

S. EPA Risk Assessment: Clear Creek Management Area Asbestos Increases Long-Term Cancer Risk

Thursday, May 1st, 2008.

The U.S. Environmental Protection Agency has completed a detailed study of the extent of the asbestos exposure risk to people participating in recreational activities at the Clear Creek Management Area in Central California.

The risk assessment found an increased long-term cancer risk from engaging in many of the typical recreational activities at the CCMA.

“The EPA’s sampling results demonstrate that in areas where asbestos is present in the soil, activities that create dust also create asbestos exposure,” said EPA Toxicologist Daniel Stralka, PhD. “Higher dust-generating activities produce higher exposures and, therefore, higher risks. The asbestos levels measured in the breathing zone at CCMA are in the range seen in industrial environments and are at levels of concern. Reducing or eliminating dust-generating activities in CCMA will reduce exposure and reduce the risk of developing asbestos-related disease.”

Most of the area is managed by the federal Bureau of Land Management. The area is visited by hikers, campers, hunters, botanists, rock collectors, off-highway vehicle riders and others. CCMA receives about 35,000 visitors per year including many families with children. Both BLM and the EPA have advised users of the asbestos health hazard existing at the area since the early 1990’s.

The CCMA contains the largest deposit of asbestos in the United States, and popular CCMA activities, such as off-road vehicle riding, disturb the soil and put asbestos into the air where it can be inhaled. Asbestos is a known human carcinogen.

The EPA studies found that motorcycle riding, ATV riding and SUV driving created the highest asbestos exposures. The EPA data also showed that children are generally exposed to higher asbestos concentrations than adults participating in the same activities.

Based on the asbestos exposure levels, the EPA estimated lifetime excess cancer risks. Many CCMA activities were found to have risks above the range that EPA considers to be acceptable.

In 2004 and 2005, EPA Region 9 collected air samples while EPA employees and contractors participated in typical recreational activities common to the CCMA. The samples were collected from the breathing zone of individuals riding motorcycles and all-terrain vehicles, driving and riding in SUVs, hiking, camping, sleeping in a tent, fence building, and washing and vacuuming vehicles after use at the CCMA.

The EPA risk assessment only evaluated excess lifetime cancer risks. Asbestos can also cause debilitating and fatal diseases other than cancer, such as asbestosis and pleural disease. The EPA risk assessment did not take other diseases into account because no asbestos toxicity values exist for non-cancer health effects. Non-cancer health effects from heightened asbestos exposure in the area may actually be more significant to total disease outcome than cancer.

The CCMA spans more than 75,000 acres across San Benito and Fresno Counties and includes the Atlas Asbestos Mine Superfund Site. It includes a 31,000 acre outcrop of naturally occurring asbestos.

Federal agencies must incorporate environmental considerations in their planning and decision-making, and ensure the scientific integrity of analyses in their environmental impact statements. Specifically, BLM

will use the information provided in the EPA's risk assessment to evaluate alternatives in an upcoming environmental impact statement for managing the CCMA.

Asbestos is a known human carcinogen recognized by the U.S. EPA, the U.S. Occupational Safety and Health Administration, the U.S. Centers for Disease Control, California EPA, the World Health Organization, the International Agency for Research on Cancer, and numerous other international and national agencies.

All asbestos is naturally occurring. The fibrous minerals have been mined for centuries for their unique physical properties such as tensile strength, ability to be woven, and heat and chemical resistance. Three asbestos mines operated within or near the CCMA, supplying asbestos for a variety of commercial and industrial applications.