA attempted for a number of years to find a compromise between the mining interests, EPA, and the environmental interests regarding the scope of the definition of "remediating party," but was ultimately unsuccessful.

STATEMENT OF J. CHARLES FOX, ASSISTANT ADMINISTRATOR FOR WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY

INTRODUCTION

Good morning Mr. Chairman and members of the committee. I am Chuck Fox, Assistant Administrator for Water at the U.S. Environmental Protection Agency (EPA).

I look forward to talking with you this morning about the Nation's clean water program and, more specifically, to support the "Good Samaritan Abandoned or Inactive Mine Waste Remediation Act" (S. 1787) introduced by Senator Baucus and others. This legislation will promote efforts to mitigate the effects of pollutants discharged from abandoned or inactive mines into the Nation's streams, rivers and lakes.

BACKGROUND

Despite the great progress that has been made in improving the Nation's water quality since the passage of the Federal Water Pollution Control Act in 1972, serious water quality problems persist.

States reported in 1998 that 35 percent of the rivers and streams they assessed do not meet clean water goals and another 10 percent of waters are threatened. In the case of lakes and ponds, 45 percent of these waters do not meet water quality goals and 9 percent are threatened. And, 44 percent of the coastal and estuarine waters that States assessed do not meet their clean water goals and 9 percent are threatened. In the Great Lakes, fully 96 percent of the shoreline miles assessed do not meet clean water goals. Based on this data, the States indicate that over 20,000 waterbodies are polluted and need the focused attention in order to recover.

In the western States, one of the more serious threats to this Nation's water quality is pollution contributed by thousands of abandoned or inactive mines. Mining has a significant economic benefit to the west, but many of these former mine sites left an unfortunate legacy of water pollution or the threat of water pollution.

Exact figures are not available due to the magnitude of historical, small-scale mining activities and the age of many of these abandoned mines, but estimates place the total number of abandoned mine sites at 200,000 to 500,000 for the entire country. An independent assessment by the Western Governor's Association places the total at more than 400,000 in the west alone. Most of these sites are classified as "hardrock" mines that were developed to extract a wide variety of metal-bearing ores. Further complicating the problem is the fact that the majority of these sites were mined and abandoned prior to the enactment of modern environmental regulations in the 1970's.

Estimates of the magnitude of the environmental impacts occurring as a result of historical hardrock mining activities in the western States vary significantly. Not all of these mine sites pose serious threats to human health and the environment. The Western Governors Association estimates that as many as 80 percent of the sites may not pose environmental or immediate public safety concerns. However, many mine sites do create significant environmental and public health hazards—anywhere from 40,000 to 100,000 sites, based upon the previous figures cited.

REGULATORY AUTHORITY—ABANDONED/INACTIVE MINES

EPA has no single, comprehensive statutory authority to regulate mining and oversee development of environmental performance standards and financial assurances at individual mines. EPA does, however, have statutory authorities to help reduce potential environmental problems at individual mines and has used these authorities to prevent and remediate pollution at a number of mine sites. EPA also has used administrative statutes, such as the National Environmental Policy Act (NEPA), to try to introduce pollution prevention measures during the mine site selection and evaluation phase for new mines.

EPA uses a number of statutory authorities including the Clean Air Act (CAA), Clean Water Act (CWA), the Resources Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response, Compensation and Recovery Act (CERCLA)—more commonly referred to as the "Superfund"—to regulate and remediate hardrock mining activities.

RCRA and CERCLA authorities have only been used for the highest priority sites posing the greatest threats to public health and safety.

A number of sections in the CWA have a direct bearing on regulating both active and remediation activities at abandoned mines. Section 301 prohibits discharges of any pollutant without a permit. Section 402, which authorizes the National Pollution Discharge Elimination System (NPDES) that requires permits for all discharges into waters of the United States, is the most comprehensive and commonly used authority to regulate all types of mining-related activities. The majority of active mines have CWA discharge permits and many of these permits implement national technology-based effluent limitations developed under section 301 and 304 of the CWA. Section 309 provides very broad enforcement authority that includes issuing administrative penalty orders and assessing penalties.

Closely related to provisions in Section 402 are certain provisions in Section 303(d) that require States to identify water bodies that exceed the prescribed water quality criteria and that the State develop a total maximum daily load (TMDL) limitation on pollutants being discharged into these water quality-limited bodies of water.

Section 504 of the Act, which provides the Administrator with emergency powers to correct all activities that constitute an "imminent and substantial endangerment to public health and welfare," and Section 505, which permits citizen suits against polluters, also come into play in the overall regulatory scheme.

Unfortunately, there are limitations under the CWA that often hamper remediation and restoration activities at abandoned mine sites. In particular, the permitting requirements under Section 402 of the CWA require that the permittee meet

all of the requirements and effluent discharge limits set out in their discharge permit. These discharge limits include water quality standards that have been established for the body of water into which the treated effluent is discharged. In addition, these requirements mean anyone conducting reclamation or remediation at an abandoned mine site may become liable for any continuing discharges from that site.

PROPOSED GOOD SAMARITAN LEGISLATION

S. 1787 would encourage remediation activities for abandoned mine sites where no action would be taken otherwise because of potential liability and costs under the CWA. The Administration generally supports the bill and would like the opportunity to work with the sponsors of the bill and members of this committee to improve the bill in several respects.

EPA supports the major provisions of the bill including the following critical elements:

(1) the "Good Samaritan" acting as the remediating party can not have a historical or existing responsibility for the mine site; (2) sites are only subject to the bill's coverage if there is not an identifiable owner or operator of the mine that can clean up the site; (3) the permitting authority rests exclusively with EPA, ensuring consistency in application of this innovative approach to environmental regulation under the Act (4) a permit may only be issued where it is demonstrated, with reasonable certainty, that improvement in water quality will take place to the maximum extent practicable taking into consideration the resources available to the remediating party; (5) public participation in the permit issuance and modification process is ensured; (6) the permit is in force until either the site clean up is completed, the discharges are subject to a separate development permit, or the site is left in a condition that at least meets the baseline conditions prior to remediation efforts; (7) the bill provides for Federal enforcement of permit conditions, and preserves existing authorities over violations that occurred prior to issuance of the remediation permit; and (8) the use or sale associated with any mining conducted as part of the project is restricted to supporting remediation activities.

EPA would like to work with the committee to address several issues.

The first issue concerns the provision in the bill under section (2)(C) that "The Administrator shall not delegate the authority under subparagraph (A) . . ." to issue a permit. This prescriptive language would require that the Administrator personally be the authorizing official for each "Good Samaritan" permit. This provision should be amended to enable delegation of permit issuance authority to the Assistant Administrator for Water or Regional Administrators as the Administrator determines appropriate.

The second issue concerns the timeframe for issuing amended regulations to address the provisions of the new section 402(q) created by the bill. Section (9)(A) of the bill language states that EPA shall have ". . . not later than 1 year after the date of enactment of this subsection . . ." to issue appropriate regulations. The language goes on further to State that these regulations should be developed ". . . in consultation with State, tribal and local officials and after providing for public notice." Given the requirements for consultation with such a large number of potentially interested parties, EPA will need not less than 3 years to finalize appropriate regulations after the bill becomes law.

Third, the Administration questions the provision of the bill that would make State grant funds for reducing nonpoint pollution under section 319 of the CWA available to pay for implementing controls over point source discharges of pollution from abandoned mine sites.

Fourth, the current bill language does not consider providing "Good Samaritans" with relief from ocean discharge criteria established under section 403(c) of the Clean Water Act. In the proposed legislation, S 1787 allows the Administrator to issue a permit to a "Good Samaritan" . . . [all the substantive and procedural safeguards] . . ., without compliance with other provisions of section 301, 302 and 402. As you are aware, NPDES permits for discharges to the territorial seas also require compliance with the provisions of section 403(c) of the CWA. To improve the usefulness of this provision, it may be necessary to add language allowing the "Good Samaritan" to also be exempted from provisions of 403(c).

Finally, the bill provides that the permittee may request a modification of a permit. EPA suggests that the Administrator should be allowed to initiate a modification of the permit as needed. The bill should also provide authority for the Administrator to terminate the permit where appropriate. The Administration may provide additional comments.

CONCLUSION

In closing, I do want to take a minute to commend the Western Governor's Association (WGA) for the work that it has done over the past 5 years in both identifying issues and developing much of the background data that provided the foundation for the bill. WGA worked closely with a variety of stakeholders, such as industry, EPA and other Federal agencies and the States, to develop a strong foundation for this bill and to try to include as many perspectives on the proposed approach to remediation of abandoned mines.

The "Good Samaritan" bill has much to offer in addressing and correcting the environmental insults arising from abandoned mine sites. The Administration is ready and willing to work with the committee, the States, other Federal agencies, the WGA and any other interested parties to help assure the environmental remediation of abandoned mine sites.

Thank you, Mr. Chairman. I will be happy to answer any questions from the committee members.

STATEMENT OF KATE KELLY, ADMINISTRATOR, WASTE MANAGEMENT AND REMEDIATION DIVISION, IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

INTRODUCTION

Inactive mine sites pose a significant threat to public safety and water quality in the western states and in the State of Idaho in particular. The ability to respond to these threats is severely restricted in cases where a mine is "abandoned" because there is no identifiable or economically viable operator responsible for cleanup. Where a government agency chooses to step in and take actions to respond to threats from such abandoned mines, the requirements of the Clean Water Act and the Superfund process pose a disincentive.

The State of Idaho commends Congress for considering legislation to encourage Good Samaritan cleanups of abandoned and inactive mines. At the same time, it is our view that S. 1787 contains a number of serious problems and subtle but significant flaws. Most important to the State of Idaho, the Bill undermines the authority of States to control mine site remediations and water quality within their borders. Further, the usefulness of the Clean Water Act waiver created by this Bill is significantly undermined by its conditioned treatment of landowners, its failure to acknowledge the scope of potential CERCLA and RCRA liability which exists with regard to the owners of inactive mining sites, and its inexplicable exclusion of federal lands. The exclusion of sites subject to CERCLA actions is also unnecessarily broad. For these reasons, we are doubtful that this "incentive" would ever be used in Idaho to conduct an abandoned mine cleanup. The problems we have identified are described in detail below.

THE PERMIT PROGRAM HAS NO PROVISION FOR STATE DELEGATION

S.1787 amends the Clean Water Act to allow the U.S. Environmental Protection Agency (EPA) the discretion to issue a permit for remediation activities at abandoned mine sites. Although there is language requiring "concurrence" of the applicable State or Tribe, 33 U.S.C. 1342 §(q)(2)(A), the discretion to issue a permit and determine the terms and conditions of the permit, rests solely with EPA and is expressly forbidden from being delegated to the States. 33 U.S.C. 1342 §(q)(2)(C). Enforcement of the permit is also placed within EPA's authority. 33 U.S.C. 1342 §(q)(2)(B), as is the promulgation of regulations to implement the legislation. 33 U.S.C. 1342 §(q)(9).

The vesting of permitting authority in EPA is additionally problematic for the State of Idaho given that the Bill is vague about the standard to be used by EPA in issuing the permits. S. 1787 requires the remediation plan to "reduce, control, mitigate, or eliminate the adverse water quality impacts" of the mine, 33 U.S.C. 1342 §(q)(3)(B)(viii), and "result in a water quality improvement for the identified waters." 33 U.S.C. 1342 §(q)(3)(B)(ix). There is no definition for these terms in the Bill or elsewhere in the existing Clean Water Act language. It is clear, however, that by waiving compliance with section 301 of the statute, EPA can allow a discharge that does not meet State Water Quality Standards and that such decision is vested solely in the discretion of EPA. 33 U.S.C. 1342 §(q)(4)(C). At the same time, however, the Bill provides that nothing in its language "limits any obligation of a State or Indian Tribe under section 303" of the Clean Water Act which sets out the States' authorities and obligations to adopt water quality standards and do

Total Daily Maximum Loads. Similarly, the Bill is silent as to whether States retain the right to certify the discharge under section 401 of the Clean Water Act.

The State of Idaho has concerns about S. 1787's vesting of broad permitting authority in the federal EPA. The Bill fails to acknowledge the significant State authorities and obligations created elsewhere in the Clean Water Act. The precedent of unilateral federal authority in this area is not only untenable, it is inconsistent with sound public policy favoring local control.

THE INCENTIVE PROVIDED BY THE BILL DOES NOT ACKNOWLEDGE LAND OWNERSHIP PATTERNS IN MINING AREAS

Land ownership patterns in mining areas in the West create tremendous problems in conducting the remediation of inactive mine sites. The areas impacted by a single mine operation can frequently include a complex mixture of state, federal and private land ownership and interests. Ownership issues are compounded by severed mineral and surface ownership, participation of governmental land management agencies in approving and sometimes encouraging certain practices, and questions about tribal reservations. Under CERCLA, passive landowners may be liable for cleanup even if they had nothing actively to do with causing the problem. This, of course, has significant implications for federal and state land management agencies as well as local governments which own property.

The incentives created by S. 1787 are expressly limited to sites "for which there is no identifiable owner or operator for the mine or mine facilities." 33 U.S.C. 1342 §(q)(1)(A)(iii). Yet "identifiable owner or operator" is limited to a person "that is responsible for the activities . . . that created conditions that cause or contribute to the discharge of pollutants from the" land. 33 U.S.C. 1342 §(q)(1)(B)(I). In this way, the Bill appears to be considering "abandoned" to be a site with no viable operator to conduct the cleanup regardless of landownership or the potential liabilities of the landowner created in other applicable authorities. Yet the "remediating parties" eligible to obtain the permits allowed by the Bill exclude the United States where the "abandoned mined land is located on Federal land," 33 U.S.C. 1342 §(q)(1)(D).

The usefulness of the Clean Water Act waiver created by this Bill is significantly undermined by its conditioned treatment of landowners, its failure to acknowledge the broad (and well litigated) scope of potential CERCLA liability which exists with regard to the owners of inactive mining sites, and its exclusion of federal agencies acting on federal lands. The last thing that will encourage the cleanup of contaminated sites in this country is another system of identifying responsible parties; confusion and litigation over that very issue has held up more cleanups in this country than any Clean Water Act requirements.

THE BILL ADDS PROCESS ON TOP OF PROCESS, BUREAUCRACY ON TOP OF BUREAUCRACY

Whether implemented by government or private interests, remedial programs designed to respond to the impacts of inactive mines must overcome significant financial and technical hurdles. But the regulatory and procedural hurdles facing such projects are onerous as well. The process and regulations—at times—have no connection to a beneficial health or ecological outcome. This Bill inserts a totally new permitting application and review process into a scenario that is already crowded with such processes. While the Bill may provide some incentive in waiving certain Clean Water Act requirements (but see discussion above), the detailed content it requires for a remediation permit application creates a whole new layer of process and burdens. Equally problematic is the fact that nowhere does the Bill reference or acknowledge—or provide any protection or relief from—existing CERCLA and RCRA authorities and liabilities which potentially apply to the remediation projects envisioned by the Bill. It is well known that those statutes establish procedural systems comprehensible only to the experts. Do we really need to add more procedures without adding any relief from those that already exist? Combined with the seemingly unconditioned authority vested in the EPA, this omission greatly detracts from any appeal the Bill might have for States or other agencies considering cleanups of abandoned mine lands. Further, the requirement that to be eligible for a permit sites be the subject of a "planned or ongoing" CERCLA action, 33 U.S.C. 1342 §(q)(1)(A)(ii) eliminates many, many sites from consideration based on procedure rather than environmental good sense, erodes the State voice in the process, and vests tremendous discretion in EPA superfund programs based on whether they choose to "plan" a response action at a site.

ABSENCE OF FUNDING

In addition to liability, another major hurdle to abandoned mine cleanups is money. Unlike abandoned coal mines, however, there is no single dedicated source

of federal funds to cleanup abandoned hardrock sites. At all levels, limited financial resources severely limit the amount of environmental and safety work that can be accomplished. State land management agencies have access to only small or irregular funding from legislative appropriations or funds dedicated to mine cleanups, making comprehensive programmatic cleanups difficult. On the federal level things are not much better, although in recent years, the Bureau of Land Management and Forest Service have received significant increases in their appropriations for abandoned mine work. Where possible, the mining industry as a whole has contributed money to help solve the problem. In the absence of viable operators or owners, cleanup funding must be pieced together. The funds available have been spent on some high priority work. S. 1787 states that cleanups conducted under its provisions are eligible for section 319 grants. 33 U.S.C. 1342 §(q)(10). That option already exists, and has not proved to be a dramatic incentive to cleanups. If Congress' goal is to provide incentives for abandoned mine cleanup, the funding question needs to be addressed, and a Good Samaritan statute would be an appropriate mechanism to do so.

CONCLUSION

The State of Idaho is supportive of the intent behind Good Samaritan proposals in attempting to eliminate disincentives for abandoned mine cleanups. Where a government agency chooses to step in and take actions to respond to threats from such abandoned mines, S. 1787 correctly identifies that the requirements of the Clean Water Act pose a disincentive. At the same time, we have grave concerns about the fact that the Bill fails to acknowledge the significant State authorities and obligations created elsewhere in the Clean Water Act and other environmental laws. There is simply no precedent or justification for unilateral federal authority in this area. Further, the usefulness of the Clean Water Act waiver created by this Bill is significantly undermined by its conditioned treatment of landowners, its failure to acknowledge the scope of potential CERCLA and RCRA liability which exists with regard to the owners of inactive mining sites, its failure to identify funding, and its inexplicable exclusion of federal lands. Also, the exclusion of sites subject to CERCLA actions is unnecessarily broad. In sum, while supportive of the intent of this legislation, the State of Idaho is doubtful that in its current form S. 1787 would ever be used by the State of Idaho or any other agency in Idaho to facilitate the cleanup of an abandoned mine site.

RESPONSES BY KATE KELLY TO ADDITIONAL QUESTIONS FROM SENATOR CRAPO

Question 1. Should states or the EPA primarily establish water quality goals for waters within their borders? Is this bill consistent with that principle?

Response. Water quality is and should remain primarily a State issue. Many states have primacy under the Clean Water Act and/or have State laws establishing water quality standards. States establish numeric and narrative standards for many contaminants such as fine sediment and metals, and certify that operating permits such as National Pollution Discharge Elimination System and Dredge and Fill permits are consistent with and protective of the state's standards. It is inconsistent to allow the potential for EPA to establish another set of criteria for water quality in a permit issued under this bill.

Question 2. Do you believe that the water quality cleanup standards called for in this measure are clear or measurable?

Response. No. S. 1787 provides EPA with discretionary authorities to establish cleanup standards which will result in "improvement in water quality to the maximum extent practical." This term is not defined in the bill, and is impracticably vague. S. 1787 does not contain clear provisions for water quality cleanup standards that Idaho can compare with our own water quality standards.

Question 3. Do you believe that any new good samaritans will undertake cleanups at sites under this proposal? Or do you believe that only already-acting parties will be interested in pursuing further liability protections afforded under S. 1787?

Response. There is no question that State and Federal agencies will continue to try to find creative ways to clean up inactive and abandoned mine sites. It is doubtful, however, that the provisions of the bill will see much use by good samaritans who would not already act under the existing structure. The reasons for this are simple. S. 1787 creates a complex process for navigating through already complex issues at inactive and abandoned mine sites. Also, S. 1787 does not address liabilities associated with CERCLA which, along with Clean Water Act requirements, are a major deterrent to good samaritan clean ups.

Question 4. Do you believe that the eligibility for Section 319 grants incentive provided by S. 1787 would be enough incentive for new potential good Samaritans?

Response. No. States have many more projects proposed for 319 grants than can ever be awarded. In Idaho, as in many states, those projects are focused on implementation plans for Total Maximum Daily Loads (TMDLs). These plans will take 10 to 20 years to implement statewide. A judicial ruling dictates that the TMDLs and their respective implementation plans must proceed. It is unlikely that "Good Samaritan" cleanup activities would rank against the TMDLs for grant awards even if states wanted to divert the limited 319 funds available.

Question 5. What problems do you envision would be created by this bill's lack of RCRA and Superfund liability waivers?

Response. This omission will greatly detract from the usefulness of the bill and will leave in place another major deterrent to good samaritan cleanups.

Question 6. If a State wants to effect a cleanup on its own lands, under this bill, that State would have to contract through another level of government for the permit. Do you consider this bureaucratic regulatory burden to be a significant disincentive for potential good samaritians? Is this the most efficient use of limited State resources?

Response. States like Idaho will continue to develop comprehensive strategies and plans for systematically cleaning up inactive and abandoned mine sites. This bill replaces one burdensome permitting process (Clean Water Act) with another (Remediation Permit), without any apparent additional incentive. Moreover, the permit program created under the bill is administered solely by EPA; this fact creates a significant disincentive, and would delay cleanup plan development and implementation. The permitting structure created by the statute would not be a prudent place to dedicate the limited resources available to states.

Question 7. Do you believe the conditions under which a permit could be terminated under this bill are correct?

Response. The termination clause of S. 1787 invests considerable discretion in EPA to potentially terminate permits that would otherwise be relied on by the remediating party. This is another disincentive to using the provisions of the bill. Not only should the bill more narrowly restrict the conditions under which a permit can be terminated, S. 1787 should also conditionally provide for release of "Good Samaritans" from liabilities under the Clean Water Act, RCRA and CERCLA.

Question 8. Does S. 1787's threshold of cleanups to the "maximum extent practicable" provide appropriate standards or would it preclude marginal, but significant environmental improvements? Should potential good samaritans be excluded from consideration because they would not be able to accomplish small improvements to the environment?

Response. The "maximum extent practicable" terminology is far too vague for interpretation or practical application. This language should be replaced by more familiar discussion of cleanup performance goals and measures established for each site by stakeholder groups (including but not limited to State and Federal land management agencies, and the public). Partial cleanups or closures would be much more likely to occur under this type of standard. So long as their activities improve the situation, potential good samaritans should not be discouraged from performing partial cleanups.

Question 9. How many additional site cleanups do you expect the State of Idaho to undertake as a result of the enactment of this legislation?

Response. None. The narrow application, disincentives and legal implications inherent in this bill effectively eliminate its potential usefulness to the State of Idaho.

STATEMENT OF WILLIAM B. GOODHARD, DIRECTOR, RECLAMATION & ENVIRONMENTAL AFFAIRS, ON BEHALF OF ECHO BAY MINES AND THE NATIONAL MINING ASSOCIATION

INTRODUCTION

Chairman Crapo, Senator Baucus my name is Bill Goodhard and I appear here today on behalf of Echo Bay Mines where I am the Director of Reclamation and Environmental Affairs. I also appear at the request of the National Mining Association. My comments today are based upon my 24 years experience in the minerals industry.

During my career in the industry I have worked as an exploration geologist, mine geologist, technical assistant to milling, mill superintendent, chief geologist, mine superintendent, superintendent of technical services, resident manager, project

manager and director of reclamation and environmental affairs. For the last 12 years responsibilities have included mine reclamation and mine closure. I have designed or supervised reclamation and mine closure budgeting, negotiation and work. The work has been at four underground mines, two open pit mines and one developmental project located in the western United States and Canada. The work has included negotiating and working with local, State and Federal agencies as well as with a watershed stakeholder group. I appreciate the opportunity to share my thoughts on the "abandoned and Inactive Mine Waste Remediation Act," S. 1787.

GENERAL COMMENTS

First I would like to thank Senator Baucus, his colleagues and co-sponsors, Senators Daschle, Campbell, and Reid for advancing the debate on Good Samaritan issues with the introduction of the "Abandoned and Inactive Mine Waste Remediation Act, S. 1787. I also thank Senator Crapo for today's hearing, and for providing an opportunity to hear from the mining industry on an issue that the industry considers very important. The very fact that we are here today at this hearing speaks to the high level of importance that the U.S. Senate and numerous stakeholders have placed in solving this problem.

Unfortunately, as currently drafted, the liability relief in S. 1787 is illusory because it does not include the two groups of remediating parties that must play a significant role if we are to solve the abandoned mine cleanup problem. The two parties I am referring to are the Federal land management agencies (e.g., the U.S. Bureau of Land Management, the U.S. Forest Service, and the National Park Service) on whose land most abandoned mines are located, and the private sector who has demonstrated both the willingness and the capability to reclaim abandoned mine land (AML) sites.

Like the Senators here today, the National Academy of Sciences/National Research Council (NAS/NRC) also recognizes the need to enact Good Samaritan liability relief if we are to solve the AML cleanup problem. A recently published NAS/NRC study on hardrock mining entitled "Hardrock Mining on Federal Lands [1] discusses the existing legal and regulatory impediments thwarting private-sector cleanup of AMLs and stresses the importance of enacting legislation to facilitate and promote AML cleanup. The NAS/NRC prepared this 249-page study" (the Study) in response to a Congressional directive to review existing rules for mining and to determine how well these rules protect the environment. The Study findings regarding AML cleanup include the following:

> Recommendation 7: Existing environmental laws and regulations should be modified to allow and promote the cleanup of abandoned mine sites in or adjacent to new mine areas without causing mine operators to incur additional environmental liabilities. [2]
>
> Implementation: To promote voluntary cleanup programs at abandoned mine sites, Congress needs to approve changes to the Clean Water Act and the CERCLA legislation to minimize company liabilities. [3]

These NAS/NRC findings are particularly noteworthy given the fact that Congress did not specifically ask the NAS/NRC to examine the AML issue. However, the evidence gathered during the course of the NAS/NRC's research efforts was so compelling, that this recommendation was included in the Study. The NAS/NRC comments on the AML issue underscore the importance of our discussion here today and point to the need to enact meaningful liability relief as quickly as possible. I would like to devote the rest of my testimony to describing how the current bill will not achieve the goal of solving the liability problem and offer suggestions to address the shortcomings in S. 1787.

The assertion that significant progress could be made toward solving the AML problem if the private sector were granted Good Samaritan liability relief is not conjectural. The private sector has already helped to clean up numerous abandoned and inactive mines throughout the West. Some of these private sector efforts are documented in a study published in 1998 by the National Mining Association entitled *Reclaiming Inactive and Abandoned Mine Lands—What Really is Happening"* [4]. I would like to request that this study be placed in the hearing record.

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[1] *Hardrock Mining on Federal Lands,* National Research Council/National Academy of Sciences, 1999.

[2] NRC/NAS Study, page 104.

[3] NRC/NAS Study, page 106.

[4] *Reclaiming Inactive and Abandoned Mine Lands—What Really is Happening,* Struhsacker, D.W., and Todd, J.W., prepared for the National Mining Association, 1998.

The NMA study presents compelling evidence that given the right opportunity, the private sector can play a significant role in improving the environment at abandoned and inactive mines. The NMA study also documents that State and Federal agencies have accomplished AML cleanups.

The NMA study presents data from industry sources and State abandoned mine programs on successfully reclaimed AML sites in a number of western states and includes detailed information on nearly 80 successfully reclaimed AML sites. Like the NAS/NRC study, the NMA study also concludes that there are a number of legal, regulatory, and institutional barriers that are impeding progress on solving the AML problem. The NMA study findings are based on the characteristics of the 80 reclaimed AML sites described in the report and comments made by State AML program personnel and mining industry sources contacted during the study. The study findings relevant to this discussion are summarized as follows:

• *Private Funding, Equipment, and Labor from the Mining Industry Have Been Responsible for Reclaiming and Remediating Many AML Sites.*—Industry has spent tens of millions of dollars in voluntary on-the-ground cleanups and abatements of AML sites throughout the West. The progress made to date and the lessons learned by both the mining industry and State and Federal regulators in addressing these sites is often overlooked in policy discussions on the AML issue.

• *AML Reclamation, Remediation, and Abatement Solutions Must be Site Specific.*—Just as no two mines are identical, each AML has unique characteristics based upon site-specific physical conditions and ownership patterns and history. Therefore, appropriate solutions to problems at an AML must be determined on a site-by-site basis.

• *The Term "Remining" Has Been Used Too Broadly.*—AML stakeholders (e.g., industry, regulators, industry critics, and the public) have indiscriminately used the term "remining" to mean any project involving active mining and concurrent AML reclamation and cleanup. Remining should be used to describe projects that process or reprocess previously mined materials. Concurrent mining and reclamation/remediation of an adjacent or nearby AML is more appropriately called "reclamation-mining".

• *Industry Reclamation-Mining Projects Have Contributed Significantly to AML Cleanups.*—The numerous examples of reclamation-mining examined in this survey document that significant synergism can be achieved when active mining operations reclaim and remediate problems at adjacent or nearby AML sites. There are a number of reclamation-mining sites at which industry-funded reclamation/remediation activities have achieved significant environmental improvements. Most of these reclamation-mining projects occurred at sites acquired prior to the mid- to late 1980's. It appears that liability concerns have inhibited industry acquisition of previously mined areas since then, probably corresponding to the enactment of CERCLA and the Superfund Amendments and Reauthorization Act (SARA) in the 1980's. Reclamation-mining could be a significant partial solution to the AML problem if CERCLA, CWA and other liability barriers were removed.

• *Remining Has Occurred on a Very Limited Basis and May Not be Profitable at Most Sites.*—Only six examples of remining, in which previously mined materials were processed or reprocessed, were identified in this survey. Just one of the six produced a net economic gain which occurred during a period of extraordinarily high gold prices in 1981. Based on this limited data, remining may not be financially rewarding at many sites but may help off-set AML remediation and reclamation costs.

• *Widespread Misconceptions About Remining Have Complicated Development of a Good Samaritan Liability Relief Policy.*—Policy discussions have incorrectly characterized all concurrent mining and AML reclamation/remediation efforts as remining and have assumed remining is a profitable endeavor. The reluctance on the part of some members of the regulatory and activists communities to extend liability relief to a profitable remining project is perhaps understandable. Unfortunately, intransigence on this issue has created great difficulties in developing liability relief policies applicable to any industry-sponsored AML cleanup project.

• *Renewed Dialogue to Develop Liability Relief for Uneconomic Remining Projects and for Reclamation-Mining Projects is Needed.*—Concerns about extending liability relief to remining activities should be refocused on profitable projects. Uneconomic remining and reclamation-mining projects should qualify for liability protection.

• *AML Sites with Acid Rock Drainage (ARD) From Mine Openings Pose the Most Challenging Technical and Policy Problems.*—Remediation of ARD from underground workings is the most challenging issue both from a technical and a legal perspective. Although passive water treatment systems can achieve significant water quality improvements and are practical at remote sites with no power infrastructure, more sophisticated water treatment measures are typically required to meet water quality standards and NPDES permit limits. Both State agencies and the pri-

vate sector face onerous legal challenges from Clean Water Act citizen lawsuits for residual drainage from remediated AML sites that does not meet arbitrary water quality standards—regardless of the improvements realized at these sites.

• *CWA Citizen Lawsuits Are Significantly Chilling State and Industry Efforts to Improve AML Sites with ARD.*— Concerns about CWA citizen lawsuits have nearly completely stymied cleanup progress at sites with acid drainage from underground workings. The end result is a net loss to the environment as water quality problems at these sites remain unabated. Remediation measures that could result in incremental (and in some cases significant) water quality improvements are not undertaken for fear of the resulting liability exposure.

• *Pursuit of the Perfect is Thwarting Realization of the Good.*—Regulatory policies that require strict compliance with all environmental standards, particularly arbitrary one-size-fits-all water quality standards, have forestalled State and industry AML cleanup projects that may produce significant environmental benefits but that do not meet some water quality standards. A new policy approach is needed to facilitate partial and incremental cleanup efforts and to protect the parties involved from exposure to CWA citizen lawsuits.

SHORTCOMINGS OF S. 1787 AND SUGGESTED REMEDIES

Although the introduction of S. 1787 presents an opportunity to open the dialog, I must emphasize that S. 1787 by itself will not accomplish the goal of facilitating AML cleanup and improving the environment at AML sites. As documented by the findings of the NMA study, the bill as written does not go far enough to provide meaningful liability relief to both private and public sector interests who might otherwise be in a position to improve the environment at an inactive or abandoned mine, nor does it provide any incentives that would encourage voluntary cleanups. Therefore, I do not believe S. 1787, in its current form, will do much if anything to encourage on the ground cleanup of abandoned mine lands. The remainder of my testimony will present suggestions for addressing the current shortcomings in the bill: Specifically the following areas need to be addressed:

• Expand the definition of remediating parties;

• Recognize that land status at most AML sites is a complex mixture of private and public ownership;

• Allow the Federal and State governments, Indian Tribes and municipalities protection for cleanup of its sites for which it is not responsible;

• Accept the concept of net environmental gain in lieu of maximum extent practicable and use existing site conditions to define the baseline against which net environmental gain will be measured;

• Maximize the investment of resources spent on-the-ground rather than devoted to a protracted regulatory review process by developing a streamlined permitting process for proposed AML cleanup projects and eliminating open-ended authorities granted to the Administrator allowing for additional information;

• Allow States permitting authority;

• Provide liability protection from CERCLA actions to qualifying volunteers if the cleanup is done according to the approved plan;

• Provide liability protection from CWA citizen lawsuits at sites where cleanup activities result in incremental water quality improvement but may not be able to meet arbitrary water quality standards;

• Eliminate limitation precluding sites proposed for inclusion on National Priorities List (NPL) and sites that are subject of planned or ongoing response or resource damages actions;

• Remove disincentives for remining and reclamation mining where contemplated by the approved plan; and

• Provide incentives for encouraging private sector involvement in cleanups;

• Allow for grants from other programs, including 319 (h) to be used for cleanups.

I believe these changes can be made while preserving the intent of the Clean Water Act that requires other actions and requirements of responsible parties. The Good Samaritan concept is a useful tool that foster voluntary cleanups of abandoned and inactive mines resulting in positive environmental gains and improved water quality. A more detailed discussion of these suggested changes follows.

The Definition of Remediating Parties Must be Expanded

The first step in developing a Good Samaritan liability relief proposal must be founded on a clear understanding of the universe of parties (i.e., stakeholders) who may potentially undertake an AML cleanup effort. As documented in the above referenced NMA study, the private sector, State regulatory agencies, and Federal land management agencies have all performed AML cleanup projects in the past. It seems logical that under the proper circumstances, these three stakeholder groups

are likely to be the remediating parties of the future. Therefore, it is imperative that liability relief extend to all of these entities in addition to those already included in the bill: the private sector, State agencies, Federal land management agencies, and Federal land owners.

A careful consideration of the ownership conditions that apply to AML sites will quickly reveal that both the public and private sectors must be included in the definition of remediating party and granted Good Samaritan liability relief. Otherwise, very few problematic historic mines will benefit from Good Samaritan liability relief provisions, and the enacted liability relief will be so limited in its application as to be illusory. The following definitions are suggested to clarify these ownership issues:

Abandoned Mine.—A site with no private owner of record typically on public land managed (and sometimes owned) by a Federal, State, or local government agency. These sites are sometimes referred to as "orphaned". Abandoned mines on public land comprise a very significant portion of the universe of problematic AML sites.

Inactive Mine.—A site on patented/private land which, in contrast to an abandoned site, has an owner or owners of record. However, at many sites the current inactive mine owners are not the entity involved in the past mining activities that created the safety hazards or environmental problems. Moreover, some owners of inactive mines do not have the financial resources necessary to correct the safety and environmental problems.

Excluding Federal land management agencies or Federal land owners (on their own land) from the definition of remediating party will mean that a large population of AML sites will not benefit from the proposed Good Samaritan liability relief provisions. Thus, as currently written, S. 1787 does very little if anything at all to advance the goal of cleaning up problem sites on public land because Federal land owners and Federal land management agencies represent stakeholders with a significant interest in addressing abandoned mines, and are thus likely remediating parties. Likewise, precluding the State as a remediating party on its own lands unless the State purchased the land for the purpose of cleaning up the site similarly limits the utility of this bill.

Another potential remediating party for abandoned sites on public land is the private sector, such as a mining company with a nearby or adjacent property. By excluding such private parties from remediating party status, the bill fails to recognize that industry is already investing millions of dollars voluntarily, yet such private parties would not receive the benefit of the liability protections provided by the bill. In fact, it was the hardrock mining industry that initiated, in cooperation with the Western Governors Association, the Abandoned Mine Land Initiative (AMLI). The AMLI was the first cooperative effort between industry and government to address the AML problem. Currently, the AMLI is working toward completing pilot cleanup projects in the western states. Unfortunately, until the CERCLA, RCRA and CWA liability issues are resolved, such projects are limited to the less complex sites, thereby leaving the high risk sites unaddressed. For these reasons, S. 1787 must be expanded to include private parties, including the mining industry, as a matter of good public policy.

Finally, S. 1787 must be expanded to clarify that liability protections that apply to either a State or Federal agency also extend to private-sector contractors charged with executing the on-the-ground work. Because State and Federal agencies typically contract work to third-party, private-sector companies, the contractual relationship between a State or Federal agency should designate the contractor as an agent of the governmental entity, and clearly include the contractor in the liability coverage.

The Focus to Identify PRPs is Inconsistent with the Good Samaritan Concept

The concept of the Good Samaritan gets lost in the proposed legislation. In the context of AML cleanup, a Good Samaritan is a person, private-sector company, or government agency that acts voluntarily and without obligation to improve the environmental conditions at a specific site. Therefore to be maximally effective in facilitating AML cleanups, S. 1787 should provide complete protection for those who pursue voluntary cleanup activities. As a matter of policy, an entity that desires to remediate an AML site should not have to assume liability for pre-existing conditions at the AML site. Furthermore, once those planned activities are completed, the Good Samaritan should be released from any further permit obligations and should be free from exposure to citizen suits.

It should also be clearly understood that identifying parties with previous involvement at an historically mined site is typically a very complicated task. Most historic mining districts are comprised of a complex mixture of private and public land. At many AML sites the private land consists of patented mining claims that are intermingled with and/or surrounded by unpatented claims (i.e., public land). Assigning

liability is especially difficult at these mixed estate AML sites, and at sites with a history of multiple owner/operators. Some sites have numerous potentially responsible parties (PRPs); some have only one or two owners/operators; and others have no viable owners at all. Although a title search may reveal an owner of record for the patented claims, it is not uncommon for the current private land owner to be an absentee owner who had no involvement with the mining activities at the site and who may have limited or no resources to devote to an AML cleanup. For example, the patented claims may have been inherited by the present owners as part of an estate settlement. Or, for that matter, the private, absentee owner may be "financially capable" yet unwilling to engage in cleanup. S. 1787 provides no incentive to encourage the private, financially capable landowner to join the voluntary cleanup. Therefore, the majority of these sites will go unaddressed. This becomes particularly important where a site is situated in a watershed targeted for cleanup or where the site is located adjacent to a site undergoing cleanup, etc. It is important to note that this provision of S. 1787 in effect actually impedes addressing the AML problem on a watershed basis.

It is highly likely that all or some of the public land at an historic mine site consists of unpatented mining claims for which there is no current claimant and is thus truly an abandoned site. The incidence of abandonment of unpatented claims increased dramatically following Congress' decision in 1993 to eliminate the annual assessment work requirement and to substitute an annual claim maintenance fee of $100 per unpatented mining claim. Since that date, many mining claimants abandoned their claims because they were unwilling or unable to pay for the annual claim maintenance fee.

In the context of Good Samaritan provisions, these factors mean that an effort to identify PRPs is difficult, impractical, and may not find entities with significant financial resources. Moreover, a protracted PRP search merely detracts from the resources that could otherwise be spent performing on-the-ground environmental improvement measures.

The focus of S. 1787 should be to expedite and facilitate tangible environmental improvement at sites affected by outmoded mining practices that existed prior to the development of today's environmental laws and regulations. The proposed PRP search requirements are inconsistent with that goal and regrettably reflect a "search for the guilty party" vendetta rooted in an attitude of historical revisionism that fails to recognize that nearly all AML sites were mined in the distant past when there were no environmental controls on mining—or other human endeavors.

S. 1787 Should Facilitate Projects that Have a Reasonable Chance to Produce Net Environmental Benefits

If it is agreed that the principal objective of S. 1787 is to help solve the AML problem by encouraging and facilitating voluntary cleanups of AML sites, then it is important to recognize that other issues besides liability exposure must also be addressed. One of the main regulatory barriers currently thwarting both private and public sector voluntary cleanups is concern about whether a proposed cleanup project will be able to meet stringent water quality standards. This concern translates into a significant reluctance to pursue voluntary cleanup projects for fear that the remediating party will be subjected to regulatory sanctions and even citizen lawsuits if water quality at the remediated site does not meet predetermined and typically arbitrary water quality standards. The following sections discuss this issue in detail and suggest ways to address this significant regulatory barrier to voluntary AML cleanups.

Defining and Attaining Cleanup Criteria

Defining appropriate and attainable cleanup criteria at AML sites with contaminated surface water and/or groundwater creates both technical and regulatory challenges that are impeding public- and private-sector AML cleanup activities. At many AML sites, naturally occurring geochemical reactions between the mineralized rocks and the surface water or groundwater systems contribute dissolved metals, sulfate and other parameters to proximal surface and groundwater resources. Consequently, surface water and groundwater systems in and near some orebodies have background water quality conditions that may exceed one or more regulatory standards. The absence of baseline (i.e., pre-mining) water quality data for most AML sites makes determining any incremental contamination due to mining activities technically challenging and impractical at some sites.

However, the naturally occurring levels of metals and other chemical constituents contributed by the orebody need to be considered in developing reasonable AML water quality cleanup goals. As discussed in CCEM (1998), states often apply EPA "Gold Book" standards in defining numeric concentration limits for pollutants like

heavy metals. These one-size-fits-all standards do not consider site-specific factors including the geochemical signature that an orebody may imprint upon nearby surface waters. The unilateral application of Maximum Contaminant Levels (MCLs) to determine groundwater quality cleanup requirements poses similar problems at mineralized sites at which groundwater quality reflects the geochemistry of the orebody.

The CWA authorizes the EPA to require owners of both active and inactive mines to obtain an NPDES permit that stipulates effluent limits for surface water discharges. Depending upon the designated beneficial use of the receiving surface water and the corresponding water quality standards, NPDES permits typically establish stringent effluent limits. Active mining operations successfully employ proven and effective water treatment technologies to meet NPDES permit limits. However, these water treatment measures may not be feasible at many AML sites in remote locations lacking the necessary infrastructure to operate a water treatment plant.

The use of Gold Book standards to set surface water quality standards or MCLs to set groundwater quality standards creates a significant dilemma at many AML sites. Applying these standards may require an AML cleanup effort to achieve the impossible—to make a site "cleaner than clean" by mandating improvements in water quality that do not reflect pre-mining conditions and the presence of metals, sulfate, etc. due to naturally occurring reactions between the orebody and the surrounding water systems.

It is important to note that the Environmental Protection Agency (EPA) acknowledges, in the context of coal remining operations, that requiring AML cleanup efforts to meet strict numeric standards is sometimes inappropriate and is a disincentive to remining. In an effort to remove regulatory impediments and to encourage remining, EPA recently proposed to amend the CWA regulations to address preexisting discharges at coal remining operations. 65 Fed. Reg. 19440. As justification for the proposal, the EPA acknowledges the following: "remining has the multiple benefits of improving water quality, removing hazardous conditions, and utilizing remaining coal as a resource instead of mining virgin land." Furthermore, the Agency acknowledges, "requiring the treatment of pre-existing discharges to meet existing standards has been shown to be cost prohibitive, and thus, a disincentive to remining activities."[5] S. 1787 fails to make similar findings.

AML Cleanup Policies Should Focus on Net Environmental Benefit—Not Arbitrary Standards

In discussing the issue of AML reclamation/remediation and water quality requirements it is very important to acknowledge that significant water quality improvements can be achieved at many sites by performing some fairly straightforward physical reclamation. The NMA study documents a number of cases where the simple removal of mine waste from a drainage course, rerouting a drainage away from or around a mine waste pile, or capping a mine waste pile to minimize infiltration of meteoric water has improved water quality—sometimes substantially. Moreover, these improvements in water quality often translate into a significant recovery of aquatic habitat to the point where fish populations have dramatically increased.

However, additional, costly water treatment measures, including construction and operation of a water treatment plant, would be required at some of these sites in order to achieve water quality standards such as those that might be specified in an NPDES discharge permit. The concern that voluntary reclamation work could ultimately force the remediating party to construct and operate additional water treatment requirements is having a significantly chilling effect on voluntary AML reclamation work. This means that the significant environmental benefits that can be achieved with physical reclamation work are foregone. Moreover, the incremental improvement in water quality that may be achievable with a water treatment plant may not be cost effective when measured in the context of meaningful improvements in fish populations, enhancements of aquatic habitat, or benefits to downstream users. S. 1787 thus needs to be modified to remove this regulatory barrier in order to allow and encourage projects that result in a net environmental benefit but may not meet arbitrary water quality standards.

How Should Environmental Benefits be Measured

As discussed above, determining pre-mining water quality conditions is a technically challenging if not impossible task at many AML sites. It should also be rec-

[5] EPA Fact Sheet "Amendments to Effluent Limitations Guidelines and New Source Performance Standards for the Coal Mining Point Source Category: Proposed Rule" March 2000.

ognized as an unnecessary complication when applied to a voluntary AML cleanup project. AML cleanup policies should specify that the only conditions that are relevant in assessing a cleanup proposal are the existing conditions. The baseline data inventory effort should be accomplished as expeditiously as possible in order to minimize the resources spent studying the problem, and to maximize the resources spent solving the problem.

AML Cleanup Policies Should Not Stifle Experimental Cleanup Techniques

Although significant environmental improvements can be achieved at AML sites using existing techniques and technology, it is highly likely that an improved regulatory climate that allows voluntary AML cleanups would stimulate the development of new and possibly more effective cleanup technologies. AML cleanup policies should therefore include provisions to allow onsite testing of new or experimental reclamation and remediation techniques. Remediating parties who wish to try new or unproven techniques at voluntary cleanup sites should be allowed to do so without fear of regulatory sanctions or citizen lawsuits if the resulting water quality does not meet expectations.

S. 1787 needs to be modified to include language that authorizes remediating parties conducting voluntary cleanups to use experimental techniques that have a reasonable likelihood of success. The absence of this type of liability and regulatory relief measure will completely stymie the development of new and improved AML reclamation and remediation techniques.

S. 1787 Should Be Modified to Include CERCLA/RCRA and CWA Citizen Suit Liability Relief

Past industry-funded improvement projects at AML sites have been driven primarily by the desire to avoid, reduce, or otherwise limit liabilities associated with both safety hazards and environmental concerns. If contaminants such as metals, sediments, or acid rock drainage (ARD) have been or are being released or have the potential to be released from an AML site, the owners, operators, or managers of that site potentially face liabilities under a number of State and Federal environmental laws, CERCLA, RCRA and the CWA being foremost among them.

Without the necessary liability relief from CERCLA, RCRA and the equivalent State statutes, most AMLs will simply go unaddressed. Potential CERCLA liability is considered the single greatest obstacle to cleaning up AMLs. Because heavy metals are considered "hazardous substances" under the CERCLA regulatory regime, a current or past owner or operator of an AML could be liable for cleanup of the AML to the extent "hazardous substances" are determined at the site. Incurring CERCLA liability can be as easy as having "active involvement in the activities" at a site. Furthermore, any "active management" of mining wastes not excluded by the Bevill exemption would trigger RCRA Subtitle C regulation of the actively managed wastes to the extent those wastes qualify as "hazardous wastes." Once triggered, RCRA Subtitle C regulation would impose exceedingly stringent generation, transportation, treatment, storage and disposal requirements, the so-called "cradle to grave" regulation.

Thus, at many AML sites it is simply good business practice and in the owners' best interest to reclaim the site as expeditiously and efficiently as possible. However, the potential for citizen lawsuits under the CWA should discharges occur at reclaimed AML sites effectively suffocates the best intents of industry (as well as State AML agencies and Federal agencies) to reclaim any more sites than absolutely necessary to contain potential CERCLA actions. While industry may have the desire and the means to abate and remediate AML sites throughout the West, implementation will not be achieved until there is indemnification against such litigation and associated liabilities.

Voluntary remediators should be treated similar to CERCLA remedial action contractors. Under this exemption, a remediator would not be liable under CERCLA or any other Federal law unless they cause damages as a result of their negligence, gross negligence or intentional misconduct. If S. 1787 is to have any utility, the CERCLA/RCRA liability issues must be addressed.

The Term "Remining" Has Been Used Too Broadly in AML Policy Discussions

Defining Remining

The term "remining" is used rather indiscriminately in both the public and the private sectors to describe a broad range of renewed mining activities in previously mined areas. The findings of the NMA study suggest that a narrower definition of remining would be useful in focusing policy issues that affect remining and AML reclamation and remediation. The suggestion is made herein to restrict the use of the term remining to projects involving processing of existing mine wastes (e.g.,

waste rocks, and low-grade stockpiles) and/or reprocessing of tailings and previously leached materials (e.g., heap leach ores) at a nearby metals recovery (i.e., treatment) plant. The term "reclamation-mining" is suggested for active mining projects with concurrent AML reclamation and remediation activities that do not include mine waste processing or reprocessing. Using these definitions, remining is a subset of reclamation-mining. Reclamation-mining is discussed later in this testimony.

Remining Benefits

In the last few years, AML policy discussions about remining have assumed that remining results in both environmental and economic benefits. Because remining metal-bearing mine wastes achieves source reduction, it can be an exceptionally effective environmental cleanup method for AML sites. Other cleanup methods such as water treatment or waste containment do not reduce or eliminate the source of the contaminants, and may create long-term operational and monitoring requirements. In contrast, recovering metals by remining removes some or all of the contaminant source, thereby minimizing the volume of problematic mine waste and reducing the residual metals content in the resulting waste product. Additionally, the newly generated mineral processing wastes are disposed of in a modern, permitted mine waste disposal facility with appropriate containment, monitoring, and financial guarantees. Remining 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.

Remining is also assumed to produce economic rewards for the company that processes or reprocessed the previously mined materials because the company recovers some of the metals in these materials and avoids some of the costs associated with mining new ore. A 1993 remining study identified widespread industry interest in remining, suggesting that remining could be viable at a number of sites. However, this study also revealed equally widespread concerns about the potential environmental liability exposure associated with becoming involved with historically mined areas (Struhsacker, 1993).

Remining Examples

Despite the widespread recognition that remining could facilitate AML cleanups at some AML sites, the NMA study identified only six sites (the Alta Mine in Idaho, the Maitland Tailings and the Double Rainbow Mine in South Dakota, the Dean Mine in Nevada, the Mercur Mine in Utah, and the Westar Heap in New Mexico) at which remining involving mine waste reprocessing has occurred. The limited number of remining sites appears to be due to the same liability concerns identified in the 1993 remining survey. (It should be noted that mine wastes at the Westar Heap were sold as a silica flux source; they were not reprocessed as a source of residual metals). Details about these six sites are presented in the NMA study.

The NMA study indicates that the assumptions regarding the economic rewards associated with remining are inaccurate or overstated. Only one of the identified remining projects, the 1981 reprocessing of the Maitland Tailings in Lawrence County, South Dakota, produced a net economic gain. Remining at the Double Rainbow Mine and the Westar Heap sites helped defray the reclamation and remediation costs; however, remining was not profitable at either project. The positive economics realized by reprocessing the Maitland Tailings were due largely to anomalously high gold prices in 1981. This project was undertaken principally as an economic endeavor rather than as an AML remediation effort—land use. It is not known whether remining would be financially rewarding if pursued at other sites.

In several of the identified remining projects, remining was selected as the most cost effective AML cleanup measure because it allowed the mining companies to place the resulting tailings into an existing tailings disposal facility, thus avoiding the costs and environmental impacts associated with a new waste repository. However, using an existing tailings facility for remining tailings consumes space that would otherwise be available for tailings from processing the primary orebody. Moreover, the remining wastes may not be of comparable grade or recovery characteristics as the primary orebody. Therefore, the decision to engage in remining and to displace primary ore tailings with remining tailings must involve a site-specific cost-benefit analysis.

Remining Policy Issues

The NMA study findings regarding the limited circumstances in which remining is profitable are significant from a policy perspective. At least some of the controversy surrounding development of a Good Samaritan provision to the CWA for AML remediation has revolved around remining. Mining industry critics and some regulators have strenuously objected to allowing remining projects to qualify for the Good Samaritan provision (CCEM, 1998). Their objections to providing liability re-

lief for remining presumably stem from the belief that an economic endeavor should not enjoy liability protection. The limited data available on remining suggests that this opposition may be based upon an incorrect perception of remining economics. Moreover, the widespread misuse of the term remining to mean concurrent mining and any AML reclamation/remediation activity has inappropriately lumped together a diverse group of industry-sponsored AML projects and stymied progress on development of a liability relief policy applicable to some industry-led AML cleanup efforts.

The suggestion is made herein to refocus these discussions in the context of the restricted definition of remining as used in this report (i.e., projects involving processing or reprocessing of previously mined materials). By doing so, perhaps the discussion can be focused on the environmental benefits that stand to be gained by including provisions for such remining projects outlined in this discussion. Accordingly, the committee should reconsider the possibility of including a remining component with S. 1787.

Reclamation-Mining

Defining Reclamation-Mining

Although the NMA study identified only a few remining projects at which industry processed or reprocessed previously mined materials as part of an AML remediation effort, the study includes numerous examples of reclamation-mining in which industry reclaimed and remediated AML sites in and near active mining operations through synergism between the active mine/mill and the AML site. The reclamation-mining examples described in the NMA study capitalized upon industry expertise, equipment, personnel, and existing mine waste disposal and mineral processing facilities and infrastructure to close, reclaim, or remediate the nearby AML site(s).

Reclamation-mining is a highly site specific undertaking both in terms of the AML site characteristics and the range of activities, resources, and facilities at the active mine and mineral processing operation. The reclamation-mining sites identified in the NMA study encompass a broad range of activities that have produced numerous and varied environmental benefits. Examples of reclamation-mining activities identified in the NMA study include the following:

- Remining (as discussed above);
- Removing and relocating old mine wastes to existing project components (i.e., active, permitted tailings, heap leach, or waste rock facilities)
- Removing and relocating old mine wastes to new waste repositories;
- Stabilizing old mine wastes in-situ using appropriate liners, caps, and covers; and
- Remediating groundwater by taking advantage of dewatering activities to support pump and treat opportunities.

The NMA study identifies the following environmental and public safety benefits and improvements that have occurred as a result of reclamation-mining activities:

- Surface water quality improvements;
- Landscape improvements;
- Wildlife habitat restoration, preservation and enhancement;
- Historical preservation; and
- Safety closures.

Appropriate Incentives Would Stimulate Voluntary AML Cleanup

Removing the liability risks and regulatory barriers discussed in this testimony would be a significant step in solving the AML problem by making voluntary AML cleanups a much less problematic. However, creating incentives for parties engaged in voluntary AML cleanup efforts could increase the number of voluntary AML reclamation projects and would result in more and accelerated progress in reclaiming and remediating AMLs. AML policy discussions such as the current dialog on S. 1787 should go beyond the topic of liability relief and consider ways to encourage and promote private-sector voluntary AML cleanup efforts.

The types of incentives that could be considered could include a streamlined regulatory review process, reduced or waived royalties in the event Congress establishes hard rock mining royalty provisions in the future, and depletion allowances. Also, tax credits could be considered for projects which are not economic but which are pursuing reclamation-mining to address environmental issues. Similarly voluntary AML cleanup projects could generate environmental credits that could be used to mitigate or offset impacts at other mining projects operated by the remediating party.

The advantages to the public in creating incentives for private-sector, voluntary AML cleanups is that the resulting reclamation-mining projects would expedite cleanups at a number of sites and ameliorate environmental conditions with no or

minimized public funding. This would reduce the scope of government sponsored mine land reclamation programs currently envisioned as being necessary to solve the AML program.

CONCLUSION

I appreciate the opportunity to present to this committee my views and the views of the National Mining Association regarding S. 1787. I believe the bill serves to further the discussion regarding the Good Samaritan concept. However, without significant changes as outlined in my comments I am afraid the bill will fall short of achieving its intended goals, that of increasing voluntary, cooperative efforts toward cleaning up AMLs. I wish to encourage this committee to work together to revise S. 1787 accordingly to provide a workable and meaningful bill.

At a minimum, I suggest the committee work to revise the definition of remediating party to include private parties and the State and Federal Governments on their own lands; reconsider the cleanup standards required of Good Samaritans; address CERCLA, RCRA, and CWA citizen suit liability issues; provide opportunity for states with adequate programs to issue remediating permits; and reconsider the possibility of including a remining component.

RECLAIMING INACTIVE AND ABANDONED MINE LANDS—WHAT REALLY IS HAPPENING

EXECUTIVE SUMMARY

BACKGROUND

On behalf of the National Mining Association (NMA), Debra W. Struhsacker, Environmental and Government Relations Consultant, and Jeffrey W. Todd, Senior Consultant with Schafer and Associates, performed a survey to identify successfully reclaimed abandoned and inactive mines. This survey was undertaken in conjunction with the Abandoned Mine Land Initiative (AMLI), a partnership between the NMA and the Western Governors' Association designed to take a proactive approach to the hardrock abandoned and inactive mine land (AML) problem. This investigation on successfully reclaimed AML sites had the following objectives:

- Compile data available from industry sources and State abandoned mine programs on successfully reclaimed AML sites in each WGA state;
- Obtain information on AML reclamation success stories to showcase the effective application of modern environmental and reclamation technology at hardrock AML sites; and
- Determine the regulatory, legal, and institutional policy issues that are facilitating or impeding progress on solving the AML problem.

Information on nearly 80 successfully reclaimed AML sites was gathered during the short duration of this survey (Appendix A). These data were obtained from approximately 95 representatives from the mining industry and State AML programs who responded to this survey (Appendix B).

The types of reclamation and remediation efforts at the sites included in this survey are typical of the accomplishments being made by State AML programs and industry. However, it must be emphasized that this survey was not intended to be all inclusive. Based on the information gathered to date, it is apparent that there are hundreds of examples of State and industry AML projects involving reduction of safety hazards and environmental improvements that could be included in this study.

SURVEY FINDINGS

The survey findings listed below are based on an analysis of the characteristics of the reclaimed AML sites in Appendix A, and on comments made by State AML program personnel and mining industry sources contacted during the survey.

- *Both the Western States and the Mining Industry Have Achieved Measurable Progress in Addressing the AML Problem.*—This survey found that State AML programs and industry-sponsored efforts have abated, reclaimed, and remediated a number of high-priority AML sites throughout the west. AML policy discussions typically dismiss or fail to recognize the progress made to date, choosing instead to emphasize the large but poorly defined dimensions of the AML problem.
- *Private Funding, Equipment, and Labor from the Mining Industry Have Been Responsible for Reclaiming and Remediating Many AML Sites.*—Industry has spent tens of millions of dollars in voluntary on-the-ground cleanups and abatements of AML sites throughout the WGA region. Mining industry critics often overlook or ignore this significant industry contribution.

• *States with SMCRA Reclamation Funds Have Significant AML Abatement Accomplishments and Have Achieved Some AML Cleanup and Reclamation.*—AML programs in the western coal-producing states (e.g., Wyoming, Colorado, Utah, Montana, Texas, and to a lesser extent Alaska and New Mexico) have been able to use SMCRA reclamation money derived from a tax on coal to reduce or eliminate public safety hazards at hardrock AML sites. As a result, these states have made significant progress in addressing AML safety problems. The OSM has certified the Wyoming and Montana coal AML reclamation effort as complete and these states have started using some SMCRA reclamation funds to cleanup environmental problems at hardrock AML sites. States with no SMCRA funds have much more limited AML programs and greater reliance on industry-funded efforts.

• *The Term "Site" has Different Meanings and Must be Defined Specifically in Every Forum.*—Some AML inventory efforts, including those performed by mining industry critics, have considered a "site" to be any single mine opening, mining or exploration disturbance, or mining-related feature. Inventories performed in this fashion typically reflect a desire to show as many sites as possible to qualify for a larger share of available reclamation funds, or in some cases, to advance a political agenda. In contrast, many State AML programs and the mining industry define "site" in a much broader sense. In this context a site may contain multiple features that can be addressed with coordinated and consolidated abatement or remediation measures.

• *A Comprehensive AML Inventory is Not a Necessary First Step in Solving the AML Problem.*—The successfully reclaimed AML sites identified in this study indicate that a complete inventory of the universe of hardrock AML sites is not required for the states or industry to achieve meaningful progress on correcting the AML problem.

• *AML Reclamation, Remediation, and Abatement Solutions Must be Site Specific.*—Just as no two mines are identical, each AML has unique characteristics based upon site-specific physical conditions and ownership patterns and history. Therefore, appropriate solutions to problems at an AML must be determined on a site-by-site basis. Efforts to categorize, pigeonhole, and inventory all aspects of the AML problem have reached a point of diminishing returns and will add nothing more to solving the AML problem. A one-size-fits-all approach to AML site definition and reclamation is neither necessary nor appropriate.

• *Safety Hazards are the Dominant AML Problem.*—There are far more AML sites that create a public safety problem than sites with environmental problems. In a recent survey of western State AML programs, 11 of the top 30 AML problem sites have safety hazards; another 9 sites pose both safety and environmental problems. The remainder of the sites have environmental issues. Other recent surveys corroborate that safety hazards are the dominant problem at hardrock AML sites. Abating safety hazards at many sites is relatively straightforward.

• *South Dakota Has the Most Industry-funded AML Cleanup and Reclamation Accomplishments.*—A streamlined regulatory environment that has minimized legal proceedings and protracted administrative and regulatory reviews, and has maximized resource expenditure for on-the-ground reclamation and remediation measures has facilitated industry-sponsored AML projects in South Dakota. This streamlined approach is critical and appropriate for industry-funded cleanups that involve no expenditure of public resources. These projects should not be burdened with unnecessary regulatory reviews and attendant costs and delays. The South Dakota regulatory model may be easiest to replicate in states with an omnibus regulatory agency with jurisdiction over water quality, air quality, hazardous and solid waste, and mine reclamation.

• *Safety Closures May Create Conflicts with Bat Habitat and Historic Preservation Concerns.*—A number of State AML program officials mentioned the difficulties encountered in balancing the need to seal mine openings to protect public safety with the need to preserve wildlife (especially bat) habitat and the integrity of old mine workings as historic resources. In some settings, fencing old workings may be adequate to protect public safety and avoids these potential resource conflicts. However, fencing does not satisfy the SMCRA mine closure prescription.

• *The Term "Remining" Has Been Used Too Broadly.*—AML stakeholders (e.g., industry, regulators, industry critics, and the public) have indiscriminately used the term "remining" to mean any project involving active mining and concurrent AML reclamation and cleanup. Remining should be used to describe projects that process or reprocess previously mined materials. Concurrent mining and reclamation/remediation of an adjacent or nearby AML is more appropriately called "reclamation-mining".

• *Industry Reclamation-Mining Projects Have Contributed Significantly to AML Cleanups.*—The numerous examples of reclamation-mining examined in this survey

document that significant synergism can be achieved when active mining operations reclaim and remediate problems at adjacent or nearby AML sites. There are a number of reclamation-mining sites at which industry-funded reclamation/remediation activities have achieved significant environmental improvements. Most of these reclamation-mining projects occurred at sites acquired prior to the mid- to late 1980's. It appears that liability concerns have inhibited industry acquisition of previously mined areas since then, probably corresponding to the enactment of CERCLA and the Superfund Amendments and Reauthorization Act (SARA) in the 1980's. Reclamation-mining could be a significant partial solution to the AML problem if CERCLA, CWA and other liability barriers were removed.

• *Remining Has Occurred on a Very Limited Basis and May Not be Profitable at Most Sites.*—Only six examples of remining in which previously mined materials were processed or reprocessed were identified in this survey. Just one of the six produced a net economic gain which occurred during a period of extraordinarily high gold prices in 1981. Based on this limited data, remining may not be financially rewarding at many sites but may help off-set AML remediation and reclamation costs.

• *Widespread Misconceptions About Remining Have Complicated Development of a Good Samaritan Liability Relief Policy.*—Policy discussions have incorrectly characterized all concurrent mining and AML reclamation/remediation efforts as remining and have assumed remining is a profitable endeavor. The reluctance on the part of some members of the regulatory and activists communities to extend liability relief to a profitable remining project is perhaps understandable. Unfortunately, intransigence on this issue has created great difficulties in developing liability relief policies applicable to any industry-sponsored AML cleanup project.

• *Renewed Dialogue to Develop Liability Relief for Uneconomic Remining Projects and for Reclamation-Mining Projects is Needed.*—Concerns about extending liability relief to remining activities should be refocused on profitable projects. Uneconomic remining and reclamation-mining projects should qualify for liability protection.

• *AML Sites with Acid Drainage From Mine Openings Pose the Most Challenging Technical and Policy Problems.*—Remediation of ARD from underground workings is the most challenging issue both from a technical and a legal perspective. Although passive water treatment systems can achieve significant water quality improvements and are practical at remote sites with no power infrastructure, more sophisticated water treatment measures are typically required to meet water quality standards and NPDES permit limits. Both State agencies and the private sector face onerous legal challenges from Clean Water Act citizen lawsuits for residual drainage from remediated AML sites that does not meet arbitrary water quality standards—regardless of the improvements realized at these sites.

• *CWA Citizen Lawsuits Are Significantly Chilling State and Industry Efforts to Improve AML Sites with ARD.*—Concerns about CWA citizen lawsuits have nearly completely stymied cleanup progress at sites with acid drainage from underground workings. The end result is a net loss to the environment as water quality problems at these sites remain unabated. Remediation measures that could result in incremental (and in some cases significant) water quality improvements are not undertaken for fear of the resulting liability exposure.

• *Pursuit of the Perfect is Thwarting Realization of the Good.*—Regulatory policies that require strict compliance with all environmental standards, particularly arbitrary one-size-fits-all water quality standards, have forestalled State and industry AML cleanup projects that may produce significant environmental benefits but that do not meet some water quality standards. A new policy approach is needed to facilitate partial and incremental cleanup efforts and to protect the parties involved from exposure to CWA citizen lawsuits.

• *AML Liability Issues May be Best Solved with a Parallel-Track Approach.*—It may be appropriate for future AML policy discussions to proceed on two parallel tracks that differentiate between sites with ARD from underground mine openings versus sites with waste stabilization/removal issues. Parallel track discussions that devote specific attention to developing liability relief mechanisms for less complex sites (primarily sites with waste removal or stabilization needs rather than sites with drainage from underground workings) could bear fruit while continuing to work on the more challenging legal and technical issues at mine sites with acid drainage. This incremental step could accelerate AML cleanup progress at a number of sites and result in significant environmental improvement and meaningful progress toward solving the AML problem.

RESPONSES BY WILLIAM B. GOODHARD, DIRECTOR, RECLAMATION AND ENVIRONMENTAL AFFAIRS TO ADDITIONAL QUESTIONS FROM SENATORS CRAPO AND BOXER

Question 1. Did the mining industry play a material role in the development of S. 1787? If limited, does this represent a lost opportunity to benefit from the expertise brought by the industry to the problem of remediating abandoned or inactive mine sites? Which specific provisions of S. 1787 does the mining industry consider the result of its recommendation to the bill's sponsor?

Response. The mining industry did participate in development of S. 1787 through the Abandoned Mine Lands Initiative, a partnership with the Western Governors Association, and directly with the Senate staff. Throughout the discussions the mining industry worked toward removing inappropriate ownership and control language and suggested self-certification language. The concept of self-certification was not well received and little discussion occurred. This issue was very contentious and it was apparent that the bill would not move forward unless resolved. The mining industry withdrew from discussions focused on expanding remediating parties to include private parties, in the interest of advancing the bill with the intention that "Remediating Parties" would be readdressed later in the process. Unfortunately, this never happened.

Question 2. The legislation before us excludes sites on Federal lands where the government is the remediator and sites under consideration for the superfund program. What does the mining community believe will be the impact on the number of sites qualifying for Good Samaritan?

Response. Exclusion of Federal agencies on Federal lands for impacts for which it is not responsible and sites under consideration for the superfund program clearly limits the number of sites available for voluntary remediation. Certainly many of the more serious sites are located on Federal lands. Limiting the number and these types of sites in this manner will have a direct impact on how broadly Good Samaritan provision is used and limit the scope of our cleanups. Fewer potential sites will mean fewer voluntary cleanups and that translates into fewer water quality improvements. Projects that occur at sites under consideration for superfund could result in improvements in water quality at minimal or no cost to the taxpayers. Should a qualifying "Remediating Party" have the desire to voluntarily fund work that makes an incremental improvement to water quality it should be allowed to do so. Furthermore, allowing voluntary cleanup at these sites does not relieve any legally responsible party of its obligations under the CWA and or CERCLA.

Question 3. This legislation does not provide complete liability protection even under the Clean Water Act. Do you believe that certain parties may need to also apply for a Section 404 permit to undertake a comprehensive and effective cleanup?

Response. Yes, I agree that in many instances remediation activities will require Section 404 permits. Currently, the bill does not provide liability protection for activities undertaken pursuant to section 404. The bill should be expanded to provide such liability protections as broader liability protection will help to further encourage voluntary cleanup efforts.

Question 4. Your experience suggests that the mining industry is engaged in numerous abandoned and inactive mine cleanup projects. Is it appropriate for this legislation to provide a liability shield for government agencies, who already enjoy sovereign immunity in many instances, but not to provide liability protection for potential private Good Samaritans?

Response. No, as written the liability protection stops with the defined "Remediating Party" and does not provide protection for the agents and contractors who will ultimately be responsible for completing the site work. The mining industry strongly believes that the language needs to be expanded to include, at a minimum, the current remediating parties, agents and contractors. For example, the mining industry believes that mining companies which have no legal liability at the site should be afforded liability protection if they are working under an approved permit. The mining industry has the experience and special expertise for addressing many of the environmental problems at these sites. If they or any other industry faces liability for working on these sites then you will lose the benefit of that knowledge and expertise. Furthermore, many of the sites are located in remote areas making access expensive. In these cases, it may be most efficient for a mining company already located in that remote vicinity to address the site.

Question 5. Do you believe that Superfund liability for potential Good Samaritans is an important current disincentive that should be addressed in S. 1787?

Response. This issue was discussed during the hearing and the mining industry is supportive of specific language to be included in the Good Samaritan Bill address-

ing Superfund liability. If you wish to get the broadest possible Good Samaritan cleanup accomplished it should be clarified that Remediating Parties are not liable under any other law for their work at the site, except for those obligations that they have assumed under the terms of their permit. Without clear language granting protection from Superfund, only the non-Superfund sites will be able to be addressed, relegating those sites to much more expensive and drawn out processes.

Question 6. The term "maximum extent practicable" in determining acceptable cleanup levels is used in this bill. Is this too high a threshold? Would it preclude marginal improvements from being made?

Response. The term "maximum extent practicable" is undefined and therefore creates a significant disincentive to remediation activities and will lead to extensive debate over whether the standard is being met in any particular case, with the effect that time will be lost in getting cleanups underway and resources wasted in trying to determine how to proceed. A more workable standard would be "a net improvement in surface water quality" recognizing that partial or incremental improvements in water quality at a specific site may go far toward overall improvement of the water quality in a watershed. It is important to recognize that a series of cleanups can occur under the bill and that "everything" does not have to be taken care of all at once. If we adopt this latter language we will be encouraging incremental cleanups over time, allowing the most important areas to be addressed first and getting cleanups started sooner.

Question 7. What is the mining industry's record in undertaking voluntary cleanups of abandoned or inactive mine sites? Should this experience be used in the development of Good Samaritan legislation in Congress?

Response. The mining industry has spent tens of millions of dollars in voluntary cleanups of AML sites throughout the West. This is documented in the AMLI report submitted to the record at my request at the hearing. It would be shortsighted to preclude further participation by an industry whose successes are already well documented and whose motivation to continue cleanups is high.

Question 8. What principles of SMCRA should be applied to this legislation?

Response. I have no experience with SMCRA and therefore prefer not to elaborate.

Question 9. Would remining of cleanup materials be appropriate for encouraging new Good Samaritans?

Response. I assume by "remining" you mean processing previously mined materials at abandoned sites while undergoing remediation activities. In my written testimony, I encouraged the committee to reconsider remining. With proper liability protections remining could provide an incentive for cleanups to proceed and for defraying the cost of those cleanups. It is clearly in the public interest to keep cleanup costs as low as possible, and allowing remining will help to accomplish this goal. Is the conduct of PRP searches by Good Samaritans appropriate and should it be their responsibility?

Question 10. Is the conduct of PRP searches by Good Samaritans appropriate and should it be their responsibility?

Response. Good Samaritans will be voluntarily funding efforts focused at improving water quality. Conducting PRP searches is not the best nor even a sensible use of these funds. The Good Samaritan will need the current owners permission to do work on a site. Decisions about whether the agencies should identify and pursue PRP's for additional cleanup work is best left with the agencies.

Question 11. How important would a Section 404 permit waiver be to ensuring further Good Samaritan cleanups?

Response. There are instances where a Section 404 permit is necessary to complete a remediation project, therefore, any favorable language, which extends or expands the lands upon which the Good Samaritan Act can be used and limits the exposure of the Remediating Parties will increase the number and scope of sites potentially available for voluntary cleanups to occur.

Question 12. Is the bill's preclusion of Federal agencies cleaning up Federal lands a problem?

Response. This preclusion will limit one of the largest landowners from voluntarily cleaning up its own sites, presumably sites for which it does not have responsibility. As long as the agency is not responsible for the site it should be allowed to do a voluntary cleanup that will improve water quality.

Question 13. Do you agree with the provision in S. 1787 that would sunset the program after 10 years? If not, what would you recommend?

Response. Based on EPA's testimony that it will take 3 years to promulgate regulations 10 years is not a sufficient time. There does need to be a point where Congress can examine whether or not the program is working, but of course they are always free to do so. Regardless of the timing, providing for a formal examination or review of the Act could result in changes in the Act that may further improve upon the program by drawing upon the experience gained.

ABANDONED MINE LAND INITIATIVE BY DEBRA W. STRUHSACKER, ENVIRONMENTAL AND GOVERNMENT RELATIONS CONSULTANT AND JEFFREY W. TODD, SENIOR CONSULTANT, SCHAFER & ASSOCIATES, INC.

EXECUTIVE SUMMARY

Introduction

Abandoned hardrock mines have long been an issue of concern to industry, government and the public. The majority of AML sites are historic, and some are in mining districts with features included on the National Register of Historic Places. The "typical" site can be described as an underground mine which began operation in the mid to late 1800's or early 1900's. Generally, but not always, a mill was associated with these historic operations.

The technologies employed at these historic sites were refined for production efficiency over the years, but the management of air emissions, water discharges and wastes were not radically changed until the enactment of environmental legislation in the 1970's. Mining in a number of important U.S. mining districts commenced more than a century before the passage of these environmental laws, and a number of abandoned mines in some of these districts now present safety and environmental problems.

Environmentally responsible mining is rooted in the passage of the National Environmental Policy Act of 1969 (NEPA) and the program-specific environmental laws and land management acts that followed. Many Western states enacted state-level mining reclamation legislation over the last 25 years. These State laws include reclamation bond requirements to ensure that today's mines do not become tomorrow's unreclaimed AML sites.

In conjunction with the Abandoned Mine Land Initiative (AMLI), a partnership between the National Mining Association (NMA) and the Western Governors' Association (WGA), NMA recently undertook a survey to identify successfully reclaimed abandoned and inactive hardrock mines in WGA states. This investigation on successfully reclaimed AML sites had the following objectives:

- Compile data available from industry sources and State abandoned mine programs on successfully reclaimed AML sites in each WGA state;
- Obtain information on AML reclamation success stories to showcase the effective application of modern environmental and reclamation technology at hardrock AML sites; and
- Determine the regulatory, legal, and institutional policy issues that are facilitating or impeding progress on solving the AML problem.

The types of reclamation and remediation efforts at the sites included in this survey are typical of the accomplishments being made by State AML programs and industry. However, it must be emphasized that this survey was conducted over a short timeframe and was not intended to be all inclusive. Based on the information gathered to date, it is apparent that there are hundreds of examples of State and industry AML projects involving reduction of safety hazards and environmental improvements that could be included in this study.

SUMMARY OF SURVEY FINDINGS

The survey findings listed below are based on an analysis of the characteristics of the reclaimed AML sites in Appendix A, and on comments made by State AML program personnel and mining industry sources contacted during the survey. The survey gathered information from approximately 95 representatives from the mining industry and AML programs in WGA states on 83 reclaimed AML sites. The following summarizes the key findings from this survey.

- *Both the Western states and the mining industry have achieved measurable progress in addressing the AML problem.* This survey 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 from mining companies have been responsible for reclaiming and remediating many AML sites. Mining companies have spent tens of millions of dollars in voluntary on-the-ground cleanups and abatements of AML sites. AML policy discus-

sions often dismiss or fail to recognize the progress made. Instead, the debate emphasizes the large but poorly defined dimensions of the AML problem.

The Term Site Has Different Meanings and Must be Defined Specifically in Each Forum.—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 consolidation abatement 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.

• *Safety hazards are the dominant AML problem, and most sites pose no problem at all.*—According to the Mineral Policy Center, 97 percent of the abandoned sites it identified were characterized as reclaimed and/or benign, landscape disturbances or safety hazards. The survey indicates that abatement of safety hazards are generally less complex and less costly than environmental remediation actions. The WGA recently indicated that the majority of abandoned mines (greater than 80 percent) create neither environmental nor immediate public safety concerns. These sites are either benign or manifest a landscape disturbance of some variety.

• *The impediments to voluntary cleanup are twofold.*—First there are the legal impediments, or risks of incurring new legal liability for taking voluntary action at an AML site. Second, there is the institutional impediment, which consists of the systematic one-size-fits-all or command-and-control approach taken by regulatory agencies to public safety and environmental issues that inhibits voluntary, cooperative action at AML sites.

• *The most significant legal barrier to voluntary cleanup at AML sites is the potential for incurring Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) liability.* Many high priority AML sites will not be remediated or reclaimed voluntarily, given the attachment of CERCLA liability to "actual control" activities.

• *The Clean Water Act (CWA) creates another legal impediment to voluntary AML cleanups.*—Given the CWA's broad legal jurisdiction, AML abatement, remediation or reclamation could easily be subject to CWA permitting requirements in the event of a discharge. The current CWA liability scheme discourages cleanup of AML sites, even if the cleanup would significantly reduce water pollution by controlling and treating discharges. This impediment is particularly apparent in cases involving the remediation of acid rock drainage (ARD) from underground workings.

• *AML abatement, reclamation, and remediation solutions must be site specific.*—Just as no two mines are identical, each AML site has unique characteristics based upon site-specific physical conditions, ownership patterns and history. Therefore appropriate solutions to problems at AML sites must be determined on a site-by-site basis. Command-and-control regulatory policies that require strict compliance with all environmental standards, particularly one-size-fits-all water quality standards, have forestalled State and industry cleanup projects that would produce significant environmental benefits but do not meet specific numeric water quality standards. A new policy approach is needed to recognize the appropriateness of site-specific measures and to facilitate partial and incremental cleanup efforts by protecting participating parties from exposure to CWA liability.

• *The regulatory approach in South Dakota has facilitated significant AML cleanup.*—A streamlined regulatory environment that has minimized legal proceedings and protracted administrative and regulatory reviews and associated expenses in South Dakota has resulted in maximum resource expenditures for industry-sponsored reclamation and remediation projects. This streamlined approach is critical and appropriate for industry-funded cleanups that involve no expenditure of public resources. The South Dakota regulatory model may be the easiest to replicate in states with an omnibus agency with jurisdiction over water quality, air quality, hazardous and solid waste, and mine reclamation.

• *There are several sources of potential funding for the cleanup of abandoned mine sites.*—Under the umbrella of the "Clean Water Action Plan", several Federal agencies have requested funds to engage in abandoned hardrock mine cleanups. Under certain circumstances and subject to certain constraints, funding for AML remediation projects also may be available under the Clean Water Act, section 319; Title IV of the Surface Coal Mining and Reclamation Act; and section 206 of the Water Resources Development Act of 1996. Several states have established their own funding mechanisms to further their involvement in voluntary remediation projects.

• *A funding information clearinghouse is needed.*—It is difficult to assess the adequacy of available AML reclamation and remediation funding when the sources are located in so many different Federal programs. Industry, other private and semi-

private parties, States, and the Federal Government would benefit from the creation of a data bank or cleaninghouse that identifies and describes available resources.

• *There are numerous examples of remining, including the processing of existing mine wastes and the reprocessing of tailings and previously leached materials, in which mining companies reclaimed and remediated AML sites in and near active mining operations through synergism between the active mine/mill and the AML site.*—Remining capitalizes on mining industry expertise, equipment, personnel, and existing waste disposal and mineral processing facilities and infrastructure to reclaim and remediate the nearby AML site. There are a number of AML sites where remining has occurred that have achieved significant environmental improvements. However, concerns about potential CERCLA and CWA liability attaching have inhibited mining industry activity in historic mining areas. Remining could contribute more to AML reclamation and remediation if CERCLA, CWA and other liability and institutional barriers were removed.

CONCLUSION

Western states and the mining industry have achieved measurable progress in addressing the AML problem. The progress has occurred in spite of significant legal and institutional barriers and disincentives and funding constraints. The threat of CWA and CERCLA liability pose serious legal impediments to both industry- and state-led hardrock AML abatement, reclamation, and remediation efforts. Similarly, institutional preferences for command-and-control approaches to public safety and environmental issues create a system in which incremental improvements at AML sites are foregone, because unattainable standards attach to states and miners who, in good faith, attempt reclamation and remediation of sites long since abandoned by an unidentifiable entity. The absence of a well coordinated information source on available funding mechanisms is also hindering state-led AML cleanup efforts.

1.0 INTRODUCTION

1.1 The History

When James Marshall reached into a side channel of California's American River to pick up a glittering nugget on a cold January day in 1848, he unknowingly started the first hardrock mining boom in the American west. Mining districts organized and flourished and technology advanced rapidly. Names such as Coloma, Virginia City, Deadwood, Butte, White Pine, Bisbee, Wallace, Leadville, Telluride, Creede and a myriad of others became known throughout the country. Advancements in processing technology left sluices, arrastras, and stamp mills as historic artifacts. Although there were fits and starts, booms and busts, hardrock mining grew steadily into a powerful industry over the next 150 years, becoming a keystone in the settlement of the American west and in the development of the U.S. as a world-class industrial nation.

However, like any growing industry with a rich history, mining left its mark. Prior to the enactment of stringent local, state, and Federal environmental laws and regulations beginning, more or less in the early 1970's, mining was conducted in accordance with the existing laws that reflected the priorities of the time. The wastes produced by mining and ore processing—waste rock, mill tailings, and smelter slags—were deposited adjacent to the operating facilities or directly down-gradient in the nearest valley or low spot, much as domestic wastes of the time were sent to the nearest moving water body. Gravity was considered the great equalizer—the best friend of miners and other industrial waste generators of the time. Once the commercial ore was exhausted or market prices fell below the cost of extraction and processing, operators commonly abandoned sites with little, if any, thought to reclamation or reuse of the land.

In many settings, these old mine wastes remain vulnerable to wind and water erosion and, with the right geology and geochemistry, they generate acid and leach heavy metals. Throughout the west, there are streams in the vicinity of old mines with acid- and metals-contaminated waters draining from mine opening and mine waste piles. Unsecured mine openings and pit highwalls at old mines also create a public safety hazard—especially as suburban expansion of many western cities encroaches upon previously mined areas.

1.2 Previous Studies of Abandoned and Inactive Mines

There is widespread agreement amongst all stakeholders—industry, government, and industry critics—that correcting the environmental and public safety problems created by old mines is an important goal. Various entities have undertaken a number of studies in the last several years to define the problem and to examine policy issues affecting cleanup and reclamation of old mines.

In the early 1990's, the Western Governors' Association (WGA) conducted a detailed study and evaluation of the environmental and public health and safety aspects of abandoned and inactive mine (hereinafter referred to as "Abandoned Mine Land or AML") sites as well as the policy options for addressing these AML problems (Western Interstate Energy Board, 1991). Shortly thereafter, in 1994, the Colorado Center for Environmental Management (CCEM) and the U.S. Bureau of Mines (now defunct) released a report which extended the findings of the earlier WGA study (CCEM and USBM 1994).

The debate regarding the extent, nature, and impacts of AML sites continued to gain momentum in the mid-1990's with significant discussion between the hardrock mining industry, State and Federal regulatory agencies, and the WGA. The issue of AML sites garnered considerable notice and concern at the national level in discussions relative to changes in mining laws and national mining regulatory strategies. Several reports were generated. One of the most recent, CCEM (1998), presents an excellent discussion of the barriers to and incentives for voluntary cleanup of AML sites.

Also in the mid-1990's, the AML issue began to play an important role in influencing public dialog about proposals for new mines. For example, in a recent effort to stop the proposed Crandon Mine in Forest County, Wisconsin, anti-mining activists in Wisconsin pointed to environmental problems at old mines to justify mining moratorium legislation. In this context, AML sites create a challenging political and public opinion problem for the mining industry due to the effective manner in which anti-mining activists exploit environmental issues at old mines to create public concern about new mining proposals.

Recognizing the importance of developing a coordinated program to help solve the AML problem, the mining industry, through the National Mining Association (NMA), began a dialog with the WGA. In 1997, the WGA and the NMA entered into a Memorandum of Agreement for the Abandoned Mine Land Initiative (AMLI), the first cooperative effort between industry and government to address the AML problem. Using seed money from the mining industry, AMLI is designed to consolidate financial resources and technological expertise in order to facilitate the identification and evaluation, and then promote the abatement remediation and reclamation of hardrock AML sites. This initiative is discussed at length in Crozier (1997).

1.3 AMLI Study Purpose and Scope

One of AMLI's first goals is to obtain information on successfully reclaimed AML sites in WGA states. In March 1998, the NMA retained the services of the authors to compile data available from industry and WGA State AML programs on reclaimed or remediated inactive and abandoned sites and to prepare this report. The specific goal of this effort is to illustrate, with examples, that reclamation and remediation of AML sites is being accomplished effectively and efficiently by industry and the states using modern technology within the limitations of available resources and laws that create unintended barriers and disincentives.

Within each WGA state, there are excellent examples of AML reclamation by the appropriate State agency, by industry alone, and by cooperative efforts between the states and industry. While the authors readily acknowledge that Federal land management agencies also have conducted significant reclamation and remediation of AML sites within their jurisdictions, evaluating these sites is beyond the designated scope of this investigation. In addition, cleanups of AML sites listed on the National Priorities List (NPL) and under the direct jurisdiction of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) were not reviewed. However, some sites were included at which the implied or potential threat of becoming an NPL site triggered the cleanup action. Also, several sites at which AML cleanups were conducted as a CERCLA removal action (as distinguished from a CERCLA remedial action) were considered.

1.4 Methodology and Limitations

Time and resource constraints limited this investigation primarily to telephone inquiries and interviews and searches of selected Internet resources and publications databases. Since both investigators reside in states (Nevada and Colorado) with long mining histories, active mining operations, and similarly active State AML programs, personal visits to those AML program managers were conducted. A meeting was also held with Wyoming AML program personnel because of this agency's accomplishments and well-funded AML efforts.

Data and information regarding the sites investigated were consolidated in a simple data base arranged as a single page per site for quick and efficient review. This data base was designed for MS Access for PC and FileMaker Pro for the Mac platform. The information data base format was approved by NMA and WGA personnel

prior to conducting the investigation. The data base was not designed to provide detailed technical information for each site. Likewise, this investigation is not an all inclusive inventory of the entire universe of successfully reclaimed AML sites. This is an important distinction because it became quickly apparent during the investigation that there are hundreds of examples of State and industry AML projects involving reduction of safety hazards and environmental improvements that could be included in the data base. If certain sites were excluded, it was just a matter of logistics given the short time frame of this study. For instance, discussions with some state AML agencies revealed that while there might be 50 or more completed AML actions in that state, time should limit inclusion to only a small percentage that represent elements of the others. Likewise, numerous industry projects were not included simply because designated contacts/managers were unavailable in time. Indeed, the listings in this report easily could be tripled or beyond given additional time.

The discussions in this report and the conclusions and recommendations of this investigation are based on the data and information included in the 83 site data base forms in Appendix A and on the discussions held with the State and industry representatives listed in Appendix B. The sites in Appendix A are sorted alphabetically according to State and project within each state. As discussed, each data sheet is a stand-alone representation of a single project, or in a few cases, of a larger group of projects with similar characteristics. Many of the contacts listed in Appendix B are also shown in the "Comments" data field for each site and are useful for future follow-up or for obtaining photographs, additional detailed information, and information for possible future site visits if desired.

1.5 Definitions

At first glance, the majority of terms used herein are well-known to those familiar with the hardrock mining industry and the AML issue. However, in conducting this investigation, it became evident that there are some subtle and not so subtle differences in the way in which these terms are used. Therefore, the following terms and definitions apply to this investigation:

• *Site.*—A specific "project." A project can be a district, area, property, or ownership block and can have multiple "features" such as adits, shafts, tailings facilities, and smelters, singly or collectively. However, a project also can entail, for example, closure of a single feature as at Wyoming's Jesse Project. The important point is that a "one-size-fits-all" definition for an AML site is not appropriate.

• *Abandoned.*—A site with no private owner of record typically on land managed (and often owned) by a Federal, state, or local government agency. These sites also have been referred to as "orphaned".

• *Inactive.*—A site on patented/private land which, in contrast to an abandoned site, has an owner or owners of record. However, inactive mine owners are not typically the entity involved in the past mining activities that created the safety hazards or environmental problems. Moreover some owners of inactive mines do not have the financial resources necessary to correct the safety and environmental problems.

• *Abatement.*—The process of reducing public safety risks by sealing mine openings or other measures to secure safety hazards (Crozier, 1997).

• *Reclamation.*—The process of returning a site to a beneficial post-mining land use (Crozier, 1997).

• *Remediation.*—The process of improving environmental conditions and reducing environmental risks (Crozier, 1997). The terms "remediation" and "cleanup" are used synonymously in this report.

• *AML Improvement Project.*—A collective and inclusive term meaning any combination of abatement, reclamation, or remediation measures that address one or more safety or environmental problems at an AML site.

• *Remining.*—The process of concurrent mining at an active mine and AML abatement, reclamation, and remediation at an adjacent or nearby AML site. Remining is a synergistic use of industry resources that benefits the environment with little or no expenditure of public resources, and reduces the AML owner's liability exposure. Some remining projects use existing, permitted facilities to process or reprocess previously mined materials such as mine wastes, waste rock, unused ore stockpiles, heap leach ores, tailings, contaminated soils, or smelter wastes at an AML site. More commonly, remining projects achieve AML abatement, reclamation, and remediation as a necessary consequence of new mining activity, as a feasible undertaking at an active mine, or as a voluntary measure at an adjacent or nearby AML site.

• *Removal Actions.*—The process of removing and relocating previously mined materials to a mine waste disposal facility.

• *In Situ Actions.*—The process of regrading, covering, capping, or other measures to stabilize previously mined materials in place. In situ actions performed with resources from a nearby active mine are a form of remining.

2.0 AN OVERVIEW OF THE AML PROBLEM

2.1 What is an AML Site

Exactly what is an AML site? This question has arisen numerous times from a variety of interested parties with varied backgrounds. As discussed previously, there is no pat answer, no standardized description. An AML site can be as small as a single shaft or open stope or as large as a multi-thousand acre district. An AML site can be owned by an individual or multiple persons, a large corporation with an active operation nearby, a small miner, a real estate developer, a bankrupt firm, a non-profit organization, an unknowing heir, an historical preservation group, the public at large (managed by a local, State or Federal Government agency), or any combination or permutation thereof. However, there are some generalities that apply to most (but not all) AML sites.

The majority of AML sites are historic, and some are in mining districts with features included on the National Register of Historic Places. The "typical" site can be described as an underground mine which began operation in the mid- to late-1800's or early 1900's. Generally, but not always, a mill was associated with these historic operations. Milling may have started as a stamp operation and then been converted to a cyanide mill (after 1893) or a flotation mill where sulfides were present. Prior to approximately 1900, and even thereafter for some years, mill tailings were piped directly down-gradient to the nearest low point—usually a stream-course or moving water body. Likewise, waste rock materials were deposited near and directly down hill of the mine openings.

In the early 1900's, constucted tailing impoundment technology began to be used in the industry, particularly where water was limited or scarce. These impoundments were constructed of wooden-cribbed dam faces and wooden decants and launder systems which allowed both process water and tailing to be diverted directly to the stream under overload circumstances. Although these impoundments provided a degree of environmental protection while active, they soon failed when operations became inactive or were abandoned.

2.2 The Temporal Relationship Between AML Sites and Environmental Laws

These technologies certainly were refined for production efficiency, but generally were not radically changed until the enactment of environmental legislation and regulations in the 1970's and early 1980's. As discussed in Todd and Struhsacker (1997) and WGA (1998), mining at many metallic mining districts throughout the country began well before the advent of environmental laws and regulations. Nearly all of the environmental laws and regulations affecting metallic mining were enacted since about 1970. Mining at a number of important U.S. mining districts commenced more than a century before the enactment of these environmental laws, and were governed by existing laws that often favored development.

What today is regarded as environmentally responsible modern mining is rooted in passage of the National Environmental Policy Act of 1969 (NEPA), the Clean Air Act of 1970, the Clean Water Act of 1972, Federal Land Policy and Management Act of 1976, and other Federal laws. Many of the WGA states enacted state-level mining reclamation legislation during this same period (for example, the Montana Metal Mine Reclamation Act of 1971, the Colorado Mined Land Reclamation Act of 1976, the Idaho Surface Mining Act of 1977, and the South Dakota Mined Land Reclamation Act of 1982). These State mining laws include reclamation bond requirements that are intended to ensure that today's mines do not become tomorrow's AML sites.

Mine, mill, and smelter sites that closed, became inactive, or were abandoned prior to the enactment of Federal and State environmental laws were grandfathered and not required to come into compliance with the newly passed laws, or to be reclaimed or remediated in any fashion. In addition, a few sites became inactive or were abandoned after implementation of environmental regulation because of insolvency and bankruptcy. Thus, a variety of public safety and environmental problems remain unattended at many of these sites.

2.3 How Many AML Sites Are There

The WGA recently contacted State AML programs to obtain information on the number of AML sites in each state. This information gathering exercise confirmed earlier AML inventory efforts that show that AML sites are spread unevenly throughout the west and that the confidence level of the data in the AML databases varies among states (WGA, 1998). The completeness of AML inventories is quite

variable. To complicate matters even further, each State defines an abandoned mine slightly differently, making nation-wide compilations difficult if not impossible. Generally speaking, coal producing states have access to reclamation funds collected as a tax on coal production authorized by SMCRA, and therefore have more comprehensive AML inventories than those states with no or minor coal mining. (It should be noted that the SMCRA inventory process, especially for coal AML sites, was costly and inefficient and should not be used as a model for any future hardrock AML inventories).

Although the desire for a definitive picture of the AML problem in the western U.S. is understandable, the unique and site-specific character of AML sites makes this a difficult if not impossible task. As discussed in Chapter 1, there is no one-size-fits-all definition of an AML site. Each site must be defined taking into account site specific factors including, but not limited to, climate, terrain, geology, hydrology, types of AML features, history, and ownership. It thus makes sense for each State to use a definition of AML site best suited to the conditions within that state.

There are just too many variables at AML sites to pigeonhole, categorize and neatly inventory the universe of hardrock AML sites. Efforts to develop a comprehensive western regional AML inventory have reached a point of diminishing returns and will contribute nothing more to solving the AML problem.

This investigation of successfully reclaimed AML sites shows that significant AML abatement, reclamation, and cleanup progress is being made by both State agencies and the private sector without a comprehensive AML inventory, and suggests a new AML paradigm is needed which recognizes it is not necessary to have a complete AML inventory prior to initiating AML reclamation and remediation programs. This finding validates the recent recommendation of the WGA's Abandoned Mine Inventory Guiding Principles Group (WGA, 1996). This group of diverse AML stakeholders including representatives from the mining industry, citizen and environmental groups, and State and Federal regulatory agencies developed a set of principles to guide future AML inventory efforts. One of the group's recommendations is that future inventory efforts should be viewed as an ongoing effort that can proceed concurrently with on-the-ground AML abatement, reclamation and remediation.

2.4 Typical Problems at AML Sites

According to the WGA's recent AML data compilation, a majority of abandoned mines (greater than 80 percent) create neither environmental nor immediate public safety concerns (WGA, 1998). Of those sites at which problems exist, safety hazards are the dominant problem, although some AML sites have both safety and environmental issues.

Other recent investigations corroborate that most hardrock AML sites pose no problems at all, and that the bulk of AML problem sites pose public safety hazards rather than environmental risks. For example, The Mineral Policy Center's (MPC's) 1993 AML report, "Burden of Guilt" speculates that there are 557,650 hardrock AML sites (Lyon, 1993). Although the mining industry is highly critical of this report and the purported number of AML sites, the MPC's characterization of the nature of the AML problem (Table 2-1) is nonetheless consistent with the observation that most AML sites are not problematic and that landscape disturbance and safety hazards are the most common problems at AML sites.

Although each AML site is unique, some generalizations can be made about AML safety, landscape disturbance (i.e., reclamation), and environmental issues. Most AML sites have one or more of the following problems:

- unrestricted and hazardous openings (shafts, adits, portals, stopes, subsidence features, exploration "dog holes");
- dangerous highwalls and open pits;
- unsafe structures and dilapidated buildings (many of which are of historic significance);
- physically unstable or erodible waste rock dumps, tailings deposits, and smelter wastes;
- acid rock drainage (ARD) from mine openings, waste rock dumps, and tailings deposits;
- surface and ground water quality degradation from sedimentation, ARD, and metals releases;
- blowing dust problems from unreclaimed tailings piles;
- contaminated soils;
- chemical contamination from processing reagents such as cyanide; and
- surface disturbance that detracts from the aesthetic or natural appearance of the site.

The sites listed in Appendix A had one or more of these problems and are representative of the ways in which the states and industry have addressed safety, landscape, and environmental concerns at AML sites.

Table 2-1.—Mineral Policy Center's Burden of Gilt Report Characterization of U.S. Abandoned Mines[a]

Category	Assumed Number of Sites	Percent of Total Sites
Reclaimed and/or Benign	194,500	34.8
Landscape Disturbance	231,900	41.6
Safety Hazard	116,300	20.9
Surface Water Contamination	14,400	2.6
Groundwater Contamination	500	0.089
Superfund	50	0.0089
Totals	557,650	100.8

[a] Modified after Burden of Gilt, pages 6 and 31, Mineral Policy Center, June 1993.

3.0 SURVEY FINDINGS: STATE AND INDUSTRY PROGRESS IN ADDRESSING AML PROBLEMS

3.1 Types of Sites Being Improved

Consistent with the findings of the recent AML investigations discussed in Chapter 2, this investigation found that the majority of AML sites reviewed required abatement of physical safety hazards (see Appendix A). At many of these sites, closure of mine-related openings such as adits, shafts, portals, subsidence features, and ponds constituted the only action required. One of the best examples of this is the Central City area-wide site in Colorado where over 1000 features have been abated in some manner. Of these 1000 features, approximately 950 are vertical openings (each of these features may be designated as an individual "site" by others). Likewise, the Nevada Statewide Program has abated over 4500 such features either directly through the State AML program or in conjunction with private land owners and claim holders.

A smaller percentage of the sites examined in this survey required both abatement of safety hazards and site reclamation and/or remediation activities. Typically, actions at these sites are larger scale and may involve some or all of the following measures: securing mine openings; removing or stabilizing buildings, foundations, or other operational structures; minimizing highwalls; reducing unsafe slopes on waste rock dumps and dredge tails; recontouring and revegetating (i.e., reclaiming) disturbed land; and remediating environmental problems caused by mine, mill and smelter wastes and mine drainage.

Generally speaking, State AML programs are principally involved with abating AML safety hazards whereas industry efforts typically address AML environmental as well as safety problems. The predominance of state-sponsored safety closures largely reflects restrictions in the way in which SMCRA reclamation funds can be used. The remainder of this chapter presents some generalizations about the various safety abatement and environmental remediation methods typically used at AML sites.

3.2 Abatement of Safety Hazards

3.2.1 Methods for Securing Mine Openings

There is no prescriptive, one-size-fits-all means for closing or otherwise abating public safety hazards at AML sites. Numerous techniques and methods are being used depending upon the type of feature, public accessibility, land/claim owner or manager, location and general environment, presence of bats, historic importance of the feature, and funding availability and sources. Again, as with all facets of AML site reclamation/remediation, each site and each feature requires abatement measures tailored in response to site-specific conditions.

The most prevalent means of closing mine openings throughout the WGA region is by partial or complete backfilling. If heavy equipment is available at the site or at nearby active operations, backfilling may be expedient. Backfilling combined with a plug, panel, or cap of some sort also is popular in a number of states. Such seals can be concrete, in situ or as precast panels, wood, steel, or sprayed/pumped polyurethane. In several instances, expensive and sophisticated engineered bulkhead plugs have been installed in adits and portals where mine drainage is active. Such bulkheads allow control and monitoring of mine water. In some instances, as in the

case of the Keystone Mine in Colorado, these bulkheads direct mine drainage to an active water treatment facility.

Gates, doors, drain doors, and grates also are in widespread use by both State AML agencies and industry. Gates and doors can be installed inexpensively, and are appropriate in more remote areas where access to heavy equipment is limited. Grates and grated gates are used widely to close adits known to be used by various bat species. It has been long known that bats will inhabit abandoned or inactive mine openings. Significant research (Pierson, et al., 1991) at Homestake Mining Company's McLaughlin Mine in California documented and substantiated such use and initiated industry-wide awareness of mine closure and bat habitat issues. However, as discussed below, developing measures to close mine openings that do not preclude use of the mine by bats sometimes creates challenges and resource conflicts.

The least expensive, and in some areas, the most widely used method of safety hazard abatement is simple fencing and signage. The State of Nevada AML program minimizes public safety problems at AML openings through the use of fencing and warning signs. (The Nevada program also features an aggressive public outreach campaign, "Stay Out and Stay Alive", to educate the public about the dangers associated with mine openings. Arguably, fencing is easily breached or destroyed by the curious or those seeking entrance. However, fencing is inexpensive (approximately $175 per feature in Nevada) and easily maintained or reinstalled. Given the limited availability of AML funds, many more sites can be secured with fences than backfilled, sealed, or gated. Nevada AML program personnel make the case that the majority of closure techniques may fail over time and that most can be breached by those with the will and means to gain entrance. In addition, issues related to historic preservation and bat habitat become moot if the features are left undisturbed except for fence installation.

3.2.2 Issues and Problems Associated with Safety Abatements

It became quickly apparent during this investigation that several specific issues face both state AML agencies and private parties when closing mine openings or removing/stabilizing mine and mill structures at AML sites. These issues involve historical aspects of the site or feature and utilization of specific features by bat species. A third issue involves the long-term integrity and stability of closures.

Historical preservation has become an extremely important and sensitive issue in implementing safety abatement programs involving public or private funds. Commonly, AML sites are located within or adjacent to historic mining districts with rich histories. In some instances, mine or mill sites may have distinct architectural structures remaining such as headframes, loadouts, or step-design buildings which contribute to the historical value of the particular site. Local stakeholders, State historic preservation officers (SHPOs), Federal land management agencies (if Federal lands are involved), and the general public have interests in maintaining historical integrity of such sites.

Thus, what would be (in most cases) a relatively simple safety abatement can become an expensive, complex and, occasionally, a highly contentious public issue if a site is within an area of historical importance or on its own merits may qualify for historical designation.

During this investigation, 15 sites (see Appendix A) were found where historical/cultural resources issues were considered "obstacles" to efficient closure. However, in each case, State agencies and private parties worked through the process to obtain consensus for the closure action. As evidenced by Colorado's historically complex Central City area wide site (Appendix A), the Colorado Division of Minerals and Geology (DMG) has been particularly effective in integrating historical aspects of features into abatement programs.

As discussed above, preserving bat habitat in mine-related openings has become an issue complicating some AML abatement efforts since the beginning of the 1990's. Of the sites in Appendix A, 11 had definitive bat habitat which required specifically designed closure techniques. Grates and bat gates which allow free movement of bats into the mine openings but exclude larger animals and humans are the most common forms of closures in these instances. Construction and installation of bat gates is expensive when compared to other closure techniques. For example, the bat gates installed at the Nevada Golconda Tungsten site (private funding) cost approximately $1000 each. In comparison, the State of Nevada AML program abates all openings with fencing which costs approximately $175 per mine opening, causes no disturbance to the openings proper, and has no impact upon bat usage of the underground mine.

Although the jury remains out, most if not all safety abatements other than complete backfill, while generally effective in the short-term, may not withstand the test

of time. Certainly, wooden structures such as some doors, gates, and panels will deteriorate over time even if properly treated. Likewise, concrete and steel, while lasting significantly longer, also will deteriorate. Minor subsidence, changes in mine water quality and quantity, and general exterior and internal mine climatic factors can cause bulkheads, plugs, and seals to lose integrity and efficiency.

Vandalism in its varied forms and styles is anathema to closure structures, agencies, and industry. Human will-power, coupled with the right equipment, can breach all closures including concrete panels, bulkheads, and partial backfills, with the possible exception of total backfill. Therefore, to be effective in the long-term, safety closures need to be monitored for structural integrity on a regular basis. Indeed, the majority of the sites in Appendix A which include safety closures are monitored to varying degrees. However, the future duration of such monitoring beyond 3 to 5 years is unknown even to the agencies and firms conducting the inspections, and will depend to a large degree upon availability of funds and personnel.

3.3 Remediation of Environmental Problems

3.3.1 Characteristics of AML Sites with Environmental Problems

Under the broad definition of the term "remediation" used in this investigation, 63 of the sites listed in Appendix A have been or are undergoing remediation actions to address environmental problems. A number of these remediated sites also include significant abatement activities.

Interestingly, of these 63 remediated AML sites, 43 have been (or are being) done by industry and funded, in large part, with private capital.

Environmental cleanup problems at the AML sites listed in Appendix A typically were due to contaminant releases or the potential for such releases from mine wastes to the environment. Releases of sediments, metals, and ARD to surface waters and groundwater present the largest issues at these sites. Wind-blown tailings were problematic at several of the sites examined. A few of the identified sites also had contamination or potential contamination due to the presence of non-mining wastes and chemicals. Typically, the non-mining and chemical wastes were materials used in mineral processing and equipment maintenance. Some of these non-mining and chemical wastes may be regulated as hazardous (i.e., RCRA Subtitle C wastes) and require special, offsite disposal or treatment measures.

Although environmental problems at many of the AML sites in Appendix A were derived directly from the interaction between the environment and aboveground mine wastes, problems at several of the sites were due to contaminated drainage emanating from underground mine openings. Contaminated mine drainage typically has a low pH (i.e., is acidic) and contains dissolved metals in concentrations harmful to aquatic life and other beneficial uses of surface water. Mine openings with contaminated drainage constitute a subset of AML remediation problems and represent some of the most technically challenging AML sites to remediate. Moreover, parties involved with remediation efforts at these sites potentially face complex regulatory and liability issues. The technical challenges; associated with remediating contaminated drainage from mine openings is discussed in more detail below. The legal and regulatory issues surrounding these sites are discussed in Chapter 4.

3.3.2 Typical Environmental Cleanup Measures

Regardless of the nature or severity of the environmental problem(s) an AML site, the survey results indicate that viable solutions require a site-specific approach. The methods used for source control and remediation of the sites in Appendix A are designed in response to the climate, terrain, geology, mining features, and other factors at each site. The need for site-specific solutions to AML problems is analogous to the need for site specificity in designing mine plans and reclamation measures for active mines. However, from site to site, there are some general similarities in approach to AML environmental remediation, and it is possible to make some generalizations about the types of environmental cleanup measures commonly used.

The remediated sites in Appendix A include removal actions, repository actions, and in situ actions. Removals have caused the mine wastes to be completely or partially removed from the initial deposition area to an active, permitted facility. (In some cases, removal actions involve remining in which the previously mined materials are processed or reprocessed at an existing modern mill or heap leach facility. (Remining is discussed in detail in Chapter 5). Repository actions involve consolidating and moving the wastes to a new, engineered mine waste repository that has been specifically designed and built as a remediation measure to contain the old mine wastes. In situ actions stabilize and reclaim the wastes in place. As per the definitions in Chapter 1, all removal actions, and those repository and in situ actions using equipment/personnel from a nearby active mining operation are considered remining.

Removal actions, repository actions, or a combination of the two were typically used to remediate sites where mine wastes were in contact with surface water (including wetlands) or had a demonstrated impact to groundwater. While expensive, removal and repository AML remediation actions were usually technically straightforward. Of the sites in Appendix A, 23 involved repositories, 29 involved in situ actions, five involved removal actions, and two involved a combination of remedial actions Table 3-1). All of these AML remediation actions have improved the landscape and environmental conditions at each site.

If the source of contaminant release is fine-grained wind-blown tailings only, remediation actions many times are characterized by in-situ reclamation. Multiple tailings impoundments may (or may not be) consolidated and surfaces stabilized by capping and vegetating. In some instances, particularly where radionuclides are an issue, a multi-media cap followed by placement of a rock cover on the surface may be the remedy of choice.

Table 3-1.—Remediation Actions at AML Sites in Appendix A

Site	Action	Funding Source
AZ—Stockton Mill	Repository	Private
CA—Buchanan Mine	In situ	Private
CA—Valley View Mine	In situ	Private
CO—Alta	In situ	Private
CO—Capitol Prize	In situ	Private
CO—Crystal Hill	In situ	Private
CO—John Reed Mine	Removal	Private
CO—Keystone Mine	In situ	Private
CO—Rawley Mine and Tailings	Repository	Private
CO—Rico	In situ	Private
CO—Sunbank	In situ	Private*
CO—Sunnyside Mine and Tailings	In situ	Private
CO—Upper Chalk Creek/Mary Murphy	Repository	SMCRA, 319 et al
ID—Alta Mine	Removal	Private
ID—Cataldo Flats	Repository	Private
ID—Wagontown Placer	In situ	Private
MT—Black Pine	In situ	Private
MT—Blackfoot Tailings	Repository	SMCRA
MT—Brooklyn Mine	Repository	SMCRA, USFS
MT—Charter Oak Mine and Mill	Repository	SMCRA
MT—Corbin Flats Tailings	Repository	Private
MT—Curlew Mine	Repository	SMCRA
MT—Empire Mine	Repository	SMCRA
MT—Glen Tungsten Mill	In situ	SMCRA
MT—Golden Messenger Mine and Mill	In situ	SMCRA
MT—Joslyn Street Tailings	Repository	Private**
MT—Lower Tenmile Mill	Repository	EPA
MT—Maxville Tailings/Londonderry	Repository	SMCRA
MT—McLaren Tailings	In situ	Private
MT—Mike Horse Mine	Repository	Private
MT—Park Mine	In situ	SMCRA
MT—Piegan Gloster	Repository	SMCRA
MT—Pony Mill	In situ	Private
MT—Red Water	Repository	EPA
MT—Stillwater Chromium Tailings	Repository/In situ	Private
MT—Vosberg	Repository	SMCRA, USFS
NV—Alligator Ridge Project	In situ	Private
NV—Buckhorn/Red Springs	In situ	Private
NV—Dean Mine	Removal/In situ	Private
NV—Getchell Smelter and Tailings	In situ	Private
NV—Golconda Tungsten Mine	In situ	Private
NV—Nevada Copper Tailings	In situ	Private
NV—Robinson Mining District	In situ	Private
NM—Bull Hill Mine and Mill	Repository	Private
NM—Bull Frog Mill and Tailing	Repository	Private
NM—Westar Heap	Removal	Private
OR—Amalgamated Mill	Removal	Private
SD—Bald Mountain Tailings	In situ	Private
SD—Double Rainbow Mine	Removal	Private

Table 3-1.—Remediation Actions at AML Sites in Appendix A—Continued

Site	Action	Funding Source
SD—Gilt Edge Tailings	Respository	Private
SD—Maitland	Removal	Private
SD—Red Placer	In situ	Private
TX—Shafter Tailings	Respository	Private
UT—Gold Hill	In situ	Private
UT—Mercur Mine	Removal	Private
UT—SF Phosphate	In situ	Private
WA—Sherwood Mine	In situ	Private
WY—Atlantic City Tailings	In situ	SMCRA
WY—Carissa Mine Tailings	Repository	SMCRA
WY—Encampment River Tailings	Repository	SMCRA
WY—Shirley Basin Uranium	In situ	SMCRA
WY—Sunrise Mining District	In situ	SMCRA***

*Included some Clean Water Act 319 funds for experimental work.
**Included off-set funds from MT CECRA.
***Included small forfeited bond from previous operator.

3.4 Technical Challenges

As a general observation based on the information in Appendix A, technical challenges are not a significant barrier to AML abatement or AML cleanup at sites requiring mine waste removal, repository, or in sit actions and landscape improvements. The technologies used to relocate and stabilize mine waste typically involve engineered liner and capping systems and stream diversion measures identical to those used at modern mines and other industrial facilities, and no technology gaps were identified. Similarly, AML landscape issues are addressed using the same reclamation techniques employed at active mines. No technical problems were recognized with the commonly used techniques to seal mine openings to abate safety hazards. Although implementing the appropriate abatement and remediation measures may be costly, (and available funding sources are typically quite limited), technical challenges do not appear to be a significant impediment.

In contrast, technical challenges are a serious barrier to AML cleanup at sites with acidic and metals-bearing drainage from underground mine openings. Mine plugging activities to eliminate drainage from an underground mine often produce contaminated seepage from some other location. Moreover, treating mine drainage to meet National Pollutant Discharge Elimination System (NPDES) permit effluent limits may be very costly, particularly at remote sites with no source of power, and may require treatment in perpetuity. Although passive water treatment systems such as wetlands may significantly improve water quality conditions, they may not achieve full compliance with strict, numeric water quality standards for one or more parameter. The Acid Drainage Technology Initiative (ADTI), a cooperative effort involving the mining industry and State and Federal agencies, and other entities are currently researching and developing new passive treatment technologies.

Additionally, as discussed in Chapter 4, sites that are unable to meet applicable water quality standards and NPDES permit effluent limits face serious legal problems due to their vulnerability to CWA lawsuits. Given the chilling effect that CWA lawsuits are currently having on State and industry cleanup of AML sites with acidic mine drainage, it appears that this legal barrier must be removed prior to committing any significant resources towards mine plugging and water treatment technology development. It seems unlikely that either the states or industry will be willing to pursue AML cleanups and test new technologies at sites with acid drainage from mine openings without some form of liability relief.

3.5 Funding Sources for AML Improvement Projects

A complete investigation of the funding sources available for AML improvement projects was beyond the scope of this survey. However, the following presents a brief overview of existing funding sources and several funding proposals currently under consideration in the Federal Fiscal Year 1999 budget.

There are several sources of proposed Federal funding for the cleanup of abandoned mine sites. For fiscal year 1999, the Bureau of Land Management (BLM) has requested a $6 million "investment in the cleanup of abandoned hardrock mine sites." (Interior Budget in Brief, February 1998 at page BH 6). In conjunction with this proposal, the U.S. Geological Survey will provide support to the BLM and other agencies to characterize watersheds and the impacts of past mining practices. (Interior Budget in Brief, February 1998 at page DH 20).

In addition to these sources, individual line item appropriations such as $3.74 million approved by the House Appropriations Committee for the continued cleanup of the abandoned Penn Mine site in California may become available for specific projects. Under certain circumstances, and subject to certain constraints, funding for AML Remediation projects also may be available under the Clean Water Act, section 319; Title IV of the Surface Mining Control and Reclamation Act of 1997; and section 206 of the Water Resources Development Act of 1996. Other sources of funding available to State AML agencies include, but are not limited to, grants from the EPA (headquarters grants, headwaters programs, etc.) and other Federal agencies, historic preservation grants, and partnerships with industry.

During the survey, several individuals associated with State AML programs indicated that information on the existence and availability of Federal AML cleanup funds is not always easy to obtain. It is clear from these discussions that State and Federal agencies, industry, and watershed organizations would all benefit from the creation of a data bank or clearinghouse that identifies and describes available Federal AML cleanup resources. The issue of AML funding sources is explored at greater length in CCEM (1998).

Several states have established their own funding mechanisms to further their involvement in AML improvement projects. For example, the Colorado DMG receives annual capital for AML closures from the Gaming Fund from the casino industry located in historic mining areas of Central City, Blackhawk, and Cripple Creek. The DMG also has established a highly workable policy of cost-sharing to close hazardous mine openings on private lands. Landowners with such hazards can make a contribution to the DMG AML fund in return for which their site is given preferential treatment for abatement action . . . those contributing the most move higher on the list of priorities. In one case (Colorado-Alta), a larger scale AML site owned by a real estate developer was remediated in award-winning fashion through the DMG and funded by a significant contribution from the owner.

State-industry partnership programs have been used on an ad hoc basis with some success on some sites, but the concept has not been institutionalized in any State with the possible exception of South Dakota. The South Dakota Department of Environment and Natural Resources (DENR) developed a program that works directly with industry to provide some CERCLA liability relief and to streamline the regulatory and administrative processes which commonly cause industry to shy away from undertaking AML improvement projects. This program has been a resounding success, driving the voluntary reclamation/remediation of approximately 65 AML sites in the Black Hills region. Additional information on this program is found in Chapter 4.

3.6 AML Improvement Project Awards

While this investigation has documented many of the issues, problems, and obstacles to solving the AML problems, it also has found that many AML projects have received prestigious State and Federal awards for reclamation and environmental stewardship. Seventeen of the sites in Appendix A either have received awards or have been nominated for an award. Award recipients include AML, improvement projects undertaken by both State AML agencies and industry (five and twelve, respectively). Table 3-2 presents these sites and the awards received.

Table 3-2.—Award for State and Industry AML Improvement Projects

State	Site	Award
Colorado	Alta	1997 CMLRB Reclamation Award
Colorado	Crystal Hill	1995 CMLRB Reclamation Award; BLM Byways Site
Colorado	Keystone Mine	1993 CMLRB Reclamation Award
Idaho	Alta	ID Reclamation Awards—Outstanding Achievement Award
Idaho	Wagontown Placer	ID Reclamation Awards—1997 Special Reclamation Project Award (nominated)
Montana	Brooklyn Mine	1995 USFS Appreciation Award
Montana	Curlew Mine	Nominated for several, but unlisted.
Montana	Mike Horse Mine	1996 Lewis & Clark SCS Environmental Excellence Award
Nevada	Alligator Ridge Mine	1997 BLM Health of the Land Award
Nevada	Nevada Copper Tailings	1995 Nevada Governor's Award
New Mexico	Gage	1995 OSM National AML Award
Texas	Terlingua	1996 National Park Partnership-Leadership
Utah	Calumet Shaft	1998 State of Utah Earth Day Award

Table 3-2.—Award for State and Industry AML Improvement Projects—Continued

State	Site	Award
Utah	Gold Hill	State of Utah Earth Day Award
Utah	Parrot Shaft	State of Utah Earth Day Award
Utah	Texas Shaft	State of Utah Earth Day Award
Wyoming	Sunrise Mining District	1998 OSM National AML Award (nominated)

4.0 SURVEY FINDINGS: POLICY ISSUES AFFECTING AML SOLUTIONS

4.1 Policy Issues Overview

Based upon the survey results, there are a number of policy issues affecting State and industry AML abatement, reclamation, and remediation activities (including remining in historic mining districts) throughout the western U.S. For the most part, these policy issues are impeding and in some cases preventing solutions to the AML problem. However, the survey did identify a few policy approaches that show promise in facilitating AML improvement projects.

The specific policy issues that are adversely affecting progress on solving the AML problem include the following:

- Legal Impediments: CWA and CERCLA liability;
- Institutional Impediments: command-and-control regulatory approach;
- Defining and attaining cleanup requirements—particularly water quality standards in highly mineralized areas;
- Interagency jurisdiction and coordination; and
- Failure to differentiate between sites with long-term liabilities versus sites with less serious liabilities.

The following emerging policy approaches offer partial solutions to the AML problem:

- The South Dakota Steamlined Interagency Regulatory Process Model
- CWA Section 319 Grants; and
- State Voluntary Cleanup Programs.

These policy issues are discussed in this chapter.

4.2 Legal and Institutional Impediments

At many inactive mine sites it is simply good business practice and in the owner's best interest to reclaim the site as expeditiously and efficiently as possible. However, two major impediments to voluntary cleanups are significantly limiting the mining industry's ability to undertake AML improvement projects (Crozier, 1997). First there are the legal impediments, or risks of being exposed to new legal liability for taking voluntary action at an AML site. Perhaps the most significant legal barrier to voluntary cleanup at AML sites is the potential for incurring CERCLA liability. Many high priority AML sites will not be remediated or reclaimed voluntarily, given the attachment of CERCLA liability to "actual control" activities. Another legal impediment to voluntary AML cleanups is the CWA. Given the CWA's broad legal jurisdiction, AML abatement, remediation or reclamation activities could easily be subject to CWA permitting requirements in the event of a discharge. The current CWA permitting liability scheme discourages cleanup of AML sites, even if the cleanup would significantly reduce water pollution by controlling and treating discharges. This impediment is particularly apparent in cases involving remedition of acid rock drainage (ARD) from underground workings.

Second, there is the institutional impediment associated with having to comply with the systematic command-and-control approach taken by regulatory agencies to public safety and environmental issues. This mind set and the rigid application of arbitrary and prescriptive environmental performance standards inhibits voluntary, cooperative action at AML sites. It also stifles innovation and new technology development. Moreover, regulatory policies that require strict compliance with all environmental standards, particularly one-size-fits-all water quality standards, have forestalled State and industry cleanup projects that would produce significant environmental benefits but do not meet specific numeric water quality standards.

Just as no two mines are identical, each AML site has unique characteristics based upon site-specific physical conditions, ownership patterns and history. Therefore, appropriate solutions to problems at AML sites must be determined on a site-by-site basis. Unfortunately, a command-and-control regulatory framework is not supportive of site-specific solutions. A new policy approach is needed to recognize the appropriateness of site-specific measures and to facilitate partial and incremental cleanup efforts by protecting participating parties from exposure to CWA liability.

4.2.1 Defining and Attaining Cleanup Criteria

Defining appropriate and attainable cleanup criteria at AML sites with contaminated surface water and/or groundwater creates both technical and regulatory challenges that may impede State and industry AML cleanup activities. At many AML sites, naturally occurring geochemical reactions between the mineralized rocks and the surface water or groundwater systems contribute dissolved metals, sulfate and other parameters to proximal surface and groundwater resources. Consequently, surface water and groundwater systems in and near some orebodies have background water quality conditions that may exceed one or more regulatory standards. The absence of baseline (i.e., premining) water quality data for most AML sites makes determining any incremental contamination due to mining activities technically challenging and impractical at some sites.

However, the naturally occurring levels of metals and other chemical constituents contributed by the orebody need to be considered in developing reasonable AML water quality cleanup goals. As discussed in CCEM (1998), states often apply EPA "Gold Book" standards in defining numeric concentration limits for pollutants like heavy metals. These one-size-fits-all standards do not consider site-specific factors including the geochemical signature that an orebody may imprint upon nearby surface waters. The unilateral application of Maximum Contaminant Levels (MCLs) to determine groundwater quality cleanup requirements poses similar problems at mineralized sites at which groundwater quality reflects the geochemistry of the orebody.

The CWA authorizes the EPA to require owners of both active and inactive mines to obtain an NPDES permit that stipulates effluent limits for surface water discharges from both active and inactive mines. Depending upon the designated beneficial use of the receiving surface water and the corresponding water quality standards, NPDES permits typically establish stringent effluent limits. Active mining operations successfully employ proven and effective water treatment technologies to meet NPDES permit limits. However, these water treatment measures may not be feasible at many AML sites.

The use of Gold Book standards to set surface water quality standards or MCLs to set groundwater quality standards creates a significant dilemma at many AML sites. Applying these standards may require an AML cleanup effort to achieve the impossible—to make a site "cleaner than clean" by mandating improvements in water quality that do not reflect pre-mining conditions and the presence of metals, sulfate, etc. due to naturally occurring reactions between the orebody and the surrounding water systems.

The legal and regulatory problems created by applying established, one-size-fits-all water quality standards to ARD cleanup projects are not unique to hardrock AML sites. Numerous coal AML sites have ARD problems similar to hardrock AML sites and face analogous policy issues regarding compliance with NPDES permit limits. The OSM recognizes these challenges and is considering scenarios in which relaxed water quality standards should be applied in order to facilitate AML cleanup projects that would result in incremental water quality improvements but that may not meet stringent NPDES permit limits (K. Karpan, personal communication).

4.2.2 Clean Water Act Lawsuits

A number of State and industry survey respondents expressed concerns about the cleanup standards with which they would be faced should they undertake an AML project involving surface water or groundwater remediation. As discussed in Chapter 3, significant water quality improvements can be realized using a number of proven and practical technologies. However, at many sites, achieving compliance with water quality standards and NPDES permit limits may be difficult and costly. For example, passive water treatment systems such as wetlands or anoxic lime beds are a practical solution at AML sites without power or an entity with sufficient funds to run a treatment plant, and can achieve significant water quality improvements. However, passive systems may not be able to achieve compliance with water quality standards and NPDES permit limits.

Owners of inactive mine sites with an unpermitted surface water drainage are facing third-party CWA lawsuits compelling them to acquire an NPDES permit. One California regulator predicted that these mine owners, some of whom are individuals not otherwise affiliated with the mining industry, may face future litigation under the CWA for failure to meet the effluent limits mandated in their NPDES permits. Individuals from both State agencies and industry voiced serious concerns about vulnerability to third-party CWA lawsuits in the event that AML cleanup measures do not meet water quality standards, and stated that this concern is having a significant chilling effect on both state-led and industry-led AML projects at which there are surface water quality and mine drainage issues.

Several respondents referred to the Penn Mine in California in justifying their concerns about potential exposure to CWA lawsuits. At the Penn Mine, the East Bay Municipal Utilities District (EBMUD), and a State regulatory agency, the Central Valley Regional Water Quality Control Board, constructed facilities to contain contaminated mine drainage. The containment measures substantially improved downstream water quality conditions but did not eliminate drainage from the site. A local activists' group sued the utility district and the regulatory agency claiming illegal discharges without an NPDES permit (*Committee to Save the Mokelumne River* v. *EBMUD,* 1993). The plaintiffs prevailed in Federal appeals Court and ultimately reached a settlement with the defendants involving a plan to treat the remaining mine drainage and additional site remediation work.

The Rico Project in Dolores County, Colorado is another example of a site at which concerns about CWA liability significantly influenced AML cleanup activities. Atlantic Richfield Company (ARCO) performed extensive AML remediation and reclamation work at this site under Colorado's Voluntary Cleanup and Redevelopment Act (see Appendix A). However, mine water treatment was not included as part of the remediation effort due to CWA liability concerns. Similarly, the Colorado DMG has been unwilling to pursue water treatment remediation efforts in the Central City area due to concerns about CWA liability and becoming a potential target for third-party lawsuits.

Based upon the survey results, it appears that the concern about vulnerability to CWA citizen lawsuits is creating a significant barrier to both State and industry efforts to improve AML sites with acid mine drainage issues. The end result of this reluctance to become involved with these AML sites is a net loss to the environment. No environmental improvements are being realized at sites at which a partial cleanup could achieve incremental (and in some cases significant) water quality improvements. It is truly unfortunate that what appears to be misguided pursuit of the possibly unattainable perfect (i.e., 100 percent cleanup) is thwarting realization of the good (i.e., a partial but meaningful cleanup).

4.2.3 Interagency Jurisdiction and Coordination

A number of survey respondents noted that work on AML sites is sometimes made more complicated and frustrating due to interagency jurisdictional issues that precipitate a challenging agency coordination task. Although these issues were ultimately resolved at most sites, they did cause delays and added to the overall cost of the AML improvement projects.

The most common interagency issue identified during the survey was satisfying the conflicting mandates between agencies charged with protecting historic sites, wetlands, or wildlife habitat, and agencies whose primary mission is abating public safety hazards at AML sites. As described in Chapter 3, AML closure measures that focus on plugging mine openings and removing dilapidated buildings and mine structures may first have to address concerns regarding historic preservation or wildlife (especially bat) habitat protection. Resolution of these competing interests was time consuming and expensive at some sites.

Another source of interagency conflict was different agency perceptions regarding the necessary level of environmental review and formal permitting. A formal (and sometimes protracted) environmental review and permitting process may delay AML improvement projects and can be a significant disincentive for industry-led AML projects. Work on AML sites is season-dependent at many high elevation sites throughout the west where the practical field season is limited. Moreover, there are seasonal constraints associated with revegetation measures (i.e., reseeding, seedling transplanting, etc.) in order to take advantage of optimal soil moisture and precipitation conditions. Regulatory reviews that are not responsive to these seasonal considerations can delay work on an AML site by an entire field season or more.

Industry-led AML projects are particularly sensitive to delays and increased expenses that may result from a time-consuming formal environmental review and permitting process. For example, at some active mining operations, including remining opportunities at adjacent or nearby AML sites, are highly time sensitive and need to be integrated into the overall mine plan in order to be feasible. Additionally, a number of industry responses to the survey indicated that companies need to be able to maximize expenditure of resources on actual on-the-ground measures and are unwilling to devote significant company resources to transaction costs such as legal, administrative or regulatory reviews. It should be noted that this comment does not specifically apply to resolving site-specific technical issues and identifying appropriate reclamation and remediation measures. A number of respondents noted that they had worked closely with agency personnel to develop an optimal reclamation/remediation design. However, several companies stated their concerns about participating in a regulatory review process just for process sake. Industry-spon-

sored AML cleanup efforts that do not involve a commitment of public resources should not be burdened with unnecessary regulatory reviews.

4.2.4 Failure to Differentiate Liability Type and Degree

The large number of variables at AML sites—climate, terrain, accessibility, geology and geochemistry, hydrology, mine waste characteristics and distribution, mining and mineral processing history, and ownership patterns means that liability must be considered on a site-by-site basis. Sites involving complex liability issues may not require complex cleanup measures.

Sites with uncontrolled mine drainage or contamination of several environmental media (i.e., soil, surface water, and groundwater) may require extensive remediation and may expose the owner or a third party that becomes involved with the site to significant liability under the CWA, CERCLA, and State environmental laws. On the other hand, there are numerous sites with less complex environmental issues and substantially less liability exposure that could be significantly improved by relatively straightforward (although not necessarily inexpensive) remediation measures such as waste removal, repository, or in situ actions. It should also be noted again that at most AML sites, the principal issue is landscape disturbance and not environmental remediation.

Site history and ownership issues make assigning liability a complex endeavor at many AML sites, especially at mixed estate sites with both private and public lands, and at sites with a history of multiple owner/operators. Some sites have numerous potentially responsible parties (PRPs); some have only one or two owners/operators; and other have no viable owners at all.

AML policy discussions often focus on the worst and most complex AML sites—for the most part sites with acid drainage from underground mine openings, at which extensive and costly remediation requirements trigger the need to identify PRPs in order to pay for the cleanup costs. The survey results verify that these types of sites do indeed create serious environmental problems and pose significant policy challenges. Sites with acid drainage from underground mine openings represent some of the most technically challenging sites to remediate, and as discussed above, are also burdened with vexing liability issues. This observation is consistent with CCEM's recent study of barriers to voluntary AML cleanup (CCEM, 1998).

However, the environmental and liability issues at sites with acid drainage from underground workings are not representative of the environmental concerns at many AML sites, and should be considered as a subset of the overall AML environmental problem. This survey identified a number of AML sites with more tractable and easily managed problems at which private and public-sector AML cleanup projects have realized significant environmental improvements. Straightforward waste removal, repository, and in situ actions have proven very effective in addressing surface water and air quality environmental impacts at some sites. For example, Brohm Mining Company's Strawberry Creek AML project in the Black Hills of South Dakota achieved significant water quality and aquatic habitat improvements by relocating the historic Gilt Edge tailings from Strawberry Creek to a secure, engineered waste repository. Tailings stabilization work involving in situ covers at both the Getchell and the Nevada Copper tailings sites in Nevada virtually eliminated the fugitive dust problems previously caused by these unreclaimed tailings piles. A number of similar waste removal or stabilization AML projects are described in Appendix A.

4.2.5 Dialogue on Liability Issues

Solving the legal and policy liability issues at all AML sites has proven to be difficult and controversial. The WGA's ongoing efforts to develop an AML Good Samaritan provision to the CWA point to the challenges in addressing AML liability (CCEM, 1998). Cooperative efforts such as this, however, will be ongoing under the auspices of various memoranda of agreement undertaken by the WGA. Continued dialog among interested parties can provide solutions to liability-based impediments to AML cleanups resulting in the on-the-ground cleanup of a greater number of sites with commensurate environmental benefits and reduced transactions costs.

4.3 Promising Policy Approaches

This survey did identify policy approaches that have facilitated AML projects in several states. These promising policy approaches include one or more of the following elements:

- minimal administrative delays;
- streamlined regulatory reviews;
- significant interagency cooperation;
- industry—state partnerships;
- stakeholder involvement;

- liability relief; and
- finding sources.

CCEM, 1998 presents a thorough discussion of the policy approaches that appear to promote AML improvement projects. The remainder of this chapter examines how AML improvement projects were facilitated at several of the AML sites in Appendix A.

4.3.1 The South Dakota Streamlined Interagency Regulatory Process Model

According to the South Dakota DENR, the mining industry has reclaimed about 65 inactive and abandoned mine sites on a voluntary basis at a cost of about $6.2 million (DENR, 1998). In discussing South Dakota AML reclamation and remediation activities with both industry representatives and State personnel, it appears that one of the most important factors in facilitating these activities was a regulatory environment that allowed the mining companies to devote most of their resources to implementing on-the-ground measures rather than on trying to resolve competing agency interests and requirements, or engaging in formal permitting processes and protracted agency reviews. In many cases, this required significant interagency coordination, particularly with respect to wildlife habitat issues. Durkin (1996) cites the importance of keeping these AML improvement projects out of the legal realm and overcoming regulatory barriers that might otherwise stifle cleanup efforts in order to solve the AML problem in South Dakota.

The South Dakota regulatory review and interagency cooperative approach could be used as a template to facilitate industry-led cleanup activities in other states. This streamlined regulatory approach may be most readily achieved in states with an omnibus environmental agency like the South Dakota DENR which has jurisdiction over water and air quality, public health, and mining regulation and reclamation. Only two State agencies, the DENR and the Department of Fish, Game, and Parks, were involved with most of the South Dakota AML cleanup projects. It may be more difficult to achieve such a streamlined regulatory approach in states with more numerous agencies with different or overlapping jurisdictions. Many of the South Dakota AML sites are on private land, so Federal agencies are not involved as land managers. However, the U.S. Army Corps of Engineers has had CWA 404 permit program jurisdiction over stream restoration projects like the Red Placer AML cleanup described in Appendix A. This project required extensive State and Federal interagency coordination and technical review of the proposed stream restoration design.

The Upper Chalk Creek—Mary Murphy AML site in Colorado is another example of good interagency coordination. The Colorado DMG used SMCRA funds to abate safety hazards at this site. A different State agency, the Colorado Department of Public Health and Environment, used a CWA Section 319 grant to consolidate historic tailings into an engineered repository. The two agencies worked together to coordinate the separate abatement and remediation actions.

4.3.2 CWA Section 319 Grants

Several of the sites in Appendix A were remediated in part using CWA Section 319 non-point source grants. These grant funds are available for projects proposing innovative measures to address non-point source pollution problems. (Adverse impacts to surface water due to non-point source runoff from mine waste piles are a common problem at AML sites). Projects that receive Section 319 grants must match 40 percent of the grant with non-Federal (either State or private) funds. CCEM (1998) reports that 16 mining-related non-point source remediation project have been funded in Colorado at a cost of $3.4 million. Examples of Colorado AML cleanups at which Section 319 funds were used include the Upper Chalk Creek—Mary Murphy site, and sites in Central City with environmental issues. According to the CCEM (1998), Utah, New Mexico, and Montana have used CWA Section 319 funds for AML cleanup activities. Colorado and New Mexico are also using this program to fund AML remediation technologies and management practices demonstration projects. Use of Section 319 funds does not address the liability problems for discharges that may persist following completion of the reclamation/remediation activities.

4.3.3 State Voluntary Cleanup Programs

This survey identified several sites at which AML cleanup activities took place under the aegis of a State Voluntary Cleanup Programs (VCPs). CCEM (1998) describes the use of VCPs for cleanup of AML sites. The "Abandoned Mine Lands Preliminary Assessment Handbook" recently published by the California Environmental Protection Agency Department of Toxic Substances Control (DTSC, 1998) describes a DTSC-managed VCP in the context of a regulatory resource for industry and private-sector AML cleanup activities. A VCP allows states to provide some liability

relief, a more streamlined regulatory process, and some measure of predictability of technical and cleanup requirements.

The Rico Project in Dolores County, Colorado, and the Corbin Flats Tailings project in Jefferson County, Montana are examples of AML cleanup projects involving industry working under a VCP to remediate an AML site. The industry representatives interviewed about these sites (see Appendix A) had positive things to say about the VCP concept. However, they mentioned the significant amount of agency coordination and stakeholder involvement required for these projects, and suggested that a more streamlined process would be desirable.

4.3.4 Liability Relief

Several states have developed partial solutions to the AML liability problem. In 1995, the California State Legislature enacted amendments to the State's water law that provide regulatory relief for a State agency and private parties engaged in remediation activities approved by the California Regional Water Quality Control Board. Colorado has a Memorandum of Understanding (MOU) with the EPA for liability protection for AML cleanup projects conducted under the CWA Section 319 program. South Dakota has a similar agreement with the EPA that provides the State and its agents with CLRCLA liability relief for inventory or cleanup activities at abandoned or inactive mines on private lands. However, none of these liability relief measures minimize exposure to CWA citizen lawsuits (CCEM, 1998).

5.0 REMINING

5.1 Defining Remining

The term "remining" includes the process where mining at an active mine and AML abatement, reclamation and remediation are accomplished concurrently as a necessary consequence of new mining activity, as a feasible undertaking at an active site, or as a voluntary measure at an adjacent or nearby site. The term "remining" includes the use of existing, permitted facilities to process or reprocess previously mined materials such as mine wastes, waste rock unused ore stockpiles, heap leach ores, tailings, contaminated soils, or smelter wastes from an AML site. However, this investigation identified only a few remining projects at which industry processed or reprocessed previously mined materials as part of an AML remediation effort.

More commonly, remining involves other types of AML improvement measures. Appendix A includes numerous examples of remining projects in which industry reclaimed and remediated AML sites in and near active mining operations through synergism between the active mine/mill and the AML site. These examples capitalized upon industry expertise, equipment, personnel, and existing mine waste disposal and mineral processing facilities and infrastructure to close, reclaim, or remediate the nearby AML site(s). The survey indicates that there are situations where these two types of remining activities (e.g., reprocessing versus other AML abatement, reclamation, and remediation measures) should be differentiated in order to clarify the context in which the term "remining" is being used.

Remining is a highly site specific undertaking both in terms of the AML site characteristics and the range of activities, resources, and facilities at the active mine and mineral processing operation. The remining sites identified in this survey encompass a broad range of activities that have produced numerous and varied environmental benefits. Examples of remining activities identified in this survey include the following:

- Processing of waste rock and low grade stack piles and/or reprocessing of tailings and previously leached materials;
- Removing and relocating old mine wastes to existing project components (i.e., active, permitted tailings, heap leach, or waste rock facilities);
- Removing and relocating old mine wastes to new waste repositories;
- Stabilizing old mine wastes in-situ using appropriate liners, caps, and covers; and
- Remediating groundwater by taking advantage of dewatering activities to support pump and treat opportunities.

The following environmental and public safety benefits and improvements have occurred at sites identified in this survey as a result of remining activities:

- Surface water quality improvements;
- Landscape improvements;
- Wildlife habitat restoration, preservation and enhancement;
- Historical preservation; and
- Safety closures.

5.2 Remining/Reprocessing Benefits

Because reprocessing metal-bearing mine wastes achieves source reduction, it is considered to be an effective environmental cleanup method for AML sites. Other cleanup methods such as water treatment or waste containment do not reduce or eliminate the source of the contaminants, and may create long-term operational and monitoring requirements. In contrast, recovering metals by reprocessing removes some or all of the contaminant source, thereby minimizing the volume of problematic material and reducing the residual metals content in the resulting waste product. Additionally, the newly generated mineral processing wastes are disposed of in a modern, permitted mine waste disposal facility with appropriate containment, monitoring, and financial guarantees. 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.

5.3 Remining Examples

Despite the widespread recognition that remining could facilitate AML cleanups at some AML sites, this survey identified only eight sites at which remining involving mine waste processing or reprocessing has occurred. The limited number of this type of remining site appears to be due to the same liability concerns identified in the 1993 remining survey.

All of the remining/reprocessing sites identified in this survey capitalized upon opportunities to integrate reprocessing of previously mined materials into the modern mining and milling sequence. For example, remining at the Mercur Mine in Utah removed approximately 4 million tons of historic tailings from the Mercur drainage basin produced from mining activities from 1890 to 1913. Some of these historic tailings were used during 1985 to 1990 as composite liner cushioning material to protect the new heap leach pad liners from punctures and to achieve incidental gold recovery. The remaining historic tailings were reprocessed during the period March 1997 through April 1998. The tailings produced from this reprocessing effort were placed into the engineered and permitted tailings disposal facility used at Mercur from 1983–1997 for tailings from processing new ore. Remining and reprocessing of the historic tailings at Mercur removed a waste from a watershed, allowed secondary gold recovery from a material otherwise given up for waste, and allowed access to historically impacted surface areas in the basin to more effectively accommodate mined land reclamation and post-closure land uses.

In several of the identified remining projects, processing of existing mine wastes and/or reprocessing of tailings and previously leached materials was selected as the most cost effective (although seldom profitable) AML cleanup measure, because it allowed the mining companies to place the resulting tailings into an existing tailings disposal facility, thus avoiding the costs and environmental impacts associated with a new waste repository. However, using an existing tailings facility for remining tailings consumes space that would otherwise be available for tailings from processing the primary orebody. Moreover, the remining wastes may not be of comparable grade or recovery characteristics as the primary orebody. Therefore, the decision to engage in remining and to displace primary ore tailings with remining tailings must involve a site-specific cost benefit analysis. Liability issues discussed above must be carefully evaluated in each instance.

Table 5-1 is a partial listing of the remining projects identified during this survey. The projects listed are representative of the range of industry reclamation and remediation activities at remining sites located in and near currently operating mining and exploration projects. Based on the survey data, the State with the most remining sites is South Dakota. As discussed in Chapter 4, South Dakota mine operators have reclaimed about 65 inactive mines in the Black Hills (DENR, 1998).

The information about remining obtained during this survey is consistent with the results of another recent survey to evaluate environmental practices at North American hard rock mines (Todd and Struhsacker, 1997). This comprehensive evaluation involved contacting over 150 individuals in the mining industry and mining regulatory communities, detailed consideration of over two dozen mines, and field examination of 14 mine sites in geographically diverse areas of the U.S. The Todd-Struhsacker survey identified a number of mines that had performed remining to address environmental impacts from previous mining activities. Significant environmental improvements were documented at a number of these sites, many of which are included in Appendix A.

Table 5-1.—Example of Industry Remining Projects

Remining Type	Site Names and Location
Processing and Reprocessing	Maitland—SD
	Double Rainbow Mine—SD
	Westar, NM
	Alta, ID
	Mercur, UT
	Dean Mine, NV
Removal Actions	John Reed Mine—CO
Repository Action	Upper Chalk Creek—Mary Murphy
	Gilt Edge Tailings—SD
	Corbin Flat—MT
In situ Actions	Keystone Mine—CO
	Stillwater Mine—MT
	Getchell—NV
	Bald Mountain Tailings—SD
Groundwater cleanup facilitated by active mine dewatering activities.	Confidential
Water quality improvements	Keystone Mine—CO
	Buclthorn—NV
	Gilt Edge Tailings—SD
Landscape rehabilitation and improvement	Castle Mountain—CA
	Golconda—NV
	Getchell—NV
	Robinson District—NV
	SF Phosphates—UT
Safety closures	Castle Mountain—CA
	John Reed Mine—CO
	Keystone Mine—CO
	Alta Mine—ID
	Golconda—NV
Wildlife habitat restoration, preservation and enhancement	Wagontown Placer—ID
	Red Tail Placer—SD
	Golconda, NV
	Maitland Tailings—SD
Historic resource preservation	Midas—NV
	Getchell—NV

5.4 Remining Policy Issues

It is important to note that, with just a few exceptions, the remining examples identified in this study have occurred at historic mining properties that were acquired by the current owners prior to the late 1980's—a date that appears to signal the development of heightened industry awareness and concerns regarding the liability considerations associated with acquiring old mining properties. This awareness probably emerged in the late 1980's as industry began to recognize the implications of CERCLA and the Superfund Amendments and Reauthorization Act (SARA) which were enacted in the 1980's. Although many of the remining sites were acquired by the present owners in the 1970's and early 1980's, some represent mining districts in which one or more company has had a significant presence for many years. The Black Hills gold mining district in South Dakota, and the Coeur d'Alene lead-silver distinct in Idaho are two areas in which the present mine owners have had property positions for a number of years.

Since the late 1980's, the paucity of historic property acquisitions suggests that elevated concerns about liability exposure have significantly influenced corporate mining property acquisition policies. It appears that most companies are unwilling to acquire previously mined properties with known or suspected substantial reclamation or remediation needs for fear of being held responsible for these problems.

This downturn in acquisition of previously mined properties does not reflect lack of industry interest in the mineral potential of these areas. Liability issues not withstanding, industry generally perceives old mining districts to hold considerable promise. A number of industry representatives contacted during the 1993 remining study commented that old mining districts are often attractive mineral exploration targets (Struhsacker, 1993). If the liability-related impediments set forth above were adequately addressed, remining, and corresponding reclamation, of these historic sites certainly would increase.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and observations are based on an in-depth review and analysis of the site data in Appendix A. They also reflect many of the comments made by the State AML program personnel and mining industry sources listed in Appendix B.

Both the Western States and the Mining Industry Have Achieved Measurable Progress in Addressing the AML Problem.—This survey found that State AML programs and industry-sponsored efforts have abated, reclaimed, and remediated a number of high-priority AML sites throughout the west. AML policy discussions often dismiss or fail to recognize the progress made to date, choosing instead to emphasize the large but poorly defined dimensions of the problem.

Private Funding, Equipment, and Labor from the Mining Industry Have Been Responsible for Reclaiming and Remediating Many AML Sites.—Industry has spent tens of millions of dollars in voluntary on-the-ground cleanups and abatements of AML sites throughout the WGA region. Mining industry critics often overlook or ignore this significant industry contribution.

The Term Site Has Different Meanings and Must be Defined Specifically in Each Forum.— 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 abatement 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.

A Comprehensive AML Inventory is Not a Necessary First Step in Solving the AML Problem.—The successfully reclaimed AML sites identified in this study indicate that a complete inventory of the universe of hardrock AML sites is not required for the States or industry to achieve meaningful progress on correcting the AML problem.

AML Reclamation, Remediation, and Abatement Solutions Must be Site Specific.—Just as no two mines are identical, each AML has unique characteristics based upon site-specific physical conditions and ownership patterns and history. Therefore, appropriate solutions to problems at an AML must be determined on a site-by-site basis. Efforts to categorize, pigeonhole, and inventory all aspects of the AML problem have reached a point of diminishing returns and will add nothing more to solving the AML problem. A one-size-fits-all approach to AML site definition and reclamation is neither necessary nor appropriate.

Safety Hazards are the Dominant AML Problem and Most AML Sites are not Problematic.—As indicated in Table 2–1, 97 percent of the abandoned mine sites are characterized by the Mineral Policy Center as reclaimed and/or benign, landscape disturbances, or safety hazards. According to the Western Governors' Association, greater than 80 percent of abandoned mines create neither environmental nor immediate public safety concerns.

Impediments to Voluntary Cleanups are Two-Fold.—First there are the legal impediments, or risks of incurring new CWA or CERCLA liability for taking voluntary action at an AML site. Second, there is the institutional impediment, which consists of the systematic one-size-fits-all or command-and-control approach taken by regulatory agencies to public safety and environmental issues that inhibits voluntary, cooperative, and innovative action at AML sites.

Pursuit of the Perfect is Thwarting Realization of the Good.—Regulatory policies that require strict compliance with all environmental standards, particularly arbitrary one-size-fits-all water quality standards, have forestalled State and industry AML cleanup projects that may produce significant environmental benefits but that do not meet some water quality standards. A new policy approach is needed to facilitate partial and incremental cleanup efforts and to protect the parties involved from exposure to CWA citizen lawsuits.

South Dakota Has the Most Industry-funded AML Cleanup and Reclamation Accomplishments.—A streamlined regulatory environment that has minimized legal proceedings and protracted administrative and regulatory reviews, and has maximized resource expenditure for on-the-ground reclamation and remediation measures has facilitated industry-sponsored AML projects in South Dakota. This streamlined approach is critical and appropriate for industry-funded cleanup that involve no expenditure of public resources. These projects should not be burdened with unnecessary regulatory reviews and attendant costs and delays. The South Dakota regulatory model may be easiest to replicate in States with an omnibus agency with jurisdiction over water quality, air quality, hazardous and solid waste, and mine reclamation.

Industry Remining Projects Have Contributed Significantly to AML Cleanups.—The numerous examples of remining examined in this survey document that significant synergism can be achieved when active mining operations reclaim and remediate problems at adjacent or nearby AML sites. Remining projects involving the processing of existing mine wastes and the reprocessing of tailings and previously leached materials comprise a fraction of the total remining sites. There are a number of remining sites at which industry-funded reclamation/remediation activities have achieved significant environmental improvements. Most of these remining projects occurred at sites acquired prior to the mid- to late 1980's. It appears that liability concerns have inhibited industry acquisition of previously mined areas since then, probably corresponding to the enactment of CERCLA and the Superfund Amendments and Reauthorization Act (SARA) in the 1980's. Reclamation-mining could be a significant partial solution to the AML problem if CERCLA, CWA and other liability barriers were removed.

AML Sites with Acid Drainage From Mine Openings Pose the Most Challenging Technical and Policy Problems.—Remediation of ARD from underground workings is the most challenging issue both from a technical and a legal perspective. Although passive water treatment systems can achieve significant water quality improvements and are practical at remote sites with no power infrastructure, more sophisticated water treatment measures are typically required to meet water quality standards and NPDES permit limits. Both State agencies and the private sector face onerous legal challenges from CWA lawsuits for residual drainage from remediated AML sites that do not meet numeric water quality standards—regardless of the improvements realized at these sites.

Safety Closures May Create Conflicts with Bat Habitat and Historic Preservation Concerns.—A number of State AML program officials mentioned the difficulties encountered in balancing the need to seal mine openings to protect public safety with the need to preserve wildlife (especially bat) habitat and the integrity of old mine workings as historic resources. In some settings, fencing old workings may be adequate to protect public safety and avoid these potential resource conflicts.

There are Several Sources of Potential Funding for the Cleanup of Abandoned Mines.—Under the umbrella of the "Clean Water Action Plan", several Federal agencies have requested funds to engage in abandoned hardrock mine cleanups. In certain circumstances, the Environmental Protection Agency, Department of Interior and Corps of Engineers programs can be a source of primary or matching funds for cleanups. In addition to these Federal sources, several States have established their own funding mechanisms. The survey also manifests significant private industry contributions to the cleanup effort. State and Federal agencies, industry and watershed organizations would all benefit from the creation of a data bank or clearinghouse that identifies and describes available Federal AML cleanup resources.

Based on the site information collected for this survey and the conclusions and observations listed above, the authors offer the following recommendations:

Collect Additional Data.—The data included with this report in Appendix A are limited due the short time available to conduct this study. This data base of successfully reclaimed AML sites could be expanded with continued study. Future data collection efforts should focus on industry-sponsored remining projects in order to develop a comprehensive understanding how to facilitate future industry AML efforts.

Conduct Field Visits.—Field visits to successfully improved AML sites could provide all stakeholders in the AML issue with a better awareness of the successes achieved to date. Field visits could also be a valuable opportunity for industry and State representatives to collaborate on proven AML abatement, reclamation, and remediation techniques and to examine effective solutions to specific technical and policy challenges.

Compile Photo and Video Documentation of AML Improvement Projects.—Armed with vivid images of AML sites, mining opponents have an easy job in provoking public concerns about mining and the environment, and fomenting opposition to proposed mining projects. Pictures and videos of reclaimed AML sites are needed to displace these dated images of landscapes and environments damaged by past mining activities.

Prepare Detailed Case Studies of Selected Sites.—Case studies should be prepared for several types of reclaimed AML sites to provide detailed information about the technical and policy issues that either facilitated or impeded AML improvement efforts. The types of AML sites that would be appropriate for case study evaluation include the following: a composite of the South Dakota sites to evaluate the streamlined regulatory approach; a site with acid drainage from a mine opening to evaluate the technical and legal challenges; a remining/reprocessing site to examine liability, technical, and economic issues; several other types of remining sites including sites requiring removal, repository, and in situ actions to define liability,

technical, and economic issues; and a safety abatement site to assess the conflicting concerns regarding historic preservation, bat habitat protection, and mine sealing.

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The authors wish to gratefully acknowledge the excellent response and cooperation from both the mining and regulatory communities in supplying information on reclaimed AML sites. Preparation of this report would not have been possible without the significant contribution of data and information from both industry and agency sources.

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STATEMENT OF JACK LYMAN, EXECUTIVE VICE PRESIDENT, IDAHO MINING ASSOCIATION

Mr. Chairman, members of the subcommittee, my name is Jack Lyman. I am Executive Vice President of the Idaho Mining Association. It is a pleasure to be here today to provide you with a mining industry perspective on S. 1787, the "Good Samaritan Abandoned or Inactive Mine Waste Remediation Act." The Idaho Mining Association consists of over 50 members who mine and process minerals and who provide equipment and services to the industry.

The Idaho Mining Association supports the concept of encouraging and promoting the remediation of abandoned or inactive mined land through a Good Samaritan program. S. 1787, however, is seriously flawed and will not achieve the desired objective of remediating these areas.

The State of Idaho has a long history of mining activity and, as a result, the state possesses a large number of abandoned mine sites. Our industry is aware of the challenges presented by abandoned and inactive mines and has worked with the State of Idaho to address these challenges.

Good samaritan legislation at the federal level has the potential to be a powerful and effective tool for helping to address abandoned and inactive mines. It is possible

to craft legislation that would not only provide significant incentives for parties to engage in remediating these mines but also to remove the existing remediation obstacles. Unfortunately, S. 1787 is not that legislation.

From a mining industry perspective, there are *numerous* concerns with S. 1787. Today, I would like to highlight three of these concerns: (1) The program established in S. 1787 is far too limited with respect to both the areas that qualify for remediation and the entities that may engage in remediation; (2) the bill establishes a standard for water quality that is so stringent it will act as a disincentive to participation in the program; and (3) the bill contains other major disincentives to participation such as exposing parties who remediate under the program to potential liability under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

I will briefly amplify each of these concerns. First, the bill has an overly strict definition of "abandoned or inactive mined land" resulting in an unnecessary limit on eligibility. The bill excludes areas that are on CERCLA's National Priorities List (NPL), proposed for inclusion on the NPL, or the subject of a planned or ongoing response or natural resource damages action. This provision eliminates large areas throughout the country from eligibility. For example, the Coeur d'Alene Basin in Idaho, where there is a heavy concentration of abandoned mines, would be excluded from eligibility under the bill. This is an area that might benefit from a self-structured Good Samaritan program. If improvement in water quality is the goal, then deferring in this way to CERCLA is not the answer unless you are satisfied waiting a decade or more to see remedial action taken, and then only at an inordinate cost.

S. 1787 is also unduly restrictive with respect to the parties that are eligible to engage in Good Samaritan remediation. The bill limits participation to the United States, states, Indian tribes and municipalities. However, the United States cannot be a remediating party with respect to abandoned or inactive mined land located on federal land. In addition, the bill provides, with one narrow exception, that a remediating party cannot apply for a permit if the abandoned or inactive mined land is owned by the remediating party. If the United States cannot remediate on land it owns, and in general, neither can a state, Indian tribe or municipality, then what land is eligible for remediation and who is eligible to remediate it? It seems that the bill has so many restrictions in place that not much land will be eligible for remediation and not many entities will qualify as remediation parties. In order to maximize the number of areas that are remediated, S. 1787 needs to be less restrictive, and the definition of remediating party needs to include private entities as well as governmental agents and contractors.

Second, a remediation plan, in order to be approved, must demonstrate with "reasonable certainty" that it will result in "an improvement in water quality to the maximum extent practicable, taking into consideration the resources available to the remediating party for the proposed remediation activity." The standard for remediation should, instead, be "an improvement in surface water quality." By adding "to the maximum extent practicable" an overly stringent standard is created that will lead to protracted debate as to its meaning and will act as a serious disincentive to participating in the program. In addition, the requirement to demonstrate a "reasonable certainty" that maximum water quality improvement will occur is likely to discourage the use of innovative technologies.

Third, S. 1787 contains several additional disincentives to participation in the program. Even if an eligible party (e.g., the United States) finds a land area that meets the bill's overly restrictive eligibility criteria, and the party is willing to brave the requirement to improve water quality "to the maximum extent practicable," there are additional requirements in the bill that discourage participation in the program. I will mention one of these disincentives.

The purpose of the bill is to allow a limited class of eligible parties to remediate a limited number of eligible abandoned or inactive mined lands without incurring liability under sections 301, 302, and 402 of the Federal Water Pollution Control Act, commonly known as the Clean Water Act. What the bill fails to address, and therefore is one of its fatal flaws, is the fact that parties will not go near an area if the potential exists that CERCLA liability will attach in the future. Because of CERCLA's draconian liability system (retroactive, strict, joint and several liability) and the fact that liability attaches to "any person who owned, operated, or otherwise controlled activities" at the facility, no party would risk potential CERCLA liability attaching in the future to remediate under this bill. The bill excludes CERCLA sites from eligibility but a non-CERCLA site today could be a CERCLA site tomorrow and anyone who "operated" at the area would be liable under CERCLA section 107(a). The ultimate disincentive to remediation under S. 1787 is the fact that every remediating party will face the prospect that the area in question will some day be sub-

ject to CERCLA and, therefore, subject them to retroactive, strict, joint and several liability.

In closing, let me reiterate that the Idaho Mining Association supports the concept of encouraging the remediation of abandoned or inactive mined lands through a Good Samaritan program. We believe that any such legislation, to be effective, should encompass the maximum number of areas and should have a broad definition of remediating parties; should provide clear and reasonable remediation standards; and should provide incentives for participation. S. 1787 fails on all three of these counts by unduly restricting both the type of area that qualifies for the program and the type of parties that may engage in Good Samaritan remediation; by imposing a remediation standard that encourages debate and delay and discourages participation; and by failing to remove some current obstacles to engaging in Good Samaritan remediation and by imposing new obstacles. For these reasons, S. 1787 would not be an effective tool for encouraging the remediation of abandoned or inactive mined land.

Thank you for the opportunity to testify on S. 1787. Mr. Chairman, I look forward to working with you to craft legislation that would create a meaningful and effective good samaritan program for abandoned and inactive mined lands.

I would be happy to answer any questions that you or any member of your subcommittee might have.

STATEMENT OF SARA KENDALL, WESTERN ORGANIZATION OF RESOURCE COUNCILS

Good morning. My name is Sara Kendall, and I am the Washington, D.C. Representative for the Western Organization of Resource Councils, or WORC. WORC is an association of grassroots community-based organizations in six western states—the Dakota Resource Council in North Dakota, Dakota Rural Action in South Dakota, the Idaho Rural Council, the Northern Plains Resource Council in Montana, the Powder River Basin Resource Council in Wyoming, and the Western Colorado Congress. We work primarily on environmental and family farm agriculture issues. Many of our members live and work in communities impacted by mining and abandoned mine lands.

I'd like to start by commending the subcommittee for its interest in addressing the persistent problem of pollution from abandoned mines. Abandoned mines are one of the major sources of water pollution in western states. These sites release sediments, heavy metals and other toxic chemicals into community water supplies, are harmful to fish and wildlife, and often impact local economies.

The primary obstacles that must be addressed if these sites are to be cleaned up are the minimal efforts currently being made to track down responsible parties and the lack of sufficient funds for remediation. But, we acknowledge that it is also important for states to stretch the funds they do have as far as possible. In addition, we recognize that, at some abandoned mine sites, it would be difficult to restore streams to the applicable water quality standards. For these reasons, we support the concept at the core of Senator Baucus' Good Samaritan legislation—reducing water quality standards and liability for third parties that want to clean up abandoned mines.

I'd like to express WORC's appreciation for changes that Senator Baucus and the Western Governors' Association made from earlier drafts of the legislation to address concerns raised by our organization and others:

- S. 1787 is restricted to state, tribal and municipal governments, eliminating the concern that loopholes in earlier versions might have allowed a potentially responsible party to qualify as a good samaritan.
- The bill's requirement that revenue generated through the use or sale of minerals be used for additional remediation alleviates the concern that it is inappropriate for a good samaritan to profit from cleaning up a site to anything less than Clean Water Act standards, but does so without going so far as to prohibit the sale of such resources and thereby shut off a potential source of additional clean up funds.
- The 10-year sunset leaves room for the Congress to extend the Act if it is a success, but ensures that it will automatically lapse if it is not.
- The more detailed requirements for an analysis of baseline conditions at the site will help good samaritans document their successes and respond if charges are made that their remediation efforts increased pollution from an abandoned site.
- Limiting the bill to abandoned hard rock mine sites removes questions over the need for reducing water quality standards at coal sites, where clean ups are occurring at a much higher rate than they are at hard rock sites, thanks to the coal royalty that funds an abandoned mine land clean up program.

We view all of these changes as positive developments that will enhance abandoned mine remediation and protect the interests of communities and taxpayers.

We continue to have concerns, however, with a couple of S. 1787's provisions. We remain concerned that the best efforts of the states, tribes or municipalities will not always succeed in improving water quality, and in some cases may actually result in increased pollution. S. 1787 would not hold good samaritans responsible for meeting the clean up goals they themselves set, or even to the level of pollution documented in the baseline analysis, as long as they stick to their remediation plans. We believe that if the good samaritan actually increases the pollution from the mine site, they should be held liable for returning the site to the condition documented in the baseline analysis.

It is a basic tenet of the Clean Water Act that any party must try to achieve some objective or standard for water quality. While, as I said earlier, we recognize that it would be difficult to restore streams at some abandoned mines to the applicable water quality standards, we strongly urge the incorporation of a mechanism for establishing a clear objective good samaritan remediation efforts, with input from people in the impacted communities. There are mechanisms in place today under the Clean Water Act, such as a Use Attainability Assessment (or some modification thereof), that could be used to address this concern.

Finally, the reduced water quality standards and liability waiver should only apply to mines that are truly abandoned, and not to sites that are inactive, in bankruptcy proceedings or permitted.

In closing, we ask that you consider, in addition to this Good Samaritan legislation, a more comprehensive approach to the problems associated with abandoned hard rock mines in the West. Many states still need to inventory their abandoned mine sites and set priorities for clean up. Strategies need to be developed to remediate the high priority sites, including attempting to identify the parties who own the mine sites and are responsible for the pollution. Funds are needed for states, tribes or municipalities to pursue responsible parties and, when necessary, to remediate pollution problems. Without an adequate funding source, no waiver of liability will even begin to address the problem.

Although S. 1787 has the potential to facilitate the clean up of a number of abandoned mine sites, this potential is very limited because the Good Samaritan approach picks at the edges of a problem fundamentally caused by an antiquated law and outdated regulations under that law. We hope that the subcommittee will address the concerns we've raised and move forward with S. 1787, but we urge you to make it part of a more comprehensive approach to the abandoned mine problem.

Thank you for the opportunity to testify.

STATEMENT OF DAVID GERARD, RESEARCH ASSOCIATE, POLITICAL ECONOMY RESEARCH CENTER (PERC), BOZEMAN, MT

PERC is the nation's oldest and largest nonprofit institute dedicated to original research that advocates using market principles to address environmental problems. More than 90 percent of our funding comes from foundations and individual donors. As part of its mission, PERC produces independent scholarly research on environmental policies. Thus, PERC's comments on the proposed Clean Water Act revisions do not represent the views of any affected parties or special interest groups, but instead represent the interests of American citizens.

PERC has ongoing research on mining and hazardous waste issues, including a current study of abandoned mines. Our abandoned mines project is in the process of examining the status of abandoned mine reclamation efforts, identifying issues confounding reclamation (including liability issues), and exploring alternative approaches for encouraging and funding site reclamation.

We would like to express our thanks to the members of the committee for allowing us to testify on this proposed legislation.

SUMMARY OF TESTIMONY ON S. 1787

The intent of S. 1787 is to encourage parties that are not responsible for environmental conditions to take steps to improve water quality at abandoned mine sites. The question is: Are any Good Samaritans likely to emerge? If not, why not? And, if so, will their resources be put to their best use?

The proposed legislation responds to the provisions of the Clean Water Act (CWA) that discourage parties from remediating waste discharges from abandoned mine sites. The disincentive stems from the fact that, pursuant to the CWA, any party that in any way affects a discharge becomes fully responsible in perpetuity to meet the CWA water quality standard. This full compliance holds even if the remediating

party had no role in creating the conditions that originally caused the adverse water quality impacts. Thus, it is not possible for a remediating party simply to improve water quality; the party must meet the water quality standard specified by the CWA, whatever the cost.

As the title of the legislation suggests, meeting the CWA standard at many abandoned sites is such a daunting responsibility, even the proverbial Good Samaritan would need an additional incentive before undertaking site remediation. The legislation provides this incentive by amending the CWA to allow a remediating party to improve water quality without being held responsible to comply fully with the CWA water quality standard. Thus, the intent of the proposed legislation is to promote voluntary cleanup.

My analysis of the proposed legislation draws two principal conclusions:

• S. 1787 will have positive environmental impacts on sites addressed through state abandoned mine programs.

• S. 1787 does not encourage Good Samaritans to undertake cleanup efforts, and will therefore have little impact on the number of sites addressed.

For sites slated for reclamation or already in the remediation process, the proposed legislation will broaden the scope of activities allowable. The resulting environmental quality at reclaimed sites will be higher once the CWA liability is relaxed.

At the same time, however, the disincentives built into S. 1787 make it unlikely that new remediation parties will emerge. For instance, the proposed legislation forces the Good Samaritan to expend resources on an owner/operator search, which has proven to be a costly and uncertain process in other contexts. In addition, the proposed legislation does not eliminate all relevant liability concerns. Specifically, potential liability under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) is a major industry concern, and might also be of concern to other potential remediating parties. These liability concerns alone make industry Good Samaritan efforts unlikely. Almost without exception, the proposed legislation discourages potential remediation parties from pursuing cleanup efforts

ABANDONED MINES BACKGROUND

There are thousands of abandoned noncoal mine sites in the U.S. that pose environmental and/or safety hazards. Some of these abandoned sites are the source of environmental contamination, including heavy metal and acid discharges that degrade surface or groundwater quality.

Arizona has surveyed 5,890 mine openings, shafts, adits, prospects, and quarried out areas. Of these sites, 118 (2 percent) have possible environmental hazards, and 668 (11 percent) pose public safety hazards (Arizona, 1999). In Montana the state has evaluated more than 3,800 sites based on their environmental and safety characteristics, and has designated 380 priority cleanup sites from this list.

As the table indicates, these sites are located both on private and on public lands. The table, however, belies the complex ownership patterns of historic mining districts. As a result of various land policies, it was common for the same mine site and processing facilities to be located both on public land (e.g., mining claims) and private land. Even for sites on private lands, however, often there is either no identifiable owner or the owner does not have the financial resources to reclaim the site. In cases where there is no identifiable and solvent owner, the site is considered to be abandoned.

Table.—Ownership of Inactive Mines and Priority Cleanup Sites in Montana

	Priority Sites	All Inactive Sites
Private	262	1820
Public	85	1325
Unclassified	33	709
Total	380	3834

Source: Montana Department of Environmental Quality, August 1998

The legacy of abandoned mines is attributed to both a lack of industry and public concern about potential hazards and an absence of environmental regulation to address these hazards. Of course, public attitudes and regulatory systems have changed radically over the past three decades, and mining is now one of the country's most heavily regulated industries. Mining activities are subject to federal statutes and federal land agency regulations, as well as state statutes and regulations.

These regulations also affect activities at inactive and abandoned mines. Though intended to promote sound environmental management, these regulations can discourage remediation of hazardous waste sites, including abandoned mined lands.

THE CLEAN WATER ACT AND ABANDONED MINE LAND REMEDIATION

The U.S. Environmental Protection Agency (EPA) maintains that discharges from abandoned mine sites are subject to the National Pollutant Discharge Elimination System (NPDES) under Section 402 of the Clean Water Act. Thus, whether the mine is active or inactive, the mine owner must obtain an NPDES permit, and the owner is responsible for meeting water quality standards as specified in the permit.

Many abandoned sites produce discharges that contribute to degradation of water quality. In such cases a party that begins remediation activity that alters the current discharge becomes permanently responsible for meeting the permit standard. The assignment of liability occurs even though the remediating party did not create the conditions causing or contributing to the water quality degradation and had no previous responsibility or liability for the condition of the site. This potential liability discourages parties that might otherwise take steps to improve water quality at abandoned mines.

Enter the Good Samaritan?

The proposed legislation (S. 1787) addresses these disincentives. The legislation allows the potential remediating party—the Good Samaritan—to obtain a permit that allows it to take steps to improve water quality without being required to comply fully with the water quality standard.

The liability shield from liability for parties that had no role in creating the water quality degradation would allow remediating parties—particularly state abandoned mine land programs—to expand the types of allowable activities (i.e., activities that affect the discharge covered by NPDES permit). What is less clear is whether the liability shield would be sufficient to encourage new parties to pursue or to expand remediation activities. To address this issue, consider the following possible Good Samaritan candidates:

- federal agencies (Bureau of Land Management, Forest Service, National Park Service)
- local governments
- non-profit groups
- mining companies

Federal Agencies.—The legislation prohibits federal agencies from acting as Good Samaritans on lands owned by the federal government. In fact, if federal agencies are always considered responsible parties on federal lands, it could be the case that S. 1787 does not apply to any abandoned mine sites on federal lands (see below).

Local Governments and Private Groups.—The legislation builds in a number of hurdles for private groups. Specifically, it requires Good Samaritans to identify the identity and financial solvency of the property owners, even though these expenditures do nothing to improve the water quality at the site. Nonprofit groups may also have concerns about being exposed to liability under CERCLA.

Mining Companies.—Mining companies face these same hurdles, and are particularly concerned about potential CERCLA liability. In addition, the proposed legislation removes other incentives by prohibiting remining and mineral exploration, and also by prohibiting remediating parties from profiting from a Good Samaritan cleanup.

Thus, there are clear obstacles other than CWA liability that could prevent Good Samaritan cleanups.

DISINCENTIVES FOR POTENTIAL REMEDIATING PARTIES

This brief survey indicates that new parties might not emerge because (1) all liability is not removed, and (2) additional hurdles and disincentives are added. I discuss these problems in greater detail below.

1. The Search for Owner/Operators and the Solvency Test—Wasting Time and Resources While Water Quality Deteriorates

As part of the permit requirements, the potential remediating party is required to take steps to identify an owner or operator (e.g., current or past owners, mine operators, lessees). An identifiable owner is defined as a party that (1) is responsible for creating or contributing to the current waste discharge; and (2) "is financially capable of compliance with requirements of sections 301, 302, and 402" of the Clean Water Act.

The EPA (the Administrator) will approve the permit application only if "no identifiable owner or operator exists." Thus, EPA can reject a permit if the Good Samari-

tan has not taken "reasonable efforts" to identify an owner/operator; or if the Administrator determines that the party identified, in fact, meets the rather loosely defined solvency requirements.

It is not clear why the potential remediating party should be required to expend resources on an owner/operator search. Even so, the proposed legislation does nothing to limit owner liability. If an owner is identified, it will still be responsible for bringing water quality into compliance with CWA permit requirements.

Moreover, the search process is likely to be complicated. The Good Samaritan is required to not only search for an operator, but also to determine whether the operator is solvent. As we have seen, land ownership in historic mining districts is most often a mixture of public and private land, and therefore there are often several parties with partial ownership or some history of operations at a given site. The search requirement does nothing to improve environmental quality. Instead it creates uncertainty as to the issuance of a permit and diverts resources that could otherwise be allocated toward cleanup.

Why should legislation prohibit a Good Samaritan effort to mitigate the effects of ongoing waste discharges? If private funds are used, that is the choice of the private party; if public funds are used, the state or federal agency would be able to put a lien on the property or to sue to recover the remediation costs. There is no reason to believe that environmental quality would suffer if the search provision was eliminated from the proposed legislation.

The Forest Service's abandoned mine cleanup efforts are instructive on these issues. According to a 1996 Inspector General (IG) audit, the Forest Service had identified 335 contaminated sites, but the agency had remediated only 16 of these sites. The IG makes it clear that the Forest Service's emphasis on determining the existence of a potentially-responsible party (PRP) limited the number of site cleanups:

Because of emphasis on sites where [the Forest Service] is the only responsible party, [the Forest Service] has, so far, spent about $12.7 million on actual cleanup of mines and only 16 sites have been completely cleanup up (USDA, 1996, 9).

The passage suggests that there will be few cases where there are no parties that satisfy some element of the "ownership" criteria as spelled out in the proposed legislation.

Even where the Forest Service found a PRP, however, it found it difficult to collect funds. The IG found that:

> [The Forest Service] has pursued PRP's (sic) at 29 sites with estimated cleanup cost of $48.5 million. Bills of collection totaling $4.3 million have been issued at only 6 sites and only $2.2 million collected. Of the $2.2 million collected, $1.56 million came from one PRP (USDA, 1996, 16).

Although the emphasis on sites with no identifiable PRPs delayed cleanup efforts, it did little to actually collect funds from PRPs. Presumably no cleanup had occurred at these sites. At the same time, because the Forest Service identified owners, these 29 sites would have been off limits to any Good Samaritan efforts (the EPA will not approve a permit if an identifiable owner exists). As a result, the offensive discharge will continue.

The benefit of finding an owner/operator comes at a very high price: The search for an owner/operator will be time consuming and costly, which will delay cleanup and limit resources available for site remediation. If an owner/operator is located, the EPA will deny the permit application, further delaying cleanup.

State Agencies.—State agencies that remediate sites, however, generally do not object to these search provisions because funding sources for these cleanups are often tied to completing a search. For instance, the Montana State Department of Environmental Quality (DEQ) is a primary agency involved in abandoned mine cleanup. The DEQ uses surplus funding from the Surface Mining Control and Reclamation Act (SMCRA) to finance the cleanup of hardrock sites. In order to tap this funding, DEQ must complete a PRP search. PRP searches are also routine under federal and state Superfund programs. Thus, S. 1787 does not create an additional hurdle for state abandoned mine programs because that hurdle already exists.

The owner/operator search is a potentially costly hurdle. If the provision is retained (and there is no reason to believe that the provision will have any beneficial environmental impacts) the language should allow for fast, low-cost searches.

2. Are Federal Lands Excluded?

The proposed legislation excludes federal agencies from being a remediating party on federal lands. The text of the IG audit of the Forest Service suggests that all federal lands are excluded from Good Samaritan remediation:

> Because of emphasis on sites where [the Forest Service] is the only responsible party. . . (USDA, 1996, 9, emphasis mine).

This phrase suggests that if no owner/operator exists, then the administrative agency is considered an owner of abandoned sites on federal lands. If this is the case, there is no possibility of a Good Samaritan cleanup because there is always a solvent owner—the Federal Government. If this is the case, then the opportunities for Good Samaritan cleanups will be limited. In Montana, more than 20 percent of priority sites are on federal land, and there are some estimates that as much as 70 percent of abandoned mine lands are located on federal land. This would severely limit scope of proposed legislation.

Therefore, the legislation should explicitly provide for Good Samaritan cleanups on federal land.

3. CERCLA Liability

A major industry concern is that a permit obtained pursuant to the proposed legislation will move a remediating party out of the frying pan of Clean Water Act liability and into the fire of CERCLA liability. If there is any uncertainty about CERCLA liability, the number of industry Good Samaritan cleanups will be roughly zero. Again, this does not present a disincentive to state abandoned mine programs, as the states are immune from CERCLA liability.

4. Remining and Mineral Exploration Prohibited

In addition to exposing industry Good Samaritans to CERCLA liability, the proposed legislation does its best to discourage involvement by the mining industry. This is unfortunate, as industry is a primary source of both expertise and potential reclamation funding.

Remining.—There is a reasonable rationale for not providing for remining. The allowance of remining would complicate the basic scope of the legislation by extending it beyond the purview of the CWA.

Reprocessing.—The proposed legislation requires a remediating party that generates revenues by reprocessing materials to put those funds back into the remediation effort. The proposed legislation stipulates that the processing and removal of minerals can only be used to "further improve the quality of waters identified in paragraph (3)(B)(iii)" (emphasis added). Thus, a company cannot use proceeds to finance a remediation effort, but is required by law to take a loss on the venture.

Exploration.—Mineral exploration is expressly prohibited.

The disincentive effects of these provisions require no elaboration. Given the political opposition of environmental groups, bringing remining or mineral exploration to the table complicates passage of this legislation. However, it is not clear why the legislation should so thoroughly reject parties that will improve water quality at a given site. Moreover, success of remining at sites such as the Druid and Sunnyside Mines in Colorado makes remining a possibility that warrants further review.

5. Citizen Suits

The proposed legislation allows for citizen suits. The entire rationale for Good Samaritan legislation is that the remediating party is not a polluter, and therefore should not be treated as such. The Western Governors Association has asserted that citizen suits are a "major disincentive" for Good Samaritan efforts (WGA, 1998).

FEDERALISM

Under the Clean Water Act the EPA generally delegates authority to the states (1) to issue discharge permits to industries and municipalities and (2) to enforce the permit requirements. EPA has delegated this responsibility to 43 states. In the proposed legislation, however, the EPA will not delegate authority to state agencies. The rationale for this is that it is inappropriate for a state to issue a permit to itself, given the uncertainty surrounding enforcement and the general absence of checks. (Unfortunately, this provision reflects the underlying theme of my analysis, which is that it is unlikely that remediation parties other than the states are likely to emerge.

Because the proposed legislation does not prohibit citizen suits, it is difficult to see why this argument applies. If there is some question about the state's compliance with the permit provisions in a cleanup effort, citizen suits can be used as an enforcement mechanism.

But even without the citizen suit provision, the explicit prohibition on delegation to the states is questionable. States are closer to the actual situation, and therefore have a better chance to make appropriate decisions than the national government. The purpose of the proposed legislation is to give remediating parties greater discretion over discharge, without assuming liability under the CWA. Thus, the legislation

is intended to encourage actions that improve water quality. It is hard to imagine how a federal regulatory agency would have greater incentive to improve environmental quality within a state than a state agency. It is much easier for citizens to hold local government officials accountable and to monitor local environmental regulations.

CONCLUSIONS

It is difficult to label S. 1787 as "Good Samaritan" legislation. Almost without exception, the provisions discourage all potential remediating parties other than state abandoned mine programs from undertaking cleanup efforts.

The exception, of course, is a very important one. The proposed legislation would provide state abandoned mine programs, such as the one operated by the Montana DEQ, with broader latitude in their remediation activities. This should have positive impacts on water quality at sites remediated by state agencies, though the cost of the permit process is probably more cumbersone than it needs to be.

The intent of the proposed legislation is to encourage parties that are not responsible for environmental conditions to take steps to improve water quality at abandoned mine sites. The question is: Are any other Good Samaritans likely to emerge? And, if so, will their resources be put to their best use?

S. 1787 has been marketed as legislation that provides positive incentives for parties to address water quality problems at abandoned mine sites. This is important conceptually because a fundamental precept of sound environmental policy is that incentives matter. The problem, however, is the only positive incentive contained in the legislation will primarily affect state abandoned mine land programs that are already undertaking cleanup efforts. For other parties the incentive structure is not as promising. Most significantly, the legislation does not clearly eliminate all potential sources of retroactive liability, and it builds in disincentives for other parties that might initiate cleanup efforts. To summarize:

- There is uncertainty concerning CERCLA liability
- The permitting process requires the Good Samaritan to conduct a search for a solvent owner. The search is costly and creates uncertainty, though there are no obvious environmental benefits from the provision.
- Mining firms, the source of potential funding and expertise, have no reason to act as Good Samaritans. In addition to potential CERCLA liability, remining and mineral exploration are expressly prohibited; processing minerals allowed only if remediating party operates at a loss.
- Citizen suits create disincentive to all potential remediating parties.
- The scope of the legislation will be narrow if federal lands are excluded.

S. 1787 is a positive step that will improve environmental quality at some abandoned mine sites, but it will fail to encourage new Good Samaritans to emerge. Therefore, I suggest the proposed legislation is either amended to address the many disincentives to potential remediating parties, or renamed "The Clean Water Act Liability Reduction for State Abandoned Mine Land Programs."

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RESPONSES BY DAVID GERARD TO FOLLOW-UP QUESTIONS FROM SENATOR CRAPO

THE GOOD SAMARITAN ABANDONED OR INACTIVE MINE WASTE REMEDIATION ACT

Question 1. What kinds of market-based approaches would you recommend for this proposal to result in Good Samaritan cleanups?

Response. Market-based approaches is a generic term that centers attention on how laws and regulations affect incentives; this contrasts to many regulations which prescribe both a standard and the means in which that standard must be achieved.

Conceptually, Good Samaritan legislation intends to treat those that would voluntarily remediate abandoned mine land (AML) sites in a manner different than those

who are responsible for the mess in the first place. This can be done both by removing disincentives and adding positive incentives to encourage voluntary cleanup efforts. I believe a market approach to the AML program has these fundamental components:

- removing liability for governmental AML programs;
- removing hurdles for private cleanup efforts;
- creating positive incentives for governmental and private cleanup efforts.

There are political realities beyond my expertise that limit my knowledge of what should be included in the bill. Some components, for instance, are so controversial that they might make the legislation politically unviable. That being said, it is my opinion that S. 1787 exclusively concerns State AML cleanups. If private parties are ever to be involved in Good Samaritan cleanups, I think there are a number of disincentives that absolutely must be addressed:

- remove Clean Water Act liability;
- remove CERCLA liability;
- remove owner-operator and solvency searches;
- remove or severely curtail Citizen Suits.

Removing these disincentives seems to be a reasonably straightforward enterprise. The issue of creating positive incentives, however, (e.g., through financial incentives or Brownfield initiatives) is considerably more complex.

Question 2. This legislation would allow the EPA to insist on unexplained "other" information, at the determination of the Administrator, from the permit applicant and holder. What do you anticipate would be the practical application of this provision?

Response. The language gives the EPA broad discretion to do what it likes, but I have no idea how the EPA would apply the provision. I think the effect of the provision is to create uncertainty as to the issuance of a permit.

As an aside, it is not clear why the bill grants any authority to EPA. According to the testimony of the EPA witness—Assistant Administrator of Water Chuck Fox—"this issue of mining has been unaddressed from EPA for some time. And I have had one heck of a time trying to find the resources in a declining budget to try and invest in these kinds of problems."

Good Samaritan legislation has been at the fore of the Western Governors Association priority list for some time. It seems that we should not allocate authority for the program to an agency that has been disinterested at best in the matter, and places low priority on mining issues. In my mind, this is not a recipe for success.

Question 3. Do you think that the mining industry should be excluded from the liability shields provided in this legislation or should they be a part of the solution to abandoned and inactive mine cleanups?

Response. As it stands, S. 1787 very narrowly applies to State AML programs. If there is ever to be a comprehensive approach to the AML problem, I do not see how the mining industry could be excluded.

Question 4. How many additional areas do you anticipate would be cleaned up as a result of the enactment of S. 1787?

Response. Many State AML programs have a list of priority sites, and the effect of Clean Water Act liability is to reduce how these programs address discharges from abandoned mine land sites. The passage of S. 1787 would allow these programs to clean up sites on their priority lists to a greater extent.

It is not clear whether the bill applies to federal lands, however. Obviously, if the bill does not apply to federal lands, fewer sites will be addressed. In Montana, at least 85 of 380 sites on the State's priority list are on federal land. If S. 1787 does not apply to federal lands, then the scope of the legislation is pretty narrow—State AML cleanups on private lands.

In addition, there are a number of major hurdles for private parities to get involved in remediation activities (plus the fact that S. 1787 only allows government entities to act as Good Samaritans), I would expect few if any new sites to be addressed.

Question 5. Under what conditions would this legislation allow a Good Samaritan to be discharged from their permit? Is this sufficient or are there other situations in which a permit holder should be excused from further obligations under the permit?

Response. I do not have a definite opinion on this matter. Whatever the conditions for discharging the Good Samaritan, however, the stipulations must be very clear *ex ante*, otherwise the inherent uncertainty will be potentially costly to resolve *ex post*, and will ultimately discourage future cleanups.

Question 6. Do you believe the requirements called for in S. 1787 for a complete permit to be too little, just about right, or too exhaustive?

Response. If the sole intent of the bill is to give greater latitude to State AML programs for cleanups on private lands, the permit requirements are ridiculously exhaustive. The same goal could be accomplished in a single sentence—"State Abandoned Mine Land Programs are not subject to liability under the Clean Water Act."

If the intent of the bill is to bring in new parties and increase the universe of sites addressed, the permit requirements are still too exhaustive, but not ridiculously so. As it stands, there is tremendous uncertainty as to the issuance of a permit. It seems to me that anyone who is going to think about expending time and resources planning an AML cleanup is going to want to have a good idea of the likelihood of the issuance of a permit. As it stands, EPA has broad discretion over issuance, and there is inherent uncertainty with respect to issues such as the owner-operator and solvency searches and the maximum extent practicable. Of course, State programs are not affected by some of the disincentives to private parties, such as CERCLA liability (states are immune), and owner-operator searches (AML programs typically must conduct such searches to secure various sources of funding).

Question 7. Is it appropriate for a potential Good Samaritan—in essence, a volunteer—to be required to undertake a PRP search? Whose responsibility should that be? Under this bill, who would be required to pick up the tab for such a search?

Response. My written testimony covers this issue in detail. I think the PRP search does nothing to enhance environmental quality, and I think the experience of the federal Superfund program and the Forest Service AML efforts provide clear support for my view. There are several possible scenarios, and none provides much support for requiring a PRP search.

- The Good Samaritan does not find a PRP;
- The Good Samaritan finds a PRP, and the subsequent solvency search shows the PRP does not have sufficient resources for a cleanup.
- The Good Samaritan finds a PRP, and the subsequent solvency search shows the PRP has sufficient resources for a cleanup.

In all three case resources the Good Samaritan is forced to expend time and resources that could otherwise be devoted to cleanup, and cleanup efforts would necessarily be delayed. If a solvency determination is necessary, the Good Samaritan must expend even more resources, and there is bound to be uncertainty as to whether a permit will be issued (for instance, who knows whether the EPA will issue a permit once it has a PRP discovered?). In the third case, the Good Samaritan would have expended resources, and not been able to do any cleanup.

As long as S. 1787 does not remove responsibility from any responsible party for the cleanup, I see no reason to make the Good Samaritan foot the bill for the PRP search.

Question 8. Senator Baucus is a principal sponsor of legislation to promote Brownfields cleanups including rural mine sites. S. 2700 provides funding for a Brownfields program, grants for site assessments, and other federal assistance. Is it consistent to deny such incentives and financial assistance to those potential Good Samaritans for certain instances under this legislation, but not under S. 2700?

Response. In my response to the first question I note that so-called market-based approaches consist both of removing negative incentives and creating positive incentives. This question asks how far down the line should this legislation go? Because this is fundamentally a political question, I don't have an answer. However, it is clear that the next step to addressing the universe of abandoned mine sites in the western states is providing, for instance, a funding mechanism for State AML programs, or creating some sort of incentives for private contractors to remediate sites. Clearly, Brownfield initiatives can create incentives without necessarily warranting a financial commitment from any government body. Such programs are the next logical step from the liability waivers.

Question 8a. Should this legislation include a waiver for Good Samaritans from Superfund liability?

Response. If S. 1787 has any designs on encouraging non-governmental bodies to pursue cleanups, then the waiver of CERCLA liability is essential.

ASSOCIATION OF METROPOLITAN SEWERAGE AGENCIES,
Washington, DC., June 14, 2000.

Hon. MAX BAUCUS,
Ranking Minority Member,
U.S. Senate,
Washington, DC.

DEAR SENATOR BAUCUS: I am writing to express the strong support of Association of Metropolitan Sewerage Agencies (AMSA) for the Good Samaritan Abandoned or Inactive Mine Waste Remediation Act (S. 1787). AMSA greatly appreciates your leadership in introducing S. 1787, along with Senators Campbell and Daschle. AMSA represents the interests of the country's wastewater treatment agencies that serve the majority of the sewered population in the United States, and collectively treat and reclaim more than 18 billion gallons of wastewater each day.

As you know, the surface waters in many of our member agencies' communities have been impacted by pollutants introduced from abandoned and inactive mines. Heavy metal discharges from these mines result in lower quality drinking water and pose significant health risk to the biota that reside in these impacted waters, and the wildlife and fisherman that eat these fish and shellfish. The Western Governors' Association estimates that there are at least 400,000 abandoned or inactive mine sites in the west. The Mineral Policy Center concludes that nearly 14,400 abandoned hard rock mines directly degrade surface waters.

AMSA believes that S. 1787 will encourage the federal government, states, tribes, local governments and private parties to undertake voluntary cleanup of abandoned or inactive hardrock mines, by establishing alternative remediation requirements than are currently available under the Clean Water Act for such "Good Samaritan" efforts. The legislation will provide enhanced environmental, economic and social benefits to downstream users of waters whose quality will be improve through such remediation efforts. This legislation is certainly worthy of widespread bipartisan support and adoption.

ASIWPCA,
Washington, DC., June 15, 2000.

Hon. MAX BAUCUS,
Ranking Minority Member,
U.S. Senate,
Washington, DC.

DEAR SENATOR BAUCUS: The Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) has followed the issues of abandoned mines and the related pollution consequences for water quality for some time now. We are well aware of the problems associated with the runoff of inactive mines that have not been properly maintained or closed in accordance with sound environmental practices.

Yet, over the years the states have found themselves in legal jeopardy because of the strict liabilities connected with the clean up process.

It is not the habit nor tradition of this Association to support or oppose specific legislation, however, we do want to express to you our appreciation for your efforts to provide the States with the necessary flexibility to address water quality and with the legal protection to take remedial action without fearing legal repercussions of liabilities

"The Good Samaritan Abandoned or Inactive Mine Waste Remediation Act" (S. 1787), as an amendment to the Clean Water Act, has as its intent the protection of State agencies engaged in the remediation process from becoming legally responsible for any continuing discharge from such abandoned mine sites after the completion of a clean up effort.

States with concerns over mining activities are in need of support for their remediation activities and are also in need of protection from legal liability. For these reasons, we thank you for your efforts to provide the States with the flexibility and legal immunity that they need to enhance water quality.

Sincerely,

J. DAVID HOLM,
President.

WESTERN STATES WATER COUNCIL,
South/Midvale, UT, June 20, 2000.

Hon. BOB SMITH,
Chairman,
U.S. Senate,
Washington, DC.

DEAR CHAIRMAN SMITH: On behalf of the Western States Water Council (WSWC), we are writing to express our support for amending the Clean Water Act (CWA) to allow for "Good Samaritan" clean up of inactive and abandoned mines. Thousands of such mines exist across the West, causing severe impairments to surface and ground water quality. In view of the impacts on water quality caused by these abandoned mines and the difficulties in identifying responsible parties to remediate the sites, states are very interested in undertaking and encouraging voluntary "Good Samaritan" remediation initiatives, i.e., cleanup efforts by states or third parties who are not legally responsible for existing conditions at a site.

Currently, a huge disincentive exists in the CWA, as recent court cases have found entities remediating mine-caused water quality impacts to be liable under the National Pollutant Discharge Elimination System for any remaining discharge. States and local government agencies should be encouraged to address water quality problems caused by abandoned and inactive mines. The Western Governors' Association with the support of Council members, has worked to produce a proposal that would provide encouragement, assuring the remediating party that its liability for cleanup at the site is limited to following its cleanup plan including any amendments thereto.

It has been the experience of many western states, that the water quality impacts of an abandoned mine site can be substantially reduced by reasonable investment in a cleanup project at the site, although all impairment will not be eliminated. But currently, the CWA does not protect such a "Good Samaritan"—who attempts to improve the conditions at such a site—from becoming legally responsible, under section 301(a) and section 402 of the Clan Water Act, for any continuing discharges from the mined land after completion of a cleanup project.

We understand that the Subcommittee on Fisheries, Wildlife, and Water will be holding a hearing on Good Samaritan legislation. Wednesday, June 21. We urge your support in passing legislation to address this current disincentive by amending the CWA to allow non-responsible "Good Samaritans" to address water quality concerns caused by abandoned and inactive mines, and improving existing conditions without incurring legal liability for remaining problems.

Respectfully,

FRANCIS SCHWINDT,
WSWC Chair.

OFFICE OF THE GOVERNOR,
Helena, MT, October 12, 1999.

Hon. MAX BAUCUS,
U.S. Senate,
Washington, DC.

DEAR SENATOR BAUCUS: I am writing to support passage of the "Good Samaritan Abandoned or Inactive Mine Waste Remediation Act".

As you know, Montana has had a very active abandoned mine reclamation program for several years. This work is carried out with a combination of state and federal funds. Montana has developed a list and prioritized abandoned mines for cleanup. At each site, we do as much as we can with the limited funding that is available. Because the funding is limited oftentimes we are not able to take all the necessary steps to completely improve the water quality.

Montana has also formed partnerships with federal agencies, such as the Bureau of Land Management and the U.S. Forest Service, as well as local counties and conservation districts to further leverage the funds available for cleanup. However, the liability issue has always served to make it very difficult to form these partnerships. Although everyone recognizes the importance of cleaning up abandoned mines, individuals and organizations without any direct responsibility for an abandoned mine site are often times reluctant to get involved without some assurance that they will not be assuming some larger liability for the site.

The legislation which you have introduced is a positive step toward greater involvement in cleaning up abandoned mines. I am grateful that you have consulted with the Montana Department of Environmental Quality (DEQ) while drafting the

legislation. Like any legislation we believe there are still some areas that need to be fine tuned, but on the whole are very pleased with this effort. I have asked Mark Simonich, with the DEQ, to continue to work with your staff as this legislation progresses through Congress.

Sincerely,

MARC RACICOT,
Governor.

COLORADO MINING ASSOCIATION,
Denver, CO, June 20, 2000.

Hon. MICHAEL D. CRAPO,
Chairman, Senate Environment and Public Works,
Subcommittee on Fisheries, Wildlife, and Drinking Water,
Washington, DC.

DEAR SENATOR CRAPO AND MEMBERS OF THE SUBCOMMITTEE: The Colorado Mining Association (CMA) appreciates the opportunity to submit its position to the committee on S. 1787, the Good Samaritan Abandoned and Inactive Mine bill.

The CMA is a not-for-profit association founded in 1876 whose members are comprised of individuals and companies that explore for, develop, produce and refine coal, metals, and industrial minerals and supply goods and services to the mining industry.

The CMA appreciates the bipartisan efforts of both the Western Governors' Association and Senators Baucus, Campbell, Reid, and Daschle in putting this reasonable legislation forward to improve water quality. CMA also appreciates Chairman Crapo's willingness to hold a hearing and become involved in this potentially valuable program for the West. The CMA has been engaged in this issue for nearly five years and is offering language today to expand the effectiveness of this program to assure that states, Indian tribes, municipalities and federal agencies can partner jointly with private contractors in this worthwhile program.

In the spirit of expanding participation in this voluntary program, CMA encourages the sponsors and the committee to consider adopting, at a minimum, the following changes:

1. Clarify that "remediating parties" includes the named entities as well as their contractors and agents.

2. Consider language that establishes a "net gain or improvement" in water quality as the standard for accepting Good Samaritan projects. The bill currently requires cleanup to the "maximum extent practicable," which is not easily defined and could engender delay in getting site cleanups started.

3. Change the language of Section 3(2)(B)(vi)(II) to read as follows: "Persons whose activities at the abandoned or inactive mined land after October 18, 1972, created a discharge of pollutants." With this change, the bill does not preclude enforcement actions against any responsible party under other provisions of the Clean Water Act; and furthermore, it will create a larger class of potential cleanup participants, thereby lowering the cost of Good Samaritan projects.

4. Assure that baseline conditions are defined as "current" conditions, not left open to differing interpretation.

The CMA is mystified as to the bill's provision prohibiting federal agencies, states, Indian tribes and municipalities from performing Good Samaritan projects on their own lands. This appears to be a limit on the bill's purpose of improving water quality in the West. We would encourage you to consider allowing these entities to clean up their own lands.

The CMA thanks you for considering these comments.

Sincerely,

STUART SANDERSON,
President.

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