

Eye Dynamics, Inc. (Torrance, CA www.eyedynamics.com) develops, manufactures and distributes medical devices related to the observation, analysis and documentation of eye movements and pupil reactions as they relate to human neurophysiology. It was the first company to receive FDA-approval for its video-based eye recording and analysis technology.

SafetyScope™, a screening device for determining real-time worker impairment, is a product which evolved from the Eye Dynamics' core FDA-approved medical technology. It is based on the National Highway Traffic Safety Administration's (NHTSA) roadside administered Standardized Field Sobriety Test (SFST) performed by law enforcement personnel who are trained under the guidelines established by the International Association of Chief's of Police (IACP). The eye test component of the SFST, termed Horizontal Gaze Nystagmus or HGN, has been shown to be the most sensitive of its test components, as it is based on the brain's involuntary control of eye movement and pupil reactions. The physiology of HGN has a 30 year history of being legally accepted as an indicator of impairment.

The accuracy of SafetyScope™, and its quick, simple and automated 90 second test, is based on comparison to a worker's baseline test, i.e. a person's normal, non-impaired, eye movement responses are used as the individual "norm" to which each subsequent test of that same individual is compared. A '*Failed*' test result, which indicates that physiological signs of impairment have been detected, could be caused by the influence of any illegal drug, alcohol, abuse of over-the-counter medications, reaction to a prescription medication, onset of a medical condition, or even fatigue. Each of these situations could result in a miner being impaired, and therefore not fit-for-duty. An impaired miner is a safety concern for themselves, their co-workers, the public at large, and the company.

Validated by sponsored clinical trials, as well as government-funded research, SafetyScope™ has proven to be three-times more accurate than any other impairment screening technology.

Eye Dynamics has partnered with Circadian Technology (www.circadian.com) to evaluate early stage commercial opportunities. Circadian is an international leader in consulting to operations on managing the costs, risks and liabilities of operating extended working hours.

Because impairment testing is a technology ideally suited for the determination of fitness-for-duty, SafetyScope™ can be practically employed in the mining industry. It is a quick (90 seconds), inexpensive (approx. \$3/test), and accurate process with immediate results. Whereas urine and blood testing for drugs only evaluates past use of a limited number of illegal substances, and cannot determine a person's current state of impairment, no matter the cause, these modalities cannot assure unimpaired workers in the workplace in real time. This relegates urine and blood testing to the evaluation of off-duty behavior.

Eye Dynamics has assured that SafetyScope™ protects workers rights to proper process, data security and personal privacy by virtue of its proprietary information technology platform which is embedded into the SafetyScope™ operating system. This connectivity and networking capability provides a turnkey solution that ensures that the rights and responsibilities of both employers and workers are maintained.

I suggest to MSHA that impairment testing as a measure of fitness-for-duty be reviewed and considered in the rulemaking process. As the inventor of the technology and Eye Dynamics' CEO, I am willing to meet with MSHA administrators and/or researchers as well as interested industry members to discuss SafetyScope™ implementation at length. In

addition, Eye Dynamics is willing to collaborate with mining industry partners in pilot programs to evaluate the best methods for implementing SafetyScope™ in mining environments.