**Expanded Written Testimony to the Subcommittee on Energy and Natural Resources on the Role of Science in Public Policy**
**February 4, 2004**
**Presented by Christopher E. Herald, CEO Crown Resources Corporation**

Madam Chairman, Members of the Subcommittee, good afternoon. My name is Chris Herald and I am the CEO of Crown Resources Corporation and its South American subsidiary Solitario Resources, both smaller sized U.S.-based mineral exploration companies. Today we have listened to the relationship between science and policy. I will provide testimony concerning the real-life consequences that bad science followed by bad policy has had on our company, and ultimately our nation's economy.

During the 1980's, Crown Resources spent about $2.0 million a year exploring for minerals exclusively in the United States. Most of our employees were based in rural America and earned, on average, twice the local pay scale. We were very successful and made a significant gold discovery in 1985 and a second one in 1988, both in Washington State. The first discovery, called the Kettle River, was permitted in 11 months. This operation has provided 150 highly paid jobs for the past 16 years. Although we sold our interest in the property years ago, the project continues to be the economic backbone for an entire rural community.

The second discovery, called Buckhorn Mountain, is quite a different story. After spending several million dollars in partially defining this deposit, we brought in a major mining company to further fund the exploration and development of this significant new mine. Permitting for the project began in early 1992. Almost 12 years and $75 million later, the project lies idle, our larger mining partner has given up in disgust over permitting, and our company had to go through a Chapter 11 Bankruptcy three years ago. And still we still foresee at least another 18 months of regulatory review. Hundreds of real jobs and millions of dollars in potential tax revenues have been lost as this very beneficial development project languishes in a regulatory black hole created in part out of bad science followed by bad policy.

Let me give you two, of many, examples to illustrate how bad science goes hand-in-hand with bad policy. We began collecting ground water quality data in 1992 as part of our environment impact analysis. One element we analyzed for was arsenic. By 1994 enough data had been collected to establish the pre-mining water quality baseline. This baseline established the basis upon which the project would be judged on whether or not it was in compliance for clean water standards. We were asked by the regulatory agencies to continue monitoring ground water quality after 1994. Although the naturally occurring level of arsenic in the ground water was extremely low, far below clean water standards, for reasons no one but Mother Nature could understand, the arsenic levels were rising ever so slightly with time, even though no mining had ever been conducted on the property. Based upon this phenomenon, we were warned that the project might be out of compliance before any construction had been initiated! Everyone acknowledge that under no foreseeable circumstance, even worse case scenarios, that arsenic levels would ever pose even a slight human or wildlife health issue.

A second, and perhaps more easily understandable example of why bad science often leads to bad policy, which can also lead to very negative economic consequences. We were told that our mining operation at Buckhorn Mountain would negatively impact the deer population in the area. While in operation, herd size was predicted to slightly decrease and migrate a fair distance away from the operation. The impacts were quantified based on "scientific" models that were at best guesswork, and at worse, purposely formulated to produce the perceived right result – mining is very bad for wildlife. To mitigate this predicted consequence, we had to purchase very expensive nearby private land and turn it into a deer preserve in perpetuity.

This would have been a good solution to a scientifically predicted environmental problem, if the problem were real. To determine whether this problem is real or not, let us return to the formerly mentioned Kettle River operation. During the permitting process for Kettle River, generally the same dire consequences to the deer population were predicted. A modest mitigation plan was developed for this impact, among many other mitigation measures, and the project was allowed to move forward in a timely fashion.

What is the reality of the Kettle River operation on deer? Well, all one has to do is look out in the lawn in front of the administrative building, or the natural grasses next to the operating mill or tailings impoundment and see plentiful numbers of deer, perhaps even too many, casually grazing to their heart's content. Apparently they like the vegetation and are curious about what we are doing. Somebody needs to inform these deer that they should be stressed-out and grazing miles away from this sixteen-year old mining operation.

There are two areas where I think this committee could help correct the negative impacts bad science and policy has on natural resource development on federal lands. The first is that policy should direct regulatory agencies to focus on specific real risks and not have to respond and study to every potential imaginary risk. This includes concocting worst case-type scenarios that often time border on the surreal and impose a cost to industry to both study and mitigate unnecessarily. These impose serious additional costs to the company in both time and money, with little, if any, additional environmental protection to the public. Over time, these costs have driven most mining companies offshore. This creates a triple negative effect of increased dependence on foreign supplies for metals, reduced domestic employment and tax revenues, and reduced capital investment in the domestic economy.

The second policy improvement should direct federal agencies to give much added weight to the very real and often devastating socio-economic risks of not allowing a development project to advance in a timely fashion and provide local communities with much needed jobs and tax revenues. Regulatory agencies often give great weight to the study of relatively insignificant environmental impacts based on imaginative dooms-day science versus the benefits a vibrant economy that can afford environmental protection for real risks. We have seen agencies provide some socio-economic analysis that demonstrate a complete lack of understanding concerning the importance of jobs in the community.

For instance, a Forest Service analysis of a new mine proposal concluded that because the mine was only forecast to operate for 20 years, the 250 highly paid new jobs would not really benefit the local economy and that the mine was really going to be a negative. This outrageous economic conclusion by the Forest Service was mainly based on a junk science study from an environmental anti-development group. Fortunately, the outcry of this analysis by the impacted local community forced the Forest Service to reverse this particular conclusion and say that 250 highly compensated jobs for at least 20 years in an area with high unemployment is probably a good thing for the economy.
Do I think the regulatory community will change their scientific models to more closely resemble reality? Unfortunately not, and that's why today our company spends two million dollars a year exploring for minerals in South America and absolutely nothing in the United States.

Although two million dollars a year may not sound like much, let's not forget that our company was spending a similar amount in the 1980's. These modest expenditures generated over a $100 million in payroll to employees and nearly $400 million in invested capital and operating costs. We are projecting a similar amount to be spent on these same projects over the next ten years. That's nearly 4,000 man-years of highly compensated employment and one billion dollars in economic activity in an area that depends on sensible resource development.

We are certainly not alone in the industry in our perception of science and policy issues in the United States. Today our company, as well as the majority of other mining companies, is no longer making significant new investments searching for mineral deposits in the United States for primarily one reason - environmental policies that are unpredictable and lack common sense in prioritization. I am sad to say that we perceive South America has less risk, almost solely based on regulatory uncertainties, than the United States. Our decision to abandon exploration in the United States for foreign shores is not to avoid the costs of sound environmental practices, but to escape the uncertainty of regulatory policy and its chaotic and often arbitrary implementation. I would very much like to return to the United States for business. I believe this committee could help provide the policy guidance to the regulators to allow the industry to return home and create meaningful new jobs for rural America.