

April 25, 2003

By facsimile and Federal Express

Kirk Minckler, Esq.
Office of the General Counsel
U.S. Department of Agriculture
740 Simms Street
Golden, CO 80401

Re: Molycorp's response to the trustees' "Preassessment Screen"

Dear Kirk:

Enclosed is Molycorp's response to the natural resource trustees' "Preassessment Screen" for the Questa site. Please include it in the administrative record for this matter.

We appreciated receiving the statement of work ("SOW") you provided us, which we have reviewed. Many of our comments on the Preassessment Screen also apply to the SOW. Some of our comments go to the basic evaluation process, such as Molycorp's liability being limited to releases of "hazardous substances," as opposed to "constituents of concern." The draft SOW raises many other questions about the process we are entering into.

Molycorp would like to discuss these process issues before we enter into the MOA, to make sure that we agree on the basic process before we proceed.

Accordingly, we would like to meet with you so we can discuss these process issues before we finalize the MOA. We would like to finalize it promptly, so we would like to meet with the trustees to discuss the basic process issues raised by the SOW as soon as a meeting can be arranged. We have checked our calendars, and could meet with the trustees in Albuquerque or Santa Fe as soon as the afternoon of May 28, or any time on May 29. Please let us know if the trustees can meet with us on either of those dates. If not, please let us know about the next earliest dates that you could meet with Molycorp.

We look forward to meeting with you soon.

Sincerely,

Richard E. Schwartz

Cc: Lindsay Lovejoy, Esq., NMAG (by facsimile only)
David Mittle, Esq., NMAG (by facsimile only)
Dori Richards, Esq. USDOJ (by facsimile only)
Karen Cathey, USFWS (by facsimile only)
Russ MacRae, USFWS (by facsimile only)
Greg Gustina, BLM (by facsimile only)
Penny Luehring, FS R3 (by facsimile only)
Rebecca Neri Zagal (by facsimile only)

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April 25, 2003

Molycorp, Inc.'s Response To The Preassessment Screen For The Questa Mine Site

Introduction

In December 2002 Molycorp, Inc. ("Molycorp") received the preassessment screen ("PAS") prepared by the natural resource trustees for the Questa mine site. The trustees¹ prepared this PAS to comply with 43 C.F.R. § 11.23(a), which requires that "before beginning any assessment efforts under this part . . . the authorized official shall complete a preassessment screen and make a determination as to whether an assessment under this part shall be carried out." The purpose of the PAS is to "provide a rapid review of readily available information" concerning trustee resources to "ensure that there is a reasonable probability of making a successful claim" before the trustees spend time and money on a natural resource damage assessment ("NRDA"). 43 C.F.R. § 11.23(b).

The regulations (43 C.F.R. § 11.23(e)) also provide the criteria for this determination. All of the following criteria must be met before a trustee proceeds with a NRDA:

- (1) A discharge of oil or a release of a hazardous substance has occurred;
- (2) Natural resources for which the Federal or State agency or Indian tribe may assert trusteeship under CERCLA have been or are likely to have been adversely affected by the discharge or release;
- (3) The quantity and concentration of the discharged oil or released hazardous substance is sufficient to potentially cause injury, as that term is used in this part, to those natural resources;
- (4) Data sufficient to pursue an assessment are readily available or likely to be obtained at reasonable cost; and

¹ The trustees include: the Office of the Natural Resources Trustee of the State of New Mexico; the U.S. Department of Agriculture (U.S. Forest Service); and the U.S. Department of the Interior (U.S. Fish and Wildlife Service, Bureau of Land Management).

- (5) Response actions, if any, carried out or planned do not or will not sufficiently remedy the injury to natural resources without further action.

Summary of Molycorp's Response

The PAS generally contains the elements (with the exception of § 11.25(d) (estimate of concentrations of the hazardous substance in the areas of potential exposure, which appears to be missing) and the organization called for by 43 C.F.R. § § 11.23-25. What the PAS shows, however, is that the available information does not support the affirmative determination required for all of the foregoing criteria.

The other important difficulty with the PAS is that it goes beyond the factors that are relevant to a NRDA:

- The PAS relies on data for substances that are not “hazardous substances.”
- It is not limited to conditions attributable to releases by Molycorp.
- It takes no account of baseline conditions.
- It is not limited to natural resources likely to have been adversely affected by a release by Molycorp.
- It is not limited to releases sufficient to cause injury “as that term is used in this part” to those natural resources.
- It takes no account of statutory exclusions.

Additionally, because the response actions under the RI/FS have not been determined, whether those actions will sufficiently remedy the (uncertain) injury also cannot be determined.

Finally, much of the data and reports relied on, while “readily available,” ultimately will not support the scientific conclusions for which they are cited.

Below we will: (1) discuss the ways in which the PAS strays from a NRDA analysis; (2) discuss why the data do not support the required criteria determinations; and (3) discuss problems with reports that the PAS relies on.

Specific Comments on the PAS

Reliance on Nonhazardous Substances

“Hazardous substances” are the only substances that can be the basis for liability for natural resource damages (“NRD”) under CERCLA. See CERCLA § 107(a); 42 U.S.C. § 9607(a). These substances are listed in Table 302.4 at 40 C.F.R. § 302.4 . Nevertheless, the PAS frequently discusses “contaminants of concern” (“COCs”), a term that it applies to substances that are not “hazardous substances.”²

For example, the PAS discussion of “*Surface Water Resources*” (PAS at 9) begins with the statement that “COC concentrations, such as Mo, exceed or have exceeded” New Mexico water quality standards. Molybdenum, however, is not a hazardous substance. This PAS statement concludes with a reference to Table 1, which provides data for aluminum, copper, molybdenum, and zinc. Two of these four substances (aluminum and molybdenum) are not hazardous substances. The main text then concludes with a discussion of sulfate, which also is not a hazardous substance.

Under “Potentially affected resources” (PAS at 8) the PAS states that “[w]ildlife is at risk of molybdenosis (Mo toxicity). Molybdenum concentrations in vegetation exceed risk-based criteria for Mo toxicity to ruminants” Molybdenum, whose presence and concentrations in this area are the reason for the mine, is not a hazardous substance.

Most significantly, the Red River is listed as failing to meet State water quality standards only for aluminum, which is not a hazardous substance.

Conditions That Are Not Due to Releases By Molycorp

In the discussion of releases, the PAS fails to distinguish between conditions caused by Molycorp and baseline conditions. The discussion under the heading “Discharge or release” at page 5 begins with the statement that “hazardous substances have been released directly or indirectly to groundwater, surface water, soil, and sediments in the vicinity of and downstream from the Molycorp Site.” The discussion then refers to “elevated” concentrations of various substances that “are consistent with the mine operations at this location.” These “elevated” concentrations, however, are *also* consistent with background sources. Background sources are identical to the “Molycorp” sources. Attribution of substances to Molycorp by the PAS is based on Allen (1999), Abshire (1998), Slifer (1996), and

² PAS at 1.

Kent (1995), none of which show that environmental concentrations exceed baseline conditions. All of these studies are discussed below.

Omission of Baseline Conditions

In discussing the subject of “Discharge or release” attributable to Molycorp (PAS at 5), the trustees write that samples of groundwater, surface water, soil and sediments contain “elevated” concentrations of COCs that “are consistent with the mine operations at this location.” They are equally “consistent,” however, with natural sources – because the “Molycorp” sources and the natural sources are the same sources.

The trustees continue by observing that “numerous studies show that the Molycorp mine has contributed to the degradation of the Red River corridor.” Assuming for the sake of argument that the mine made such a contribution, that fact would not be sufficient to cause NRD liability, which depends on a showing that the release caused a natural resource to become worse than baseline conditions. *See, for example*, 43 C.F.R. § § 11.62(b)(1)(i-iii) and 11.62(c)(i-iii) (definition of “injury”), 11.72 (quantification), and 11.82 (damage determination).

“Baseline” means “the condition or conditions that would have existed at the assessment area had the discharge of oil or release of hazardous substance under investigation not occurred.” 43 C.F.R. § 11.14(e). Had no mining been done at the site, hydrothermal scar areas and other natural formations would have contributed minerals to the Red River – as they do, for example, upstream of the mine. In fact, the biological impact of erosion from the mountainside peaks *upstream* of the mine property. Chadwick Ecological Consultants, Inc.: *Red River Aquatic Biological Monitoring 2001* (March 2002).

Discussion of Unaffected Natural Resources

The metals that are hazardous substances at the Questa mine site were there before Molycorp arrived. Consequently there are two critical predicates to NRD liability for Molycorp. First, releases of hazardous substances from Molycorp’s operations must demonstrably have caused greater impact to natural resources than would have been caused by baseline conditions. Second, that impact must have caused “injury” as defined by the NRDA regulations. The PAS ignores these two critical questions by addressing all possible injuries to all natural resources in the vicinity of the mine site. Many of the resources have been affected (if at all) by substances that are not present because of Molycorp’s mining activity. Injury to them from other causes (most notably baseline conditions) fall outside the purview of a NRDA.

Describing “Injuries” That Do Not Qualify Under a NRDA Analysis

The PAS describes at some length “Exposed areas” and “Exposed water estimates.” Of course “exposure” is not “injury,” which is defined in the NRD regulations at 43 C.F.R. § 11.62. The same applies to the discussion of “Potentially affected resources.” For example, exposure in water must be at a concentration and duration exceeding established criteria or standards, or the exposure must be associated with adverse changes in viability of biological resources.

Under the heading “Quantity and concentration of released hazardous substances are sufficient to cause injury” (PAS at 9), the PAS refers to hazardous and nonhazardous substances that exceed water quality standards. That fact alone, however, does not establish “injury,” which must be demonstrated by two samples (of hazardous substances, not COCs) more than 100 feet apart. Moreover, a hazardous substance release (by Molycorp) must *cause* the exceedence – the trustees must demonstrate that the water met the standard before the release.

Similar gaps appear in the discussion of “*Groundwater Resources*” (PAS at 10). There is no injury unless the groundwater met the applicable standards before the alleged release (by Molycorp). Proof requires two samples from the same geohydrologic unit. The PAS refers to six substances in Table 2, three of which (aluminum, molybdenum, and sulfate) are not hazardous substances.

The discussion of injury to “*Sediment Resources*” (PAS at 10) applies the wrong criteria. Injury to sediment occurs only if the sediment has become a “hazardous waste” as defined under the Resource Conservation and Recovery Act (RCRA). The PAS, however, refers only to unspecified “COC concentrations” that exceed certain guidelines or risk-based thresholds. Table 3 refers to “regulatory standards and/or other remedial guidelines”, but none of the values listed there qualify as either of those. They are screening-level benchmarks, and have not been promulgated as standards and generally are not used as “remedial guidelines.”

The discussion of “*Geologic Resources*” (PAS at 10) refers to soil “COC” (rather than hazardous substance) concentrations that exceed certain ecological risk-based guidelines. Two of the five referenced COCs (Table 4) are not hazardous substances. The comparison standard in Table 4, the “Chino Lowest NOAEL SoilSC” does not define injury under a NRDA. Furthermore, those values were developed for animals that may not be relevant for the Questa mine site.

The PAS analysis of “*Biological Resources*” (PAS at 12) begins with “elevated COC concentrations” listed in Table 5, where two (aluminum and molybdenum) of the four “COCs” are not hazardous substances. The PAS lists the criteria for injury without discussing whether they have been met. The standards used in Table 5 (Diet LOAEL for certain mammals or birds) are not “risk-based guidelines,” but calculated lowest observed adverse effect levels for chronic dietary exposure. Because the dietary consumption exposure calculation must be integrated

throughout the foraging range, the comparison should be based on average or 95% upper confidence limits of the mean rather than the maximum concentration.

The PAS also ignores the key question as to whether the measured levels differ in any significant way from baseline levels. For example, the PAS discusses possible aquatic toxicity from arsenic (which has never, to our knowledge, been associated with the mine operation), cadmium, and silver, without any indication that the mine operations raised the concentrations of these elements in Red River. The discussions of Chadwick, Allen, Failing, and Lynch (PAS at 11-12) note various conditions downstream of the mine that indicate greater contamination than is found upstream. Because metals and other substances enter the Red River at numerous locations from the Town of Red River to downstream of the mine, it is not surprising that the greatest cumulative loading is at the downstream end of this reach. The relevant – and unaddressed – question is whether that cumulative load is greater or lesser than it would have been without the mine.

Uncertainty Concerning Response Actions

The PAS (at 14) correctly notes that response actions have been initiated under the New Mexico Mining Act, New Mexico Water Quality Act, and the federal Clean Water Act. Further response actions are expected under CERCLA. It concludes, however, that these many actions will not fully remedy injuries to natural resources. At this point, that statement is speculative.

Ignoring Statutory Exclusions

CERCLA excludes “federally permitted releases” from liability for NRD. CERCLA § 101(10); 42 U.S.C. § 9601(10). For NPDES permits, this exclusion applies to discharges resulting from circumstances identified in the permit and subject to a condition of the permit. *Id.* at § 101(10)(B). The same exclusion is included in the Clean Water Act (“CWA”). *See* CWA § 311(a)(2); 33 U.S.C. § 1321(a)(2). Molycorp has had an NPDES permit at the mine and tailings areas since 1978. The most recent NPDES permit (effective February 1, 2001) requires interception of seepage from both the tailings area and the mine area. Thus when the PAS states that the injuries it describes “did not result from any federally permitted release” (PAS at 5) it must exclude seepage from the tailings and mine areas from its analysis. In several instances, however, the PAS does discuss such seepage without acknowledging this exclusion. PAS at 6, 11.

Limited Usefulness of Certain Reports and Data

The trustees point to “[n]umerous studies” that purportedly show that the “mine has contributed to the degradation of the Red River corridor” (PAS at 5), citing Kent (1995), Slifer (1996), Abshire (1998), and Allen (1999). These studies do not, however, support the trustees’ conclusion. They are briefly discussed below in the order in which they were conducted.

Kent

The study by Kent (1995) was conducted as an “expanded site inspection” (“ESI”) to justify placing the Questa mine site on the Superfund National Priorities List. It was not intended to be an objective study. In fact, biased sampling is part of the hazard ranking system (“HRS”) methodology. The sample comparisons between the mine rock and the hydrothermal scars (cited in PAS at 5) were taken with the *purpose* of finding mine rock leachate samples with higher concentrations of constituents than the scar samples. The way this was done is not valid for other purposes.

For the Kent study, the samples of the mine rock piles (taken by the New Mexico Environment Department (“NMED”)) were selected based on “visual selection of sampling points at more highly discolored locations” (Kent at 7) which were expected to be more highly acidic. These “highly discolored locations” were compared with four hydrothermal scar samples that were composites of soils. (Kent at 7; Table 4). The soils apparently were not similarly selected from the most highly discolored locations. Instead, they were composite samples that were “homogenized” prior to transfer into sample jars. Kent at 7. The compositing process could have enriched portions of the composites with low levels of metals. The range of the coefficient of variation for concentrations of various metals in the composite soil samples, although large (16% to 84%), was less than for the mine rock samples. The report does not even discuss the “comparability” of these two different kinds of samples.

Based on the foregoing sample comparison, Kent concluded that mine rock metal concentrations were elevated over background concentrations. The metals concentrations for the mine rock material has (according to the Kent data) coefficients of variation from 50% to 245%. Despite the admitted “heterogeneous nature” of the mine rock piles (Kent at 8), he based his conclusions on only seven samples from the rock piles and four samples from hydrothermal scars. (Kent, Table 4). In addition to the biased sampling methods, the use of such a small number of samples with such high variability robs the sample comparison of any meaning.

Kent concluded that various mine-related sources are greater than three times background. This determination was necessary for the Kent ESI to show a “release” under the Superfund Hazard Ranking System for specific metals. The data supporting these conclusions were contrived. For example, Kent’s conclusion that a release from the mine rock piles to Red River had occurred was based on comparisons of several samples from the Red River along the mine site to a single “background” sample. That “background” sample was taken *six miles* upstream from the mine. This location is *also* upstream of Hot ‘n Tot Creek, Straight Creek,

Hansen Creek, and the other significant sources of acidic drainage to Red River upstream from the mine property.

Kent's conclusions that the mine-related sources exceed background are based on differences in the concentrations of various specific metals. These differences are most plausibly explained as a result of the wide variability in the concentrations of each specific metal in both the mine-related and background sources.

For example, Kent compared data from the Red River WWTP well with data from some downgradient seeps and found higher levels of beryllium and copper. On the other hand, those seeps had *lower* concentrations of chromium and lead. Kent, Appendix A, Table 7. He compared downgradient seeps (below Molycorp) with an upgradient seep (near Hansen Creek) and found higher levels of beryllium, aluminum, copper, and manganese in the downgradient seeps. He also compared mine waste leachate with leachate from scar material and found higher concentrations of beryllium, aluminum, copper, and manganese in the leachate. This comparison is based on only *two* samples of each. Sample results in Kent Appendix A, Table 4 show higher concentrations of copper and manganese in soil samples from the mine rock piles than from the scars. That same table also shows, however, that the mine rock pile samples had *lower* concentrations than the scar samples of arsenic, barium, chromium, iron, silver, sodium, and vanadium. The fundamental reason for all of these differences between the mine and "background" samples is that they come from different rocks. They do not show that mining activity caused a greater impact on the environment from baseline conditions, which include these same rocks.

Slifer

Slifer (1996) recognized the difficulty of distinguishing between acid rock drainage ("ARD") from mine sources versus ARD from natural sources (which include, but are not limited to, hydrothermal scars). Slifer at 2, 15, 19. He admitted that the mine contribution is unknown (Slifer at 22) and that more data are needed to make this determination. Slifer at 23. In fact, he relied on Kent (1995), discussed above, to conclude that ARD from mine rock piles has concentrations of metals that exceed those in ARD from natural sources. Slifer at 2, 21. Slifer noted that background concentrations of metals are not homogeneous (Slifer at 11). He nevertheless used Kent (1995) as evidence that various mine-related sources are greater than three times background for specific metals. Slifer at 16, 18, 21.

With respect to the impact of the mine area on the Red River, Slifer recognized that mine dewatering causes a cone of depression that deflects groundwater gradients away from Red River. Slifer at 15. Slifer did not, however,

attempt to determine the impact of the cone of depression, which was temporarily diminished during 1992-1995, when mine dewatering was temporarily halted. In fact, Mr. Slifer wrote his report in 1996, shortly after dewatering had resumed and before conditions returned to pre-shutdown levels. The temporary cessation of mine dewatering, and of pumping of the production wells (the Columbine and mill wells) could explain the new seeps that Mr. Slifer discovered. It is clear that the cone of depression created by the underground mine and open pit captures some of the water potentially affected by Molycorp's mining activities. Moreover, the purpose of the newly installed (2003) ground water withdrawal wells is to prevent water affected by mining from entering the river

With respect to biology, Slifer mistakenly concluded that metal loadings are not a serious problem until Red River reaches the mine property. Slifer reached this conclusion prior to the studies of aquatic life in the Red River by Chadwick Ecological Consultants, Inc. ("Chadwick"). Chadwick began biological monitoring of Red River in the vicinity of the Molycorp mine in 1997, and has been monitoring the River every year since. Chadwick found that the Red River is not a "biological desert" at any location. Chadwick Ecological Consultants, Inc.: *Red River Aquatic Biological Monitoring 2001* (March 2002.) at 47. Chadwick concluded that "the primary impacts to the suitability of the Red River to sustain aquatic biota were occurring just downstream of the Town of Red River, downstream of Hansen Creek, and downstream of Capulin Canyon." *Id.* at 48. Chadwick found that "[t]he cause of these impacts appeared to be the input of excess sediment from a number of sources and decreased water quality, especially at locations receiving drainage from hydrothermal scars." *Id.* These impacts predated the initiation of open pit mining at Molycorp, and occurred in reaches upstream of the mine. *Id.*

Slifer's report focused on base-flow seepage of acid drainage that affects groundwater. Slifer at 6. Base flow is not, however, the significant cause of fish toxicity in Red River. Fish toxicity is caused by dissolved aluminum, which is elevated during spring snowmelt and periodic storms. Chadwick: *Technical Memorandum: Aluminum Toxicity in the Red River, New Mexico* (June 2002), attached to the Comments of Molycorp, Inc. (June 10, 2002) on the draft "total maximum daily load" ("TMDL") for Red River.

Abshire

David Abshire (Abshire 1998) spent only a portion of one day at the mine site. See the attached letter from Mr. David Shoemaker to Mr. Scott Wilson (September 15, 1998) at 1. The purpose of his report was to determine whether Molycorp's mine rock piles were hydrologically connected through seeps to Red River, which could be a basis for regulating those seeps under EPA's NPDES permit program under the Clean Water Act. Abshire at i. He concluded that both the "erosional scars and WRDs are most probably hydrologically connected through a

shallow alluvial aquifer conduit to the Red River seeps within the mine property.” Abshire at ii. Abshire found only that the most likely sources of seepage to Red River from the mine site were the mine rock piles and the hydrothermal scars. He concluded that it was not possible to differentiate between them as a source of seepage constituents, or to trace any seepage back to any particular mine rock pile or natural scar. He made no attempt to assess the impact of the mine compared with baseline conditions.

Abshire was aware of the cone of depression created by mine dewatering, and devoted substantial attention to it. He argued that the mine area has three aquifers – the upper valley fill (underlain by a clay layer), lower valley fill, and fractured bedrock. Abshire at 18. He argued that “[a]lthough bedrock and lower valley fill ground water elevations indicate these units may act as one hydrologic unit (one aquifer), well tests also confirm that the valley fill has greater horizontal hydraulic conductivity than the bedrock unit. Therefore, the lower valley fill *may act to some degree* as an independent aquifer *during periods of high recharge.*” *Id.* (emphasis added) The apparent purpose of this argument is to show that the cone of depression does not capture all of the infiltration to the mine site, so the seeps are made up, at least to some degree, of infiltration passing through the mine rock piles.

Molycorp’s contemporaneous response to the Abshire report is summarized in the attached letter from Mr. Shoemaker. In a nutshell, water balance studies confirm that the cone of depression captures substantial amounts of infiltration at the site. Although Mr. Abshire argued that “subsurface flow is still probable from the caved area to the river” (Abshire at 14), in fact the bottom of the caved area is at a lower elevation than the river. Moreover, Molycorp has drilled several monitoring wells downgradient of the cave zone since the Abshire report was written and has found no clay layers in this area. The well elevations confirm that there is no clay layer beneath the valley fill that prevents water from infiltrating beneath it.

Finally, Abshire (at 3) cited numerous studies of the condition of the Red River since 1966, but ignored the most recent and comprehensive river study - the 1997 Chadwick report, which has been supplemented by annual follow-up studies to the present. Chadwick Ecological Consultants, Inc.: “Aquatic Biological Assessment of the Red River, New Mexico, in the Vicinity of the Questa Molybdenum Mine” (April 1997). Chadwick concluded, contrary to the reports cited by Abshire, that the biological evidence does not support the assertion that the Questa mine rock piles caused greater harm to the fish population than baseline conditions.

Other Molycorp responses to Abshire (1998) appear in the attached letter from Mr. Shoemaker.

Allen

On September 8, 1999, Molycorp participated in a large meeting in Santa Fe with numerous State and federal officials at which William Turner made an astonishing revelation about the drafting of Allen (1999). Mr. Turner, who was then the Natural Resources Trustee of the State of New Mexico, had commissioned this study. He told Molycorp, in front of the entire assemblage, that he had instructed the University researchers who had performed the study to destroy all of their drafts of their report. He had revised his copy and sent it back to them without retaining any copies. Mr. Turner said that Molycorp could have the final, edited version when it was ready, or Molycorp could have the raw data immediately, but it could not have the University researchers' own interpretation. Molycorp's representatives asked to see the researchers' independent interpretation, but Mr. Turner refused.

Aside from the question concerning who authored the study's interpretations, a second major problem with the report is that it assumes what Mr. Turner was trying to prove. It assumes that locations on the Red River identified as 01, S1, and S2 are all "impacted by both mine and upstream alteration scars; mine impact chemistry." Allen at 8. The report analyzes sediments in Fawn Lakes (near the natural alteration scars upstream of the mine) and Eagle Rock Lake (downstream of the mine and the Questa gauging station), and assumes the differences reflect the impact of mining. What the differences certainly reflect, however, is that Eagle Rock Lake (ERL) is over six miles downstream of Fawn Lakes, and is affected by every source of runoff and drainage above and below Fawn Lakes. Thus it is not surprising that Allen found that metals in ERL sediments are more concentrated than in the Fawn Lakes sediments. (Allen at 23).

Allen observes that "[t]he impact of ARD on the Red River is more pronounced during winter months when baseflow conditions exist, and is less pronounced during spring snowmelt and runoff, when maximum dilution of groundwater seepage occurs." Allen at 18. Because it is the high flow (not baseflow) conditions that have the greatest impact on fish, Allen's observation actually confirms that ARD is, for that reason, less likely to cause toxicity to fish populations in this part of the Red River. Fish toxicity in Red River is caused primarily by dissolved aluminum, which is elevated during spring snowmelt and periodic storms. Chadwick: *Technical Memorandum: Aluminum Toxicity in the Red River, New Mexico* (June 2002), attached to the Comments of Molycorp, Inc. (June 10, 2002) on the draft "total maximum daily load" ("TMDL") for Red River. Moreover, as noted above, the primary cause of impacts to the suitability of the Red River to sustain aquatic biota is "excess sediment." Chadwick Ecological Consultants, Inc.: *Red River Aquatic Biological Monitoring 2001* (March 2002.) at 48 In any event, neither dissolved aluminum nor sediment is a "hazardous substance" under CERCLA.

Conclusion

Because the PAS does not adhere to the facts relevant to a NRDA analysis, it does not, in the words of the regulation “ensure that there is a reasonable probability of making a successful claim” before the trustees commit the time and money necessary for a NRDA. The most critical problems include reliance on substances that are not hazardous substances, and the lack of information about baseline conditions. We believe that the trustees would be well-served to consider the problems discussed in this response before they devote their time and resources to a NRDA at the Questa mine site.

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