

**TESTIMONY OF PETER O’CONNOR, ANGLOGOLD NORTH AMERICA INC.
ON BEHALF OF THE
NATIONAL MINING ASSOCIATION
BEFORE THE
HOUSE SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES
THURSDAY, SEPTEMBER 25, 2003
2:00 PM**

Good afternoon, Madame Chair and members of the Subcommittee.

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

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

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

Overview

The mining industry supports the public’s right-to-know useful information about materials and chemicals that may affect their health or the environment. However, the manner in which EPA has applied the TRI program to metal and coal mines has resulted in the dissemination of data that is not useful or meaningful to the communities surrounding our operations or to the general public.

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

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

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

Introduction

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

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

TRI Background

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

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

the program was designed with these industries in mind. In 1990, Congress expanded the TRI reporting obligations to create incentives for pollution prevention.

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

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

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

Mining and TRI

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

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

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

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

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

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

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

TRI Discourages Pollution Prevention and Recycling at Mining Facilities

EPA's implementation of TRI discourages recycling at mining facilities by treating recycling as "waste management." For example, pad material at gold operations may be

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

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

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

suitable for other uses once precious metal recovery operations have been completed. But if that pad material after appropriate detoxification and full approval by the appropriate regulatory agencies is used as a substitute for commercial-grade road bed materials (*i.e.*, gravel), EPA does not recognize this as recycling. Rather, EPA views this as a waste management activity and a facility must report such re-use as disposal under the “otherwise use” threshold activity.⁶

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

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

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

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

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

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

For example, four Nevada mining companies worked with the state of Nevada to develop and implement a voluntary program⁹ to achieve significant, permanent, and rapid reductions in mercury air emissions. While this program has been recognized by EPA, the companies' success in reducing their mercury air emissions is nevertheless obscured by the facilities' overall reports of naturally-occurring TRI chemicals in dirt and rock.

In another example, the Colorado Mining Association and the Colorado Pollution Prevention Advisory Board recognized the incongruity of the standard P2 program and the mining industry, and developed an industry-specific P2 program identifying good management practices.¹⁰ While this program, too, has been recognized by EPA, it is not a standard "P2" program and had to be conceived outside the rubric of EPA's TRI program.

The mining industry is not the only one concerned about the TRI program. In 2002, as previously referenced, the WGA readopted¹¹ a resolution recognizing that, with the 1997 expansion of TRI to new industry sectors, there was a heightened need "to ensure that the reported data are communicated to the public in an understandable manner that includes a description of how these materials are managed so that actual releases to the environment, where public exposure may actually occur, are minimized."¹²

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

Courts Imposing Rationality on TRI-Mining Relationship

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

*NMA v. Browner*¹³

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

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

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

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

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

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

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

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

*Barrick Goldstrike Mines v. Whitman*¹⁴

In a separate lawsuit, Barrick Goldstrike Mines challenged EPA’s imposition of TRI reporting requirements via guidance documents and letters. In April 2003, the U.S. District Court for the District of Columbia issued its opinion, holding for the company on several key matters. First, the court struck down EPA’s interpretation that the TRI *de minimis* exemption did not apply to mines’ waste (*i.e.*, development) rock. Since many naturally-occurring TRI chemicals can be found at very low concentrations in such rock this holding will help to reduce some of the “noise” created by mines’ reporting large numbers of naturally-occurring chemicals in dirt and rock.¹⁵

Second, the court found that naturally-occurring metals and metal compounds that remained unchanged in Barrick Goldstrike’s dore¹⁶ had not been “processed” as EPA asserted. The court looked to the *NMA v. Browner* decision – which EPA told the court it had accepted – and found that the naturally-occurring metals and metal compounds in the

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

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

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

dore had not been “manufactured”. Thus, again by operation of EPCRA section 313, these substances could not have been “processed”.

Where do the two court decisions leave us?

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

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

Next Steps

Thus far, EPA appears to be committed to making TRI - by rule, guidance, and other administrative action¹⁷ - generate the largest possible “release” numbers, thereby providing the public a distorted view of the Nation’s mining industry.

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

The agency also has announced its intent to “re-visit” (i.e., apparently narrow) a number of reporting exemptions that have operated to impose a degree of rationality on TRI reporting. Many of these exemptions have been in place since EPA promulgated the original TRI regulations in 1988; all of these exemptions were put in place to reduce the

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

burden on reporting facilities. Some examples of the exemptions include one for TRI chemicals used in the maintenance of fleets of vehicles, and one to exempt TRI chemicals involved in coal extraction activities.

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

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

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

Attachment A

Mercury Reduction Program at Mines – A Nevada Voluntary Program

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

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

NDEP eventually developed, in concert with four mining companies, a VMRP that was released in final form in February 2002. The VMRP is a State-sponsored voluntary initiative to provide maximum flexibility to obtain significant, permanent, and rapid decreases in mercury air emissions from precious metal sites in Nevada with thermal units. The program contains two approaches for reducing mercury emissions: (1) “MACT Equivalent Track” (encourage companies to install certain identified controls that have been determined by EPA to be maximum available control technology

equivalent) or (2) “Process Modification Track” (certain activities instituted to reduce mercury air emissions by 33% and 50% of an identified baseline by 2003 and 2005, respectively). Both EPA Region IX and EPA Headquarters have concurred in the VMRP, with EPA Headquarters specifying in a May 6, 2002 memo that “[t]he program is consistent with the Agency’s commitment to finding innovative approaches to managing air quality.”

EPA Region IX recently recognized this voluntary program to reduce mercury air emissions. On April 22, 2003, Region IX awarded its 2003 Environmental Achievement Award to NDEP and the four mining companies that volunteered for the program in recognition of the exceptional work and commitment to the environment. As such, a chemical reported under the TRI program that was identified by the federal and state government as of potential concern has been dealt with voluntarily and swiftly by the mining industry.

Attachment B

TRI, Mining and Pollution Prevention (“P2”)

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

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

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

Based on various investigations, including questionnaires to determine P2 practices already instituted at mine sites, a Code of Practice was developed and ultimately finalized

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

in May 2002. See A Code of Pollution Prevention Practices for the mining industry in the State of Colorado with Good Management Practices, CMA (May 2002). The Code of Practice identified good management practices in four areas: hazardous chemicals; container management; conservation, recycling, and reuse; and closure and reclamation. The goal is for Colorado mining companies to voluntarily develop and implement (or document already instituted) customized site-specific management systems for the elimination of pollution.

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