



NIOSH FIELD EFFORT TO ASSESS CHEMICAL EXPOSURE RISKS TO GAS AND OIL WORKERS

BACKGROUND

There is a lack of existing information regarding the variety and magnitude of chemical exposure risks to oil and gas extraction workers. To determine if risks are present, NIOSH wants to develop partnerships with the oil and gas extraction industry to identify, characterize and (if needed) control workplace chemical exposures. This work will occur as part of the NIOSH Oil and Gas Extraction Safety and Health Program, which seeks to prevent injuries and illnesses among oil and gas extraction workers. Strategic objectives include identifying possible exposures, determining risk, and preventing chemical exposures to workers involved in oil and gas extraction industry.

PURPOSE

The goals of this NIOSH field effort include: 1) identifying processes and activities where chemical exposures could occur; 2) characterizing potential exposures to vapors, gases, particulates and fumes (e.g., solvents, diesel particulate, crystalline silica, acids, metals, aldehydes, and possibly other chemicals identified during the study); 3) depending on results of the field effort, recommending safe work practices and/or proposing and evaluating exposure controls (to include engineering controls, substitution, and personal protective equipment).



Crewmember at hydraulic fracturing operations. *Image courtesy of Jeff Swensen for the New York Times.*

WHO CAN PARTICIPATE

Workers, managers, supervisors, and health and safety professionals involved in oil and gas drilling and servicing operations are encouraged to participate in the field effort.

BENEFITS OF PARTICIPATION

Companies can leverage the industrial hygiene expertise of a NIOSH field research team to help identify if chemical exposure risks are present or absent, and based on results of field studies, prioritize and control potential workplace chemical exposures at their worksites. Data and results collected by NIOSH in the field effort will be communicated to the company in letter format. Become involved with NIOSH and be seen as a leader in occupational safety and health in the gas and oil industry.



Floorcrew on drilling platform. *Image courtesy of Eric Esswein, NIOSH.*

NOTE: This Field Research Effort will be fully funded by NIOSH; there is no cost to participate. NIOSH is a part of the Centers for Disease Control and Prevention (CDC). NIOSH is federal agency responsible for conducting research and providing guidance related to occupational health and safety. NIOSH is not a regulatory agency. Federal regulations provide for trade secret protection for participating companies.

HOW TO BECOME INVOLVED

To learn more about the Field Effort to Characterize Chemical Exposures in Oil and Gas Extraction Workers, contact Eric Esswein, CIH, at (303) 236-5946, or submit inquiries electronically or by mail to: ejel@cdc.gov or Eric Esswein, NIOSH, Denver Federal Center, P.O. Box 25226 Denver, CO. 80225



Sand truck operator at hydraulic fracturing operations. *Image courtesy of Eric Esswein, NIOSH.*

To receive other documents or other information about occupational safety and health topics, contact NIOSH at

Telephone: 1-800-CDC-INFO (1-800-232-4636)

TTY: 1-888-232-6348 ■ E-mail: cdcinfo@cdc.gov

or visit the NIOSH Web site at www.cdc.gov/niosh

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As part of the Centers for Disease Control and Prevention, NIOSH is the Federal agency responsible for conducting research and making recommendations to prevent work-related illnesses and injuries. Fact sheets describe how worker exposures to hazardous agents or activities can be reduced.

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