The U.S. Environmental Protection Agency (EPA) and the North Dakota Department of Health (NDDoH) are seeking participants for a medical study to determine if erionite in road gravel could increase health risks to exposed individuals. Medical faculty from the University of Cincinnati will conduct the study on behalf of EPA and NDDoH. While no health-related impacts from erionite exposure in North Dakota have been observed, the study will provide a more thorough evaluation of potential health effects in persons with likely exposure.

**Objective:** The objective of this initial screening questionnaire is to identify individuals who have been potentially occupationally exposed to erionite in road gravel in western North Dakota, and to determine their eligibility for potential participation in the subsequent medical study. The objective of the subsequent medical study is to determine the prevalence of chest X-ray and chest CT scan changes in a population of workers potentially exposed to erionite contained in road gravel used in portions of western North Dakota.

**Study Process:** The first step in the study is to identify people potentially exposed to erionite in road gravel. The persons who are considered to have the highest potential exposure are persons who have worked in the gravel pits, processed gravel, worked on road crews, or those who drove as a major part of their job (mail carriers, bus drivers, truck drivers, law enforcement officers, etc.). If you have held one of these identified jobs, you could be included in the study. Please fill out and submit the attached initial screening questionnaire to indicate your interest in being considered for inclusion in the subsequent medical study. Submitting this questionnaire does not commit you to participating in the subsequent medical study. Completed questionnaires will be reviewed by EPA, NDDoH, Agency for Toxic Substances and Disease Registry (ATSDR) and University of Cincinnati representatives to identify medical study participants. Individuals with the highest potential exposures will be requested to participate in the medical study, which includes a more comprehensive questionnaire, chest x-ray and chest CT scan. Individuals who are not selected for inclusion in the medical study will be notified. Participants in the medical study will receive interpretation of their results including copies of the medical tests. Information on this Initial Screening Questionnaire and medical study results will be kept confidential and anonymous.

**Background:** Erionite is naturally occurring in the ore that is used for road surface material in western North Dakota. Some properties of erionite are similar to the properties of asbestos; however, erionite is not currently regulated by EPA. Like asbestos, erionite may pose increased risks of fibrogenic lung disease, lung cancer and mesothelioma (a rare type of respiratory cancer usually related to asbestos exposure) to those who breathe in the fibers. The possible health effects of environmental exposure to erionite in North Dakota have not been studied.
CONTACT INFORMATION

Name: ________________________________ Age: _____ Gender (circle one): Male Female

Home Phone Number: (____) - ___________ Cell Phone Number: (____) - ___________

Work Phone Number: (____) - ___________ E-mail address: _______________________________

Street Address: ________________________________

City, State, Zip: ________________________________ County: ___________________________

Mailing Address (if different): ________________________________

City, State, Zip: ________________________________

How long have you lived in western North Dakota (see map of area of concern)? __________

EMPLOYMENT HISTORY

Have you ever been employed in western North Dakota (see map of area of concern) as any of the following (check all that apply). Indicate counties where employment occurred, ranking them A, B, C, or D, with A being the county where you worked in the job the most.

______ Gravel Pit Worker
Dunn____ Slope____ Stark____ Other ____

From (Month/Year) _____ To (Month/year) _____
Average number of months per year _____ Total number years _____

______ Road Maintenance Worker
Dunn____ Slope____ Stark____ Other ____

From (Month/Year) _____ To (Month/year) _____
Average number of months per year _____ Total number years _____

______ Mail carrier
Dunn____ Slope____ Stark____ Other ____

From (Month/Year) _____ To (Month/year) _____
Average number of months per year _____ Total number years _____

______ School Bus Driver
Dunn____ Slope____ Stark____ Other ____

From (Month/Year) _____ To (Month/year) _____
Average number of months per year _____ Total number years _____

______ Truck Driver (delivery, local hauler)
Dunn____ Slope____ Stark____ Other ____

From (Month/Year) _____ To (Month/year) _____
Average number of months per year _____ Total number years _____

______ Law Enforcement Officer
Dunn____ Slope____ Stark____ Other ____

From (Month/Year) _____ To (Month/year) _____
Average number of months per year _____ Total number years _____
EMPLOYMENT HISTORY (continued)

Have you had any job(s) not included in the employment history above where you think you may have been exposed to gravel dust from the area of concern (see map). Indicate counties where employment occurred, ranking them A, B, C, or D, with A being the county where you worked in the job the most.

Job duties: _______________________________________ ___________________________________

Month/Year started: __________ Month/Year ended: __________ Number of Months per year: ______
Dunn____ Slope____ Stark_____ Other ____

Job duties: _______________________________________ ___________________________________

Month/Year started: __________ Month/Year ended: __________ Number of Months per year: ______
Dunn____ Slope____ Stark_____ Other ____

CONSENT

I have read the included information for the North Dakota Erionite Medical Study and would like to be considered for participation in the study. By submitting this questionnaire my potential exposure to erionite in road gravel will be evaluated by representatives of the U.S. Environmental Protection Agency, the North Dakota Department of Health, Agency for Toxic Substances and Disease Registry (ATSDR), and representatives of the University of Cincinnati who will be overseeing the study. Completion of the questionnaire does not mean that I will be automatically included in the group of people who are included in the subsequent medical study and who undergo medical testing. Furthermore, by submitting this questionnaire I am not committing to participate in the subsequent medical study and I may withdraw from participating at any time. Information on this Initial Screening Questionnaire and subsequent medical study results will be kept confidential and anonymous.

Signature: ________________________________________ Date: ___________________

Thank you for your interest in this study and for completing the questionnaire. Please forward your completed questionnaire to Mark Dihle of the North Dakota Department of Health at the address below. If you know anyone who had any of the listed jobs and may have been exposed to gravel dust, please let them know about this planned study.

Additional information and Initial Screening Questionnaires are available from:

Mark Dihle
North Dakota Department of Health / Air Quality
918 E. Divide, 2nd Floor
Bismarck, ND 58501

Phone: (701) 328-5188
E-mail: mdihle@nd.gov
Website: http://www.ndhealth.gov/EHS/Erionite/