



OHMVR COMMISSION MEETING Sonora, CA 95370

May 29, 2015

STAFF REPORT: Update on Multi-Month, Activity-Based Risk Assessment, Clear Creek Management Area, San Benito County, California

REPORTING: Will Harris, California Geological Survey

SUBJECT: Risk Assessment Update, Clear Creek Management Area, San Benito County, California

Summary

This an update on the multi-month, activity-based risk assessment investigation at the 75,000 acre Clear Creek Management Area (CCMA) conducted by the International Environmental Research Foundation (IERF). The CCMA is managed by the Hollister Field Office of the US Bureau of Land Management (BLM) and spans from southern San Benito County into western Fresno County. This IERF investigation follows an earlier IERF investigation (IERF 2011) where air filter samples were collected from investigation-team motorcycle trail riders who had ridden in the western portion of CCMA in April 2010. The filter samples were examined for fibers of naturally occurring asbestos (NOA), and a health-risk assessment based on the fiber count was conducted. The IERF (2011) findings indicated that NOA levels for motorcycle trail riders were low and that the recreation could be managed per parameters now deemed acceptable by BLM for other recreational activities at CCMA. The current IERF investigation expands the timeframe of air sampling. Motorcycle trail riders from the IERF investigation team rode the trails in the western portion of CCMA during the months of November and December 2013 and January and March 2014. The results of the expanded investigation are expected in August 2015.

Discussion

The CCMA consists of 75,000 acres of mostly public land in San Benito and Fresno Counties. BLM manages 63,000 acres of public land within CCMA. Approximately 30,000 acres of that land has been designated an Area of Critical Environmental Concern (ACEC). This is based on the mapping of soils derived from the New Idria Serpentinite geologic inclusion. Serpentinite is a metamorphic rock derived from partially subducted oceanic crust and is comprised mostly of the serpentine group of minerals. A few of these minerals, such as chrysotile, can be fibrous and, if they are fibrous, are called asbestiform or asbestos. If these fibrous minerals are seen in rock or soil, they are collectively called naturally occurring asbestos (NOA). It is important to note here that most of the more than 20 minerals in the serpentine group are not fibrous and that “serpentinite,” and “serpentine,” are not synonymous with asbestos or NOA—

many occurrences of serpentinite rock do not contain asbestos. That said, the eastern third of the New Idria Serpentinite Inclusion—or ACEC—is relatively rich in chrysotile, and that portion of the ACEC has been mined for chrysotile. Recreation at CCMA has predominately been within the western half of the ACEC where access to CCMA and the ACEC is provided by Clear Creek Road, a San Benito County road.

The predominate recreation at CCMA has been off-highway vehicle (OHV) use, particularly motorcycle trail riding. The CCMA has been recognized as one of the top motorcycle trail riding recreation areas in the nation. Hiking, mountain biking, rock-hounding, hunting, and camping are also popular activities at CCMA. Prior to 2008, CCMA received approximately 35,000 visitors annually.

In May 2008, the Hollister, California field office (HFO) of BLM issued a temporary closure of CCMA. The closure was in response to a May 2008 activity-based health risk assessment study by Region 9 of the US Environmental Protection Agency (Region 9) which stated that exposure to NOA at CCMA was “of concern.” The Region 9 study examined NOA exposure for various recreational activities at CCMA, including camping, hiking, and OHV recreation. The Region 9 investigation team collected air filter samples for these activities in September and November 2004 and February and September 2005.

The BLM HFO closure of CCMA extended from May 2008 to March 2014. During that time the BLM HFO developed a Resource Management Plan (RMP) for CCMA which incorporated the Region 9 risk assessment calculations as a means to evaluate NOA exposure to potential CCMA recreationists under different visitation and activity scenarios—also known as management alternatives. The NOA exposure risk threshold for an acceptable management alternative used by the BLM HFO was 1 in 10,000; that is, health-based risk calculations using the collected air filter sample data had to show that the risk of an “excess cancer” associated with asbestos exposure was less than one visitor per 10,000 visitors. To meet this threshold, the BLM HFO chose a year-round management alternative which allows for visitation to the ACEC for five days per year but only for the driving of highway-licensed vehicles on designated roads and for activities like hiking.

Also during the 2008 to 2014 CCMA closure period, the Off-Highway Motor Vehicle Recreation Division (OHMVR Division) of California State Parks contracted with IERF for a risk assessment study which examined motorcycle trail riding at CCMA. Since 1980, the BLM HFO has accepted nearly 7 million dollars in OHMVR Division grant funds for CCMA infrastructure and maintenance specific to OHV-related recreation. The OHMVR Division’s more OHV-focused IERF study was a means for the OHMVR Division to be assured that the potential loss of its OHV-related investments in CCMA was warranted.

The IERF investigation had two motorcycle trail riders, one following the other, traverse trails in the western portion of the ACEC on April 22 and 23, 2010. These were the same trails used by the Region 9 motorcycle riders. The riders were equipped with breathing-area-intake air sampling pumps. After the riders rode the trails for designated amounts of time, filters on the pumps were collected and subsequently analyzed for asbestos content.

From the filter sample analyses it was determined that the mean concentration of airborne fibrous material was very low--less than the worldwide average for airborne asbestos in urban areas (IERF 2011). Additionally, health-based risk calculations based on the concentrations showed that for five-day-per-year motorcycle trail riding at CCMA, the risk of excess cancer was less than one in 1,000,000 (IERF, 2011), well below the minimum threshold of one in 10,000 used by the BLM HFO.

The BLM HFO finalized the CCMA RMP in February 2014. In March 2014, it lifted the temporary closure of CCMA. In its place, the RMP allows for year-round but limited access to the ACEC within the CCMA—individuals cannot enter the ACEC more than five days per year. Recreation is limited to “non-motorized activities” (e.g., hiking, rock-hounding, and horseback riding), the “non-hunting discharge of firearms,” and the driving of highway-licensed vehicles into or through the ACEC, which would primarily be on Clear Creek Road at the west end of the ACEC. Camping is prohibited though camping at the Jade Mill campground, which is adjacent to the western perimeter of the ACEC, is allowed. OHV recreation within the ACEC is prohibited.

A CCMA ACEC access permit is required for any individual entering the ACEC. The permit is free and is obtained via the website www.recreation.gov. A \$5 vehicle use permit is required for all vehicles entering CCMA and can be obtained from the same website.

The RMP includes a stipulation for adaptive management regarding restrictions associated with NOA in the ACEC. The CCMA RMP states “BLM would reinstate travel management planning in the...ACEC to modify transportation and travel management decisions adopted in this RMP” based on “adaptive management criteria” including “activity based studies that establish effective strategies for reduction in personal exposure to asbestos from off-highway vehicle recreation.” It is for this reason that the OHMVR Division asked IERF to broaden its initial risk assessment investigation. Field work for this new investigation occurred in November and December 2013 and January and March 2014 with investigation-team motorcycle trail riders equipped with air sampling gear riding trails in the western portion of CCMA. Filters from the air sampling equipment were collected and are currently being analyzed for NOA content. A risk assessment will be conducted based on the new and previous air filter data and a report will be prepared. The results of the expanded IERF investigation are expected in August 2015.

Commission Action

For information only.

References Cited:

- CCMA RMP, 2014. Record of Decision and Approved Resource Management Plan for Clear Creek Management Area, Prepared by U.S. Department of the Interior, Bureau of Land Management, Hollister Field Office, California. February 2014
- IERF, 2011. Preliminary Analysis of the Asbestos Exposures Associated with Motorcycle Riding and Hiking in the Clear Creek Management Area, San Benito County, California.
- Region 9, 2008. Clear Creek Management Area Asbestos Exposure and Human Health Risk Assessment, EPA Region 9, May 2008.