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July 8, 2009

Delivered via U.S. Mail and Facsimile to 831-630-5055

Rick Cooper, Field Manager
BLM- Hollister Field Office
20 Hamilton Court
Hollister, CA 95023

Dear Mr. Cooper:

This firm is legal counsel to the BlueRibbon Coalition, Inc. ("BlueRibbon"). BlueRibbon and its members are disappointed with the Hollister Field Office's ("HFO") temporary closure of the Clear Creek Management Area ("CCMA") and are particularly concerned that BLM's direction is fatally flawed in conducting the ongoing planning process for revision of the Hollister RMP. We urge you to consider the ways in which you can address the deficiencies in the decision-making process, to specifically include alternatives that will allow meaningful human and mechanized access to the CCMA.

The CCMA has long been one of the most popular areas in California for motorized recreation and organized OHV events. For years, thousands of OHV users have enjoyed the CCMA without report of asbestos-related injury in those users. Yet, with the closure order, the HFO has summarily and unwisely disregarded competent science and issued an overly and unnecessarily broad prohibition. This unfortunate decision impacts not only the thousands of OHV users who recreate there but also the communities relying on that use to sustain their economies. Rumored feedback from BLM employees on the planning process suggests that the soon-to-be-released Environmental Impact Statement will continue these errors and will inappropriately fail to even consider alternatives that will allow for meaningful, let alone historical, access to the CCMA. In fact, we are aware of statements attributed to BLM Interdisciplinary Team members that the public planning process is an exercise in formality and that the decision to continue closure of the CCMA has already been made. For the reasons discussed below, we hope that the HFO reconsiders these issues, shifts to a solution-oriented focus and works with the OHV community and the public to develop a long-term management plan that appropriately meets the challenges of the area.

BlueRibbon, through its Western Representative Don Amador, recently submitted a Freedom of Information Act request to BLM. Documents responsive to this request amplify our

position and accentuate our fears that BLM is dogmatically tied to the narrow and flawed recommendation of EPA in managing the CCMA. Unfortunately, it seems the HFO relied too heavily on an EPA study and failed to adequately consider all the information available to it. It seems also that reasonable management alternatives were disregarded, despite having been presented.

First, documents available to us demonstrate that the response to EPA's study was unduly broad, bearing the characteristics of a hasty reaction. In other words, the closure order does not fairly meet the science. For starters, there are uncertain or erroneous assumptions in the EPA report regarding actual conditions, and hence, risk. See Attachments A-1, -2, & -3 to this letter.

Second, it appears that the HFO disregarded reasoned, if not persuasive, input questioning the veracity of EPA's conclusions. See, e.g., Attachment B-1. Specifically, the HFO was provided the results of surveys and studies showing that PCME fibers are located in concentrated areas which would not preclude safe recreation and would be consistent with historical practice. This information appears to have been summarily dismissed without analysis, or on the ground that it was simply "sponsored research." Even BLM's toxicologist had questions about EPA's report. See Attachment B-2 (stating BLM experts "had some similar questions" regarding "[t]echnical issues relating to sampling which EPA did not elaborate on"); ("[m]ost of his [Ilgren's] comments have to do with asbestos analytical methods used by EPA and mineralogy (amphibole or not) and their risk assessment. EPA should respond to these; are they?"). Put simply, there are significant unknowns demonstrated in EPA's report. See Attachment B-3.

Third, the FOIA responses reveal that BLM's own experts have many questions about the validity of EPA's analysis, many of which echo or are consistent with questions presented by BlueRibbon, not only through Dr. Ilgren but also through scoping comments and other submissions in the planning process. Specifically, a top BLM toxicologist took the time to prepare a detailed two-page memo, presenting many questions addressed to the EPA analysis. See Attachment C. For example, this memo notes that a new analytical method was used in the EPA report, based on ISO 10312, stating that "[n]either laboratory nor its certifications were identified..."¹ and additionally opining that "[t]he IRIS cancer slope factor is probably based on PCM, so use of TEM may overestimate risk." There are a series of questions about sampling sites and methodology. See, *id.* questions 4,5. These questions would seem complementary to the Iddings et al. report provided to BLM by BlueRibbon suggesting that the unprecedented, and significant, finding by EPA of amphibole fibers at CCMA may be heavily correlated to discrete sites reflecting introduced amphibole fibers. The remaining questions similarly reflect important issues that BLM must address.

¹ Assuming that TEM and ISO 10312 are valid methodologies here, EPA/BLM must further analyze and justify the modifications to the ISO Method 10312, such as the increase in "counted fiber/structure width" from 0.20 to 0.25 microns and the more than doubling of the filter overloading threshold from 10% to 25%. See May, 2008 EPA Report at p. 4-5.

Field Manager Rick Cooper
July 8, 2009
Page 3

Finally, and most frustrating to the OHV community, is the concern that in the many hundreds of pages BlueRibbon has received from the HFO, it does not appear the HFO considered with any appreciable depth the possibility of tailoring any temporary order to permit continued use. In light of the historical patterns of use in the CCMA combined with the uncertainty of the conditions and attendant risk, the HFO should have—at a minimum—conducted a more robust independent technical analysis, as well as public outreach evaluating whether a complete closure was necessary. Even assuming it was appropriate to forego this analysis in announcing the closure order (which it was not), it is essential to fully analyze reasonable options in the ongoing planning process. Again, as noted by BLM's own experts, the common and necessary practice is to improve the monitoring and methodology in order to refine "institutional controls governing when, where, how, and who can ride" in an effort to "reduce risk into the acceptable range and enable limited ORV use at the site." Attachment C at p.2, #14. The supposed need to close the entire area immediately is in fact defied by the HFO's allowance of two previously scheduled motorized vehicle events even *after* the HFO decided to close the area. See Attachment D. If such a grave emergency existed, why permit hundreds of OHV and motorcycle users and fans to attend such an event? Additionally, BLM employees continue to frequent the site. These obvious contradictions must be answered.

We urge BLM to thoroughly evaluate these and the many other concerns presented over closure of the CCMA. We hope we are not overreacting to the developing situation, but again restate our request that BLM critically evaluate EPA's unprecedented findings and conclusions, and consider reasonable alternatives in the RMP revision process. The EIS range of alternatives is not the place to fully concur in or reject EPA's analysis, but is instead designed to allow BLM and the public to meaningfully consider and provide input upon possible management options. As we have indicated on numerous occasions, our office and BlueRibbon are committed to being an asset in collaborative management solutions alongside BLM and other stakeholders.

Thank you for considering this information. Please contact us or Mr. Amador if you have questions or wish to discuss this matter further.

Sincerely,

MOORE SMITH BUXTON & TURCKE, CHARTERED

A handwritten signature in black ink, appearing to read 'Paul A. Turcke', with a stylized, cursive flourish at the end.

Paul A. Turcke

/PAT

cc: Don Amador

Rick
Cooper/CASO/CA/BLM/DOI
03/31/2009 04:01 PM

To Sky Murphy/CASO/CA/BLM/DOI
cc
bcc
Subject Fw: ClearCreek

FYI

Rick Cooper
Field Manager
Hollister Field Office
20 Hamilton Court
Hollister, CA 95023
phone: (831) 630-5010

— Forwarded by Rick Cooper/CASO/CA/BLM/DOI on 03/31/2009 04:01 PM —



Johnson.Jere@epamail.epa.
gov
03/31/2009 11:03 AM

To Nick Vleisides <n vleisides@yahoo.com>
cc Lane.Jackie@epamail.epa.gov, youtin@cdc.gov,
Rick_Cooper@ca.blm.gov
Subject Re: ClearCreek

Mr. Vleisides - I know that your frustration over the closure of Clear Creek is shared by many others in the off-highway vehicle community. Unfortunately, one of the attributes that made Clear Creek such a great place to ride - the open areas with little vegetation - was the result of the fact that Clear Creek exists on the largest contiguous asbestos deposit in the United States.

EPA conducted the exposure and risk assessment by measuring asbestos levels in the breathing zone of people engaged in typical CCMA recreational activities - motorcycle riding, ATV riding, SUV driving on the access roads, hiking, camping, and fence building. We did the sampling on five separate occasions (September '04, November '04, February '05 (two events) and September '05) spanning nine sampling days. Two of the sampling events were considered to be conducted under "dry" conditions, one was conducted when the soil was "moist" and two were conducted under "wet" conditions when it was raining.

What we found was that activities which disturbed the soil at CCMA, particularly motorcycle and ATV riding and SUV driving, put asbestos into the breathing zone at truly significant levels. For ATV and SUV activities, the levels we measured were actually higher during the "moist" soil event than during the "dry" events. Levels only declined when it was actively raining.

In some cases, the asbestos levels we measured exceeded the OSHA 30-minute excursion limit for asbestos. The OSHA limit was established for healthy adult workers at the level which the agency thought employers could reliably measure. It is not a particularly health-protective level and the fact that the level was exceeded during a two hour riding event was of particular concern to us.

We were also disturbed by the fact that the levels measured for children were generally higher than those measured for adults during the same activities. Children are closer to the ground and also tend to be trailing riders. Because asbestos disease has a 20 year or more latency period, childhood exposures can result in the development of disease at a relatively young age.

ATTACHMENT A-1

Asbestos is one of a short list of materials known to cause cancer in humans . It also causes debilitating and fatal non-cancer diseases like asbestosis . We don't know how much or how little asbestos exposure is required to produce disease. For that reason, risk assessment cannot produce exact numbers for health outcomes. That is why our risk assessment includes a discussion of the uncertainty related to our risk numbers. The reference to uncertainty is a reflection of the nature of risk assessment , not a reflection of any uncertainty that asbestos is a very dangerous mineral.

For a variety of reasons, it is very difficult to do a valid epidemiological study of the health outcomes from either occupational or recreational exposures at CCMA. The consensus among the health and medical communities is that chrysotile and amphibole asbestos , the two types of asbestos which EPA found in the air samples at CCMA, cause cancer and other disease. This view is shared by U.S. EPA, California EPA, the Centers for Disease Control, OSHA, the World Health Organization, and many other national and international agencies. Over 30 countries have banned the use of asbestos because of its effect on human health.

EPA conducted the exposure and risk assessment at CCMA to provide information to the Bureau of Land Management, the agency which administers Clear Creek. Based on the results of our assessment, BLM decided to close Clear Creek pending revision of the Resource Management Plan for the area . I am sending a copy of this e-mail to Rick Cooper at the BLM Hollister Field Office so he will be aware of your concerns.

If you have any questions, or want to discuss the risk assessment , please do not hesitate to e-mail me or call me at the number below.

Jere Johnson
Remedial Project Manager (SFD 7-2)
EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105
415-972-3094
415-947-3526 (fax)

From: Nick Vleisides <nvlleisides@yahoo.com>
To: Jere Johnson/R9/USEPA/US@EPA, youstin@cdc.gov, Jackie Lane/R9/USEPA/US@EPA
Date: 03/30/2009 10:27 PM
Subject: ClearCreek

Greetings. I am a local citizen who has been riding motorcycles at Clear Creek for over 20 years. I'm a 52 year old father of three and we all (use to) enjoy riding at Clear Creek 2-3 times a year. We always go when the weather is cool and when the conditions are best, i.e., little dust. Most people like to visit Clear Creek in those conditions. I finally took time to read over some of the risk assessment documents and I must say I was very surprised that Clear Creek was closed based on such methodology. Granted, I'm not a

Rick
Cooper/CASO/CA/BLM/DOI

04/01/2009 10:39 AM

To Rick Cooper/CASO/CA/BLM/DOI

cc

bcc

Subject Re: 

Steve,

With respect to the changes in time for risk calculations ;

Based on public scoping and based on BLM developing a range of alternatives , exposures times to the OHV riders was reduced for each of the alternatives . This time reduction was intended to more accurately reflect actual use by the people recreating in the ACEC . The EPA assessment had some long days of riding (6 hours in the ACEC). We had EPA run numbers for the alternatives at 4 hours first day and 3 hours second day for a weekend, as opposed to 6 hours first day and 4 hours second day..

EPA merely took the time exposure numbers we provided for the alternatives and ran those through the model to arrive at the risk numbers for each activity for each alternative . The risks went down somewhat but we still experienced significant risk for most of the vehicle use .

As to the science being flawed . I believe the EPA risk calculations and sampling to be accurate . This is based my discussions with BLM toxicologists and DOI industrial hygentists .

The recurring statement from the OHV community has been that chrysotile asbestos is not harmful .

However, asbestos is one of a short list of materials known to cause cancer in humans . It also causes debilitating and fatal non-cancer diseases like asbestosis . We don't know how much or how little asbestos exposure is required to produce disease . For that reason, the risk assessment cannot produce exact numbers for health outcomes .

For a variety of reasons, it is very difficult to do a valid epidemiological study of the health outcomes from either occupational or recreational exposures at CCMA . The consensus among the health and medical communities is that chrysotile and amphibole asbestos , the two types of asbestos which EPA found in the air samples at CCMA, cause cancer and other disease . This view is shared by U.S. EPA, California EPA, the Centers for Disease Control, OSHA, the World Health Organization, and many other national and international agencies . Over 30 countries have banned the use of asbestos because of its effect on human health .

BLM employees :

BLM has since the late 1980's used OSHA guidance and our BLM Health and Safety Plan for employee working protocols . We medically monitor any employee that works over 10 days in the area . Employees take air samples while working in the area to help us determine what type of conditions cause the greatest risk . BLM will continue to follow OSHA guidance and risk thresholds for its employees (not the EPA assessment). BLM will however continue to refine how and when we have employees working in the area based on new data like the EPA Assessment .

Rick Cooper
Field Manager
Hollister Field Office
20 Hamilton Court
Hollister, CA 95023
phone: (831) 630-5010

ATTACHMENT A-2

Rick
Cooper/CASO/CA/BLM/DOI
02/19/2009 01:50 PM

To Tim Radtke
cc
bcc
Subject Fw: Asbestos Conversion Factor 320

FYI

Rick Cooper
Field Manager
Hollister Field Office
20 Hamilton Court
Hollister, CA 95023
phone: (831) 630-5010

— Forwarded by Rick Cooper/CASO/CA/BLM/DOI on 02/19/2009 01:49 PM —



Karl Ford/NOC/BLM/DOI
02/19/2009 07:22 AM

To Rick Cooper/CASO/CA/BLM/DOI@BLM, George
Hill/CASO/CA/BLM/DOI@BLM, Timothy
Moore/CASO/CA/BLM/DOI@BLM, Sky
Murphy/CASO/CA/BLM/DOI@BLM
cc

Subject Asbestos Conversion Factor 320

All,
Was to go from TEM to PCM (see below). EPA did not use it; state air pollution agencies use it. I have not found any other info on use of OEHHA cancer slope factor at Superfund sites.

Karl L. Ford, Ph.D.
Branch of Environmental Compliance
Division of Resource Services
National Operations Center - BLM
Phone: 303-236-6622
Fax: 303-236-3508

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— Forwarded by Karl Ford/NOC/BLM/DOI on 02/19/2009 08:16 AM —



Den.Arnold@epamail.epa.gov

v
02/17/2009 05:24 PM

To Karl_Ford@blm.gov
cc
Subject Re: Conversion Factor?

No, we were not enforcing the ATCM or using it for CCMA. Also, the actual data when you compare total

ATTACHMENT A-3

TEM fibers (and 3 to 1 aspect ratio) to PCME fibers is less than 10 to 1 ratio for our CCMA work. Again we used the PCME data directly with either the USEPA or CALEPA potency number. There is no science to suggest there is a set ratio of total fibers to PCM for industrial processes (there are two or three 1970/early80s references and the numbers vary greatly) let alone for NOA sites. Rather the science will show that the exposure distributions and risks vary per process even within the same industry .

Arnold
Arnold Den
Phone: 415 947 4191
Fax: 415 947 3583
Email: den.arnold@epa.gov

From: Karl_Ford@blm.gov
To: Arnold Den/R9/USEPA/US@EPA
Date: 02/17/2009 03:07 PM
Subject: Re: Conversion Factor?

So the recent risks provided (this month) to BLM did not incorporate this factor?

Karl L. Ford, Ph.D.
Branch of Environmental Compliance
Division of Resource Services
National Operations Center - BLM
Phone: 303-236-6622
Fax: 303-236-3508

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Den.Arnold@epamail.epa.gov

02/17/2009 03:51 PM

Karl_Ford@blm.gov

Stralka.Daniel@epamail.epa.gov,
Johnson.Jere@epamail.epa.gov

Subject
Re: Conversion Factor?

To

cc

The factor is used when local air pollution control districts have to calculate risks associated with the CARB's asbestos air toxic control measure. The OEHHA cancer slope factor is in units of PCM fibers and the guidance they and CARB give out to the districts is to use the AHERA TEM method (but use 3 to 1 aspect ratio) and count total fibers, short and long. They translate the total TEM fibers to the PCM units by using a factor of 320. They got this number from a few old papers that compared TEM to PCM ratios in commercialized asbestos situations. However that factor has a very large uncertainty, few studies, commercial situations and when you eye ball CCMA data total to PCME it is less than 10-1 and for our El Dorado amphibole data it was closer to 3 to 1 ratio. My view is there is no science to suggest every site particularly NOA sites has a set ratio.... but the APCDs and CARB use the 320 factor. We chose to follow WHO and use TEM to count PCME fibers and use the cancer slope factor directly.

Arnold

Arnold Den

Phone: 415 947 4191

Fax: 415 947 3583

Email: den.arnold@epa.gov

From: Karl_Ford@blm.gov
To: Arnold Den/R9/USEPA/USOEPA
Date: 02/17/2009 02:11 PM
Subject: Conversion Factor?

Hi Arnold,

Our folks in Hollister mentioned a factor using with the OEHHA slope factor, but weren't sure what it was, how it was used, etc. Can you fill me in? Feel free to call if it avoids a lengthy email. Thanks, KF

Karl L. Ford, Ph.D.
Branch of Environmental Compliance
Division of Resource Services
National Operations Center - BLM
Phone: 303-236-6622
Fax: 303-236-3508

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MAR. 11. 2009 2:55PM

MOORE SMITH BUXTON

NO. 3678

P. 2/6

Dr. E. B. Ilgren, MA, MD, DPhil, FRCPath.
Suite 503, 830 Montgomery Avenue,
Bryn Mawr, Penna., USA 19010
Tel: 610 525 5960 / Fax: 610 520 1156 / Cell: 484 431 9962
dreilgren@aol.com

Mr. Mike Pool
State Director
Bureau of Land Management
2800 Cottage Way, W-1928
Sacramento, CA 95825
916 978 4630

24 Feb 09

Re Critical Commentary on CCMA Closure.

Dear Mr. Pool,

On behalf of the BlueRibbon Coalition (BRC) I am providing further expert opinion regarding the correctness of the closure of the CCMA. This additional report is prompted by several recent events, including the updating of my detailed study of possible asbestos-related disease in CCMA human populations, as well as statements made by Field Office Manager Rick Cooper to the RAC in late January apparently suggesting that BLM still lacks meaningful data on potential human health issues and continues to defer to EPA findings on this subject. I remind you that myself and several others have provided such information. See, e.g., Ilgren to Pogacnik, 16 Apr 08; Ilgren to BLM 20 June 08; Iddings & Fowkes, 2008; Amador to BLM Hollister 19 June 08; Turke to BLM Hollister 20 June 08; and various public scoping meeting documents. I wish to summarize and elaborate here, and trust that BLM will respond appropriately in your upcoming RMP / DEIS, which we understand is now slated for an April, 2009 release.

I will restate my primary conclusion once again - there is no health related basis for the CCMA closure. I say this on the basis of my discussions with you and your colleagues last April, my 20 year study of the CCMA and extensive publications of this area; my final evaluation of the health of the Coalinga chrysotile miner and millers now in press (20 Feb 09); my review of the EPA May 2008 report and the voluminous detailed data set underlying this report obtained through FOIA's to EPA IX provided in four CDs and a fifth CD related to the same data as well as additional related unreported CCMA studies done in 2007 and 2008; the original EPA 2004 - 2005 CCMA ABS studies and attendant correspondence regarding same; the two earlier ABS CCMA studies done by the University of California at Berkley group in between 1977 and 1983 [Cooper et al, 1979; Poppendorf and Wenk, 1984] and the BLM between 1988 and 1991 [PTI 1992]; a phase I geological and historical archaeology reconnaissance study of routes R1 and R2 within the CCMA and adjacent areas (20 June 08) by Iddings and Fowkes; a recent EPA IX document ("Framework for evaluating asbestos sites" - USEPA / OSWER Asbestos Technical Review Work group, Arnold, Den); an extensive literature review regarding the geological, mineralogical, industrial historical characteristics of the CCMA, I believe there is no health related basis for the CCMA closure. The individuals recreating on the CCMA are not at risk of attributable asbestos related

ILGREN REPORT ON CCMA - 1

ATTACHMENT B-1

MAR. 11. 2009 2:55PM

MOORE SMITH BUXTON

NO. 3678 P. 3/6

disease. There is no basis for the EPA's 'extreme concern' for such people or any others exposed to Coalinga asbestos on and / or near the CCMA. The salient points supporting this opinion include, though are not necessarily limited to, the following:

1. Over two million individuals have recreated on the CCMA over the last fifty years and there is no evidence of attributable asbestos disease particularly a mesothelioma excess due to such exposures.
2. Thousands of men have incurred occupational exposures to asbestos whilst working on the CCMA and there is no evidence of attributable asbestos disease particularly a mesothelioma excess due to such exposures - which would have been in many instances exponentially higher than those recreating on the CCMA.
3. There is no evidence of attributable asbestos disease in the families of such workers show particularly a mesothelioma excess due to such exposures.
4. There is no evidence of attributable asbestos disease particularly a mesothelioma excess in individuals residing in and thus potentially incurring 'environmental' exposures near the CCMA due to such exposures.
5. The 2008 EPA CCMA ABS cancer risk estimates regarding recreational activity on the CCMA are totally ludicrous positing up to 1/100 cancers when no attributable cases have been identified in any exposed groups.
6. There is no evidence of naturally occurring 'amphibole asbestos' i.e. asbestiform amphibole in the CCMA. Thus
 - a. Detailed review of the data set underlying the EPA May 2008 report, indicates the majority of the amphibole structures were nonasbestiform on the basis of aspect ratio distribution.
 - b. Detailed review of the data set underlying the EPA May 2008 report indicates problems related to misidentification of amphibole structures including though not limited to a lack of quality control
 - c. Detailed review of the data set underlying the EPA May 2008 report, in conjunction with the existing geological and mineralogical literature of the CCMA, indicates the sources of the naturally occurring nonasbestiform amphibole would have included though not necessarily be limited to
 1. Rock contact zones from Jurassic Franciscan inclusions, jadeite pods, and synenites of the type described by Coleman [1957, 1961, 1986], Yoder and Chesterman [1950], Cohan [1962], Fowkes [2004], Iddings and Fowkes [2008] and other works and as alluded to by Poppendorf and Wenk [1984] per metamorphic zones.
 2. Naturally occurring cross fiber chrysotile from old asbestos mines near the head of Clear Creek and / or from commercial chrysotile used in some of the historical industrial materials e.g. around retorts and kiln stoppings [see Iddings and Fowkes, 2008].
 3. Nonasbestiform tremolite washed down a Clear Creek tributary from the Victor Claim to Staging area 4.
 4. Sources outside the CCMA (Amador pers com, 2008).
 5. Damaged malfunctioning sampling equipment.
 6. Historical industrial amphibole e.g from '150 years' of industrial mine dust collecting along the R1-R2 sampling routes [Iddings & Fowkes, 2008]
 - d. Earlier EPA CCMA documentation e.g. 1989 - 1990 said the only type of asbestos found in the area is chrysotile (also see Ilgren, 1994)

MAR. 11. 2009 2:56PM

MOORE SMITH BUXTON

NO. 3678 P. 4/6

- e. EPA CCMA ABS 2004 - 2005 documents failed to mention finding amphibole.
 - f. Two earlier CCMA ABS studies (Univ. of Calif. Berkley [Cooper et al, 1979; Poppendorf and Wenk, 1984; the BLM [PTI 1992]) failed to identify amphibole asbestos in the CCMA air samples¹
 - g. Extensive analysis of the available geological and mineralogical investigations of the CCMA [e.g. Yoder and Chesterman, 1950; Coleman 1957, 1961, 1986; Van Balen 1995, 2004; Fowkes, 2004; Iddings and Fowkes, 2008; Eckels and Myers, 1946; and Cohan, 1962] failed to identify asbestiform amphibole.
 - h. Reanalysis of ore samples from the UCC Joe Pit (Pooley, 2008) failed to find amphibole [also see Ilgren, 2004].
 - i. The soil samples in the EPA 2008 report failed to identify amphibole at the limit of detection (1%) for PLM. Two samples were said to be 'positive' at <1%. One of the two samples was actually said to be negative by a second analyst (cf. file 05-034, "DSB" per "fifth" CD received from Sara Goldsmith, Esq., EPA labeled "CCMA, 10/7/08, 11 files provided responsive to EI's voice-mail of 9/25/08").
 - j. No amphibole structures were found in two sets of soil samples taken after the EPA May 2008 report was issued (23 Feb 06 and 13 Dec 05).
 - k. Anomalously, the EPA 2008 report failed to list one single cleavage fragment in 169 tabular pages of direct transfer TEM data (in the "fifth" CD received from Sara Goldsmith, Esq., EPA labeled "CCMA, 10/7/08, 11 files provided responsive to EI's voice mail of 9/25/08"). The structural information needed to confirm the alleged asbestiform nature of the amphibole structures was not provided in the FOIA response materials. This information included the sketches of the structures. A few photos were provided but all of them were totally black. The EPA repeatedly refused to provide representative samples of the direct TEM transfer filters to confirm the habit of the amphibole structures even though the precise filter numbers were available to limit the size of the request.
 - l. Some types of amphiboles were simply labeled as "other amphibole", "nonregulated amphibole", "EPA2 like amphibole", "Libby amphibole" and "Libby like amphibole" but these were not defined further in the EPA FOIA response materials.
7. Coalinga type chrysotile fibers were extensively undercounted due to misidentification and / or arbitrary ("for client") modification of the standard ISO counting rules.
 8. Non-asbestos materials (NAM) e.g. cellulose and other non asbestos based fibrous materials were seen in up to 5% of some soil samples ("fifth" CD - "CCMA, 10/7/08, e.g. see 06-076: R116-01 - 013) but these were not identified in the air sampling data.
 9. The assumption that the 'air samples collected (by the EPA) ... are probably more representative of the CCMA mineral mix than soil samples collected from discrete locations or from CCMA mines' was totally unjustified (e.g. see Pooley, 2008 and

¹ Prior to the ABS conducted by the EPA for the 2008 report, the BLM had recently undertaken heavy construction along some parts of the sampling routes, scarifying the soil surface and thus potentially laying bare areas of contact potential tremolite containing rock [Amador press com 2008]

MAR. 11. 2009 2:56PM

MOORE SMITH-BUXTON

NO. 3678 P. 5/6

the points listed above). In fact, the EPA sampling point nearest any of the CCMA mines (i.e. the UCC Joe pit) was more than 6 miles away.

10. The EPA air sampling data was confounded due to overload. Some of this appeared to be due to rainy weather i.e. many filters were clogged with mud and thus thrown out). Damaged and malfunctioning equipment were also potentially confounding.
11. It is totally unclear why the EPA waited thirty years ago to insist on the closure of the CCMA since Cooper et al [1979] published a report in one of the most widely read scientific international journals three decades ago indicating that the asbestos levels generated on the CCMA by the same type of ABS recreational activities exceeded OSHA levels².
12. The EPA has continued to insist on asbestos superfund 'cleanup' measures in the absence of compliance standards e.g. the EPA put three sites at the CCMA onto the NPL in 1990 for Superfund remediation and six years later took at least one of the Sites off the list on the grounds they had been 'cleaned-up' despite the absence of pre- and post-cleanup benchmarks.
13. The EPA's Superfund contractors (WCC, 1989) concluded that the 'Intensity of recreational use ... did not change the ranking position' in their risk matrix and 'primary ranking criteria' for asbestos superfund cleanup on the CCMA.
14. The EPA's asbestos risk models have overestimated the risk of mesothelioma in other settings such as the Thorford chrysotile residential studies [Camus et al, 2002] leading the authors to conclude the EPA risk assessment methodology was seriously flawed.
15. The EPA continues to rely on their base 1986 risk assessment document [EPA600/8-84-003F: Nicholson's "Airborne asbestos health update"] even though the EPA sent it to Sir Richard Doll and Prof. Julian Peto for critical review and comment in 1985. Doll and Peto thus stated, amongst other things, that 'brief intense exposure to chrysotile has never been shown to cause either lung cancer or mesothelioma'
16. The EPA's CCMA [2008] document said the risks could be overestimated if the asbestos from the CCMA did not biopersist. However, the EPA failed to acknowledge the fact that Coalinga chrysotile does not biopersist [Ilgren and Charfield, 1998].
17. The EPA's CCMA [2008] document said "the only fiber size which has been linked to asbestos disease (is) the longer ... PCME fibers". However, in the same document the EPA said most of the Coalinga chrysotile fiber was 'short' leading one to conclude that this is another source of risk estimation³.

² One would have thought the EPA would have acted on the basis of Cooper et al's [1979] findings since they said: 'this is the first instance of which we are aware in which naturally airborne asbestos, not the result of mining, milling or other industrial activity has been shown to occur at levels comparable to those in the workplace. It reflects of course the extremely high chrysotile content of the New Idria Serpentinite. The airborne fibers in the Clear Creek recreational area have diameters, lengths, and concentrations that could be hazardous to health if inhaled over long periods of time. ... sustained or frequently repetitive exposures to concentrations such as reported at Clear Creek especially by children, do not seem justifiable. The reported 'airborne concentrations approach the maximum that might be expected from natural sources in view of the unusually high concentrations of chrysotile in the rocks (approaching 100%) and soil, the dry terrain, and the dust generating activities that were taking place'. ... "The need for restrictions of use or other protective measures for the general population should be considered. Occupational health standards provide guidelines but they are not legally applicable or appropriate in view of the nature of the exposures and the population at risk. An industrial plant in which the observed concentrations prevailed even intermittently would be required to take action to meet OSHA regulations. Environmental Protection Agency standards that prohibit visible emissions containing asbestos presumably would be violated if an industrial site permitted such dust clouds. The Federal Government probably cannot ignore exposures in a recreational area under its control if its guiding principle is that there is no threshold level of carcinogenic effect for asbestos so that 'exposures must be reduced as low as feasible.'" [Cooper et al, 1979].

³ The EPA CCMA [2008] document also said the dust clouds from crocidolite fiber tend to occur as very short fibers and that 'the majority of fibers detected in CCMA air samples ... present with a fiber size distribution similar to that recently published for commercial chrysotile'. Neither statement is true.

MAR. 11. 2009 2:56PM

MOORE SMITH BUXTON

NO. 3678 P. 6/6

18. The EPA's CCMA [2008] document claimed children are more susceptible than adults to asbestos exposure and mesothelioma development. There are no human data to support this proposal. In fact, children exposed from birth to the most potent mesothelioma inducing agent known, fibrous erionite, still develop mesotheliomas twenty or more years after first exposure in a manner similar to adults. In contrast, Selikoff suggested older workers at the amosite plant in Paterson NJ were more susceptible than younger ones for mesothelioma development [Scidman et al, 1986].
19. The EPA's CCMA [2008] claimed 'noncancerous' effects may be more important than cancer ones. However, the only significant noncancerous effect is asbestosis and this only occurs at occupational exposure levels of the kind that would never be found at the CCMA.
20. The EPA's CCMA [2008] document claimed the CCMA recreational exposure situation is somehow similar to the environmental exposure settings found in Turkey, Sicily, and New Caledonia. This is totally incorrect. The mesothelioma excess found in those locations is due to the use of a tremolitic asbestos whitewash (Turkey and New Caledonia) and the use of a rare amphibole called fluorendenite (Sicily) as a building material.

In conclusion, I continue to see no reason whatsoever for the BLM to close the CCMA. The closure is not consistent with the science. There is no evidence of risk to those occupationally, paraoccupationally, and/or environmentally/recreationally exposed to the asbestos found on the CCMA or any materials viewed by others as having 'asbestos-like' properties namely amphibole cleavage fragments. Not one single case of attributable asbestos related disease has been identified out of the millions thus exposed over the last 50 years. If the form of asbestos presently of concern was as toxic as other types of asbestos, such disease would have been identified.

Yours most sincerely,

/s/ E.B. Ilgren

Ed Ilgren



Karl Ford/NOC/BLM/DOI

07/01/2008 11:55 AM

To Rick Cooper/CASO/CA/BLM/DOI@BLM

cc

bcc

Subject Re: Comments to EPA Report from interested parties (FYI)

History:

This message has been replied to

Rick,

A brief note on Ilgren's comments. His main points are that:

1. Since EPA had known about the risk at CCMA for 30 years, why take action now? KF: For one, the analytical technique (PCM to TEM) has changed in response to Libby, MT Superfund site.
2. Where are the dead bodies? KF: He overexaggerates the population mortality. I assumed conservatively 50,000 visitors/year for 50 years where 50% are repeat users for a total of 1.5 million visitors time 1×10^{-4} cancer risk = 150 cases. the problem is that they live all over and finding the cases and attributing them to CCMA is a very difficult epidemiological problem. Recently Pan et al (2005) published a study of residential proximity to NOA and mesothelioma risk in California and found the risk of mesothelioma decreased 6.3% for every 10 km away from then nearest NOA source. Ilgren does not mention this study.
3. Lengthy discussion the chrysotile is not toxic or carcinogenic. KF: he only reports studies favorable to his position.
4. Discussion whether amphibole is present at CCMA and suggests it is only in scattered geologic environments and is not asbestiform (fibrous). Cites Iddings report about commercial asbestos from old mining camps. KF: I don't attach much credence to.
5. Technical Issues relating to sampling which EPA did not elaborate on. We had some similar questions.

Karl L. Ford, Ph.D. Remediation Advisor/Toxicologist
Division of Resource Services
National Operations Center - BLM
Phone: 303-236-6622
Fax: 303-236-3508

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Rick Cooper/CASO/CA/BLM/DOI

Rick
Cooper/CASO/CA/BLM/DOI
06/30/2008 04:11 PM

To Karl Ford/NOC/BLM/DOI@BLM
cc Timothy Moore/CASO/CA/BLM/DOI@BLM, George Hill/CASO/CA/BLM/DOI
Subject Re: Comments to EPA Report from interested parties (FYI)

Karl,

Thanks for the quick response. There is not an immediate need for you to do a full evaluation of all the citations. I wanted you to be aware of the response of the OHV community via Ilgren and Iddings. It maybe useful when we begin to work on alternatives and anticipate some of the feedback BLM will encounter from the OHV side. EPA will have the responsibility to counter this type of questioning to the assessments validity.

ATTACHMENT B-2



Timothy
Moore/CASO/CA/BLM/DOI
03/13/2009 09:48 AM

To Rick Cooper/CASO/CA/BLM/DOI@BLM

cc

bcc

Subject ed Ilgren March fax

History

This message has been replied to

Based on my twenty years of working on the CCMA asbestos mining & risk assessments here are some corrections to Ed Ilgren's "Critical Commentary on CCMA Closure".

#3 BLM is aware of one KCAC worker who may have died due to a contribution of asbestos exposure. A second person CHP law enforcement official who "patrolled the roads in CCMA" contacted BLM due to his asbestos cancer, which he thought could be attributable to this exposure.

#6 BLM has many R.J..Lee TEM lab reports which document tremolite asbestos which were found in the CCMA by routine BLM OSHA assessment sampling.

#6 (c) (2) New Idria asbestos is not "cross fiber" it is massive sheared serpentite. (EPA 1990)

#6 (d) 1989-1990 air samples used PCM low magnification which cannot distinguish species of asbestos. Only recently did BLM document thru the use of TEM the presence of airborne tremolite fibers using R.J. Lee laboratory.



Karl Ford/NOC/BLM/DOI
03/18/2009 10:55 AM

To Rick Cooper/CASO/CA/BLM/DOI@BLM

cc Tim Radtke/PHS/OS/DOI@DOI

bcc

Subject Ilgren

History This message has been replied to

Most of of his comments have to do with asbestos analytical methods used by EPA and mineralogy (amphibole or not) and their risk assessment. EPA should respond to these; are they?

Karl L. Ford, Toxicologist and Remediation Advisor
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**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
NATIONAL SCIENCE AND TECHNOLOGY CENTER
DENVER FEDERAL CENTER
P.O. BOX 25047
DENVER, COLORADO 800225-0047**

**In Reply Refer to:
1703 (ST-180)**

**February 8, 2008
Memorandum**

**To: Rick Cooper, Hollister Field Office Manager
Tim Moore, Hollister Field Office**

From: Karl Ford, Ph.D, Toxicologist, National Operations Center

**Re: Review of "Clear Creek Management Area Asbestos Exposure and
Human Health risk Assessment," Region 9 EPA**

I have been aware of this ongoing study, and have seen some interim briefings. I have briefly reviewed the report and have the following comments.

- 1. I note that EPA uses similar activity-based sampling as has been performed previously at the CCMA. The major difference in this report is the use of a different analytical method TEM (ISO 10312). Neither laboratory nor it's certifications were identified. Conversations with experts and even this report suggests that TEM reports higher concentrations than does PCM. Does EPA have comparable datasets to show have the two different methods compare? The IRIS cancer slope factor is probably based on PCM, so use of TEM may overestimate risk.**
- 2. Data validation of the useability of the results was not provided. Appendix C referred to on page 7 was not provided. What did the blanks show?**
- 3. The data quality objectives were not identified for the risk assessment. If the sampling had been correlated to soil moisture levels, it would have been more beneficial than just precipitation. For example, the November 4 period designated by EPA as "moist" had greater asbestos concentrations than some "dry" periods.**
- 4. The locations of the sampling were not identified. There are clearly areas within the CCMA that have much higher serpentinite than others and these areas have been mapped on geologic maps.**
- 5. Soil sampling is mentioned on page 9, but the Appendix F was not provided. Where did the samplers ride and how do asbestos concentrations correlate to soil samples? Did they ride in areas of lesser asbestos concentrations or just high areas? Page 24 indicates this as a possible source of uncertainty.**
- 6. Page 10 and computation of means and 95% UCL. It is understood that EPA guidance has a preference for arithmetic means and 95% UCL, however, the**

limited information available to me suggests the data are probably log-normally distributed. If true, the arithmetic mean and 95% UCL may overestimate the true concentrations. I would like to see the distributions evaluated and, if appropriate, log means and log UCLs using the Land H method used.

7. Inspection of Figure 4 shows the skewed distributions for the moist condition ATV rider and SUV rider. Most measurements were in the <0.25 fibers/cc range, but there are several values 4-5 times higher than the majority of the samples. These were trailing riders. Were there only two riders to have a lead and a trailer? Were they all riding at the same time and place? Why didn't this condition show for motorcycle riders? Figure 5 shows a similar but less striking pattern, showing a significant bimodal distribution between lead and trailing child riders. Some other potentially useful variables important to BLM are the following distance, number of riders, speed, etc.
8. Page 17 indicates the calculations to derive the UCL are in Appendix E. I could not find these calculations. If there were any non-detects, how were these handled?
9. In Tables 1 and 2, were means computed including lead, middle and trailing? Were samples from weather conditions, "dry," "moist," and "wet," similarly merged? It appears obvious that most of the samples were from dry periods and the moist period (that apparently was not so moist), thus skewing the mean concentrations, and hence risk calculations, toward dry conditions. From a land management perspective, it is essential for BLM to know if risk is acceptable during the wet season. Skewing the dataset towards dry conditions does not help us answer the question. I would like to see the risk computed for the wet period. If it was warm and breezy during the moist period and if samplers were riding on exposed south slopes for instance, the "moist" condition may have been mischaracterized. Relying simply on precipitation may not be the only or best indicator. From a land management perspective, it may be possible to measure soil moisture with telemetry to determine when conditions might present acceptable risk. Further study may be needed to determine that.
10. Were the SUV driver/riders actively on trails/hillsides or just on the main road?
11. Are the precipitation data shown in Figure 2 from the onsite met station?
12. Page 16, High Estimate of 200 days per year. This seems unreasonable since the CCMA is closed much of the year in the dry season.
13. Page 20: an age threshold for the mesothelioma effect might be helpful to BLM. I note that a recent article in by Reid, et al (Chest, 2007 vol 131:376-382) reported the opposite trend.
14. A combination of some additional analyses I have suggested above (evaluate dataset distributions and log means, compute risk during wet conditions, evaluate soil concentrations/locations, and better soil moisture characterization) and continued monitoring and institutional controls governing when, where, how, and who can ride, may reduce risk into the acceptable range and enable limited ORV use at the site. BLM also needs to recognize that the cancer (and non-cancer risk) at the site is significant. The other alternative is to eliminate ORV use.

Rick
Cooper/CASO/CA/BLM/DOI
03/11/2008 08:29 PM

To Mike Pool, Jim Abbott/CASO/CA/BLM/DOI
cc
bcc
Subject Good morning

Closure of CCMA, I got the feeling we could be over reacting at the end of our call. Thought I would clear my head before heading home for a glass of vino.

1. We need to leverage for more time and Jan and I will deliver the message tomorrow AM.

2. My approach to this decision has been verify the planned joint communication between BLM and EPA and then move forward with the appropriate outreach. (But we have not been able to get in step with EPA with respect to when and how because their timetable had been fluid and their approach/process is different from BLM's.) The fact that our decision timing is based on EPA's time table has been my biggest concern from the start.

As per our Comm Plan we would communicate to key (Congressional, State govt. and agencies) individuals prior to the release of the report. I would work with EPA to extend this period so that we can communicate effectively with all parties including County, Sierra Club, AMA, District, CA4WD, landowners, mining claimants, business', etc..

I will issue the closure in association with the release of the report. Hopefully the report will roll out beyond April 21. (This departs from my preference, but Erica's criminal comment convinced me, I think she was referring to "knowingly generating emissions". Authorizing a use that creates dust in a NOA area maybe knowingly).

I would be available at the EPA roll out meeting to affirm the temporary closure and announce the timetable for the EIS and let public know that BLM will accept scoping comments in writing for an additional 30 days. I will also announce BLM will hold two planning workshops with stakeholders to develop alternatives for the CCMA RMP/EIS.

I propose to leave the events in place. I have already allowed the Timekeepers Event on March 8,9 with the same information that I have in hand now.

I do not have the final EPA report, I propose not making any decisions related to use until that report is final, whether it be April 10 or May 30.

We have the ability to cancel SRPs in Clear Creek based on current site conditions (last moment) and certainly based on newly published findings.

Being decisive with the final report in hand is BLM's best approach.

If I take a couple of hits based on allowing two events (or cancelling 2 at the last minute) out of hundreds we have allowed over the years, so be it. Every event participant signs a waiver of warning regarding asbestos for themselves and/or their children to participate in an event. The permit conditions allow BLM to cancel the permit. The BLM image/liability is going to be based on what we have allowed over the last 30 years not one or two events in April, 2008. BLM will need to have *clear* explanation of why we got to where we are today. How do we intend to proceed in the future and what if someone gets sick because they recreated Clear Creek. (great news reporter question)

3. I would prefer not to rely on a draft EPA report that *clearly* states do not cite, internal use only.

ATTACHMENT D

However, if it is the best interest of the BLM to move immediately then we need to make our contacts immediately and start the closure procedure in March, issue closure decision as soon as possible, cancel the April events and wait until EPA files their final report to validate our decision.

4. Temporary Emergency Closure order will be based on 8364.1, which requires FRN. We should get this up through the pipeline ASAP. Our recently affirmed seasonal closure decision indicated we could close roads temporarily with a CX. We would indicate in the closure order that further use in CCMA will be analyzed through an EIS/RMP public process, reference the existing NOI. We have the draft closure order and FRN ready to go. My team says the 9268.3(d) is a one stop location for LE to write citations easily, but the 9260 regs refer back to the respective regulations, grazing, recreation etc. therefore we think the use of the citation(8364.1) will serve us best. If you have another opinion or precedent case please let me know.

5. I am working with Karen on a refund mechanism for season pass holders.

Talk to you tomorrow.

Rick Cooper
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20 Hamilton Court
Hollister, CA 95023
phone: (831) 630-5010