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April 5, 2004

VIA E-MAIL and FACSIMILE

Mr. Marvin W. Nichols, Jr.
Director
Mine Safety and Health Administration
Office of Standards, Regulations, and Variances
1100 Wilson Blvd., Room 2350
Arlington, VA 22209-3939

Re: Comment of Placer Turquoise Ridge, Inc./Placer Dome America Holding Corp., concerning the limited reopening of comment period to MSHA's Diesel Particulate Matter Proposed Rule (69 Fed. Reg. 7881)

Dear Mr. Nichols:

The Mine Safety and Health Administration (“MSHA” or “Agency”) published a “final” rule on diesel particulate matter (“DPM”) exposure of underground metal and nonmetal miners on January 19, 2001. 66 Fed. Reg. 5706. Several trade associations and mine operators filed a court challenge to the DPM Rule. MSHA and the industry litigants subsequently engaged in settlement negotiations and published a Proposed Rule on Diesel Particulate Matter Exposure of Underground Metal and Nonmetal Miners (“Proposed Rule”). 68 Fed. Reg. 48668 (Aug. 14, 2003). MSHA is reopening the comment period to the Proposed Rule for the limited purpose of obtaining public comment on three new documents related to the August 14, 2003 rulemaking. 69 Fed. Reg. 7881 (Feb. 20, 2004).

We appreciate the opportunity to submit this Comment on behalf of Placer Turquoise Ridge, Incorporated (“Placer Turquoise Ridge”) and its corporate parent, Placer Dome America

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Holding Corp., in response to the limited reopening of the comment period to the Proposed Rule. Placer Turquoise Ridge, formerly known as Getchell Gold Corporation, an underground precious metal mine in Nevada and subject to MSHA's DPM Rule, has been an active participant throughout the entire DPM rule making process. Placer Turquoise Ridge is also a litigant in the court challenge to MSHA's DPM Rule, and was extensively involved in the settlement process that led to the Proposed Rule.

As discussed below, the three new documents that MSHA seeks public comment on provide additional support for industry's prior comments about the DPM Rule in the following respects:

1. In the short term, MSHA's insistence that a complete menu of mine-worthy, technically feasible solutions exists is incorrect.
2. Similar to many other industries, the mining industry relies on respirators to protect workers when engineering and administrative controls do not reduce exposures to workplace contaminants and thus, the DPM Rule correctly allows mine operators to rely on respirators as a means of compliance consistent with existing policy and standards.
3. The review by Dr. Gerald Chase of recently released data from the NIOSH/NCI Diesel Health Effects Study provides further support for industry's strong recommendation that MSHA retain the 400 $\mu\text{g}/\text{m}^3$ Interim Permissible Exposure Limit ("Interim PEL") as the final limit (suitably adjusted to the use of elemental carbon as the surrogate).

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Isolated Zone Study

The Stillwater Mining Company and other members of the mining industry have continued efforts to implement filter systems and filter technology to reduce DPM emissions. As demonstrated by the report *The Effectiveness of Selected Technologies in Controlling Diesel Emissions in an Underground Mine – Isolated Zone Study at Stillwater Mining Company's Nye Mine*, also referred to as the *Isolated Zone Study*, where filters can be sized and fitted to equipment, reductions in DPM emissions may result. However, the *Isolated Zone Study* demonstrates that there are applications where filters are not feasible and other significant problems remain that will require additional time to solve.

The *Isolated Zone Study* evaluated a dozen filters for over 22,000 hours and attests to the extensive efforts that are needed before a mine can attempt to implement diesel particulate filter technology to its fleet of underground vehicles. Although the *Isolated Zone Study* did show that reductions in DPM emissions can be achieved, it documented instances where the filter systems studied did not meet expected reductions and that platinum based catalysts create a serious health problem due to the generation of high levels of nitrogen dioxide.

The numerous feasibility problems encountered in the *Isolated Zone Study* included the physical size of filter systems, the short life span of filter elements, the required downtime for regeneration of active regeneration systems, the need for regeneration stations with electric power and a compressed air supply near production zones for active regeneration systems, the need for major equipment modification for some filter systems and the need for high exhaust temperatures generated over a duty cycle for passive filter systems. Excessive engine

backpressure and the potential for voiding of an engine warranty and significant engine damage is also a critical problem. In sum, the majority of the filters and systems studied were determined to be impractical or infeasible.

The results of the Phase II study, *An Evaluation of the Effects of Diesel Particulate Filter Systems on Air Quality and Personal Exposure of Miners at Stillwater Mine, Case Study: Production Zone* have only recently been released. The objective of Phase II of the *Isolated Zone Study* was to determine the effectiveness of filters on reducing miners' exposures to DPM. Placer Turquoise Ridge believes that data from Phase II, similar to Phase I, provides insight and important, relevant data from actual underground mining conditions and as a result, MSHA should also consider it as part of the rule making record to the Proposed Rule.

Unlike Phase I which created an underground laboratory setting that attempted to create typical vehicle duty cycles, Phase II studied DPM reduction efforts during actual mining cycles. Of note, there were equipment failures and performance of the filters fell below expectations during Phase II. In addition, Phase II only studied pieces of equipment for which a diesel exhaust filter system could be retrofitted to Stillwater's underground diesel vehicles. Thus, the majority of Stillwater's underground diesel vehicles require controls that have not been developed. Significantly, during one test personal exposures were found to be above the Interim PEL and personal exposures were found to be above $160 \mu\text{g}/\text{m}^3$, the final DPM PEL (expressed with total carbon as the surrogate), in two of the four tests.

Based on Phase I and II of the *Isolated Zone Study* and its own experience, Placer Turquoise Ridge does not believe there is a complete menu of mine-worthy, technically feasible

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solutions that are readily available for implementation in underground metal and nonmetal mines. In addition, the results of Phase II demonstrate that the final DPM PEL of 160 $\mu\text{g}/\text{m}^3$ is not technologically feasible. Both Phase I and Phase II used the latest technology available and as a result, MSHA is mistaken if it assumes that feasibility problems have been resolved.

Respirator Usage in Private Sector Firms

The Bureau of Labor Statistics and NIOSH study, *Respirator Usage in Private Sector Firms, 2001*, surveyed a representative sample of U.S. employers and obtained data by industry sector regarding the number of establishments and employees using respirators. The survey documented the large number of workplaces (over 600,000) that rely on respirators. Importantly, the survey found that the mining industry is similar to other industry sectors in the percent of workplaces that require employees to wear respirators (approximately 50%). The survey also collected data regarding employers' respirator programs. The data suggest that the mining industry understands the appropriate role of respirators in controlling employees' exposure to workplace contaminants and how to properly implement a respiratory protection program. For example, employers in the mining industry reported the highest rate (82%) of worker training. And, the mining industry had the highest percentage (50%) of workplaces that use air sampling data to determine which respirator is appropriate to protect employees. Thus, Placer Turquoise Ridge believes the DPM Rule correctly allows mine operators to rely on respirators as a means of compliance consistent with existing policy and standards.

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Review of Data from NIOSH Lung Cancer Cohort Study

Placer Turquoise Ridge has commented previously that it strongly recommends MSHA retain the 400 $\mu\text{g}/\text{m}^3$ Interim PEL as the final limit (suitably adjusted to the use of elemental carbon as the surrogate). Comments submitted on the record during the DPM rule making process, criticizing and documenting flaws to MSHA's Risk Assessment, the scientific basis for the DPM Standard and the Interim and Final PELs, are consistent with adoption of the 400 $\mu\text{g}/\text{m}^3$ level as the Final PEL. The review by Dr. Gerald Chase of recently released data from the NIOSH/NCI Diesel Health Effects Study of Underground Metal and Non Metal Miners provides further support for industry's position that MSHA retain the 400 $\mu\text{g}/\text{m}^3$ Interim PEL as the final limit. Gerald Chase, *Characterizations of Lung Cancer in Cohort Studies and NIOSH Study on Health Effects of Diesel Exhaust in Miners* (Nov. 2003).

Dr. Chase found, based on his review of the data available to date from NIOSH, that the miners studied are not at an increased risk of lung cancer. The overall percentage of lung cancer deaths reported by NIOSH (9.8 %) falls within the range of percentages that would be expected from white males in the general population. Dr. Chase's review also found that similar numbers of lung cancer deaths have been reported in several other recently published mortality studies of miners from other countries. Dr. Chase's review and the other recently published mortality studies referenced in it, provide additional evidence that reducing the PEL to a level below the interim level of 400 $\mu\text{g}/\text{m}^3$ is not appropriate.

We thank you again for the opportunity to comment on these issues of critical importance to the underground metal mining industry and the viability of its future. We pledge our

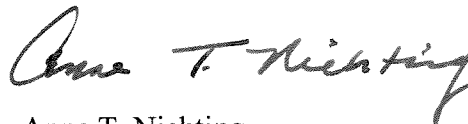
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continued cooperation in seeking satisfactory answers to the remaining problems in the control of DPM exposure.

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