# ANTHRAX MITIGATION PLAN FOR SCOTT COUNTY

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ANTHRAX MITIGATION PLAN FOR SCOTT COUNTY

Introduction

Minnesota Pipe Line Company, LLC (MPL) has developed this Anthrax Mitigation Plan to address potential risks associated with pipeline excavation activities in areas of known historical outbreaks of anthrax in livestock in Scott County. The plan provides an overview of anthrax, identifies the locations of historical outbreaks of the disease in the vicinity of the proposed pipeline route of MPL’s MinnCan Project, and identifies mitigative measures to minimize the potential for grazing animals in the vicinity of the project to ingest anthrax spores and become infected with the disease.

As indicated by the Minnesota Department of Health in its letter attached in Appendix A, there is little to no risk to humans of contracting anthrax as the result of soil disturbance activities. The construction workers on the project and the landowners in the vicinity of the project are not at risk for contracting the disease as the result of pipeline construction activities. Therefore, this plan addresses concerns related to animal health and not human health.

Overview of Anthrax

According to information provided on the Minnesota Board of Animal Health’s (BAH) website (www.bah.state.mn.us/diseases/anthrax), anthrax is a naturally occurring disease caused by the bacteria *Bacillus anthracis*. Grazing animals such as cattle, horses, sheep, and goats are most commonly affected by the disease. Since the early 1900s, anthrax has been reported on approximately 200 Minnesota farms located primarily in the southwestern and northwestern parts of the state.

Anthrax spores can occur naturally in the soil of areas with historical outbreaks of the disease and can survive for long periods of time. As indicated in the letter from the BAH attached in Appendix B, soil disturbance activities in locations where anthrax affected animals are buried may uncover spores, which could possibly be ingested by livestock grazing in these areas. The ingested spores could become active and cause the animal to become infected with anthrax. A vaccine is available to prevent livestock in high risk areas from getting infected.

Locations of Historical Anthrax Outbreaks in Scott County

Based on information provided by Scott County and the Minnesota Department of Agriculture, several farms located in three townships in Scott County (Belle Plaine, Helena, and St. Lawrence Townships) have experienced historical outbreaks of anthrax. These outbreaks occurred between 1919 and 1953. There have been no reported anthrax cases in Scott County since 1953 despite extensive excavation activities that have occurred in the county over the years. The locations of the anthrax outbreaks in the vicinity of the pipeline route are shown on Figure 1. Most of these sites are located south of the pipeline route and only one actual burial site has been documented. The pipeline route crosses one farm at approximate milepost (MP) 251.5 that had an anthrax outbreak in 1948. The landowners do not currently raise livestock on this property, but there are two livestock operations within about 1 mile of this property (see Figure 2).
Mitigative Measures to Prevent Anthrax Infection

To minimize the potential for grazing animals in the vicinity of the MinnCan Project to ingest uncovered anthrax spores and become infected with the disease, the following mitigative measures will be implemented:

- Prior to construction, MPL will notify the landowner of the property with the historical anthrax outbreak crossed by the pipeline route (MP 251.5) of the potential risks to grazing animals as the result of pipeline construction. If this landowner plans to have grazing animals in the vicinity of the construction area, MPL will make arrangements to either fence off the disturbed right-of-way on this property for two years or work with the landowner to have the animals vaccinated.

- Prior to construction, MPL will notify local veterinarians of its proposed activities and inform them of the property with the historical anthrax outbreak that will be crossed by the project.

- Prior to construction, MPL will notify feedlot operators located within 1 mile of the historical-anthrax property at MP 251.5 of its proposed activities (see Figure 2). MPL will work with these operators and their veterinarians to develop a mutually agreeable plan of action to protect the health of their livestock.

- During construction, MPL will implement dust control measures such as watering on the disturbed areas of the historical-anthrax property to minimize windborne transport of spores to adjacent properties.
Figures
Figure 1
MinnCan Project
Historic Anthrax Outbreak Locations in Vicinity of Pipeline Route

This information is for environmental review purposes only.
Figure 2
MinnCan Project
Feedlots in Vicinity of Pipeline Route

This information is for environmental review purposes only.

Pipeline Route (11/15/06)
Feedlot Location
Operator Notification Area

DATE: 12/12/06 REVISED: 12/12/06 DRAWN BY: RSMGREGOR
Appendix A
November 30, 2006

Larry Hartman, EFP Staff
Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

Dear Mr. Hartman,

The Minnesota Department of Health has been contacted regarding the potential risk to humans of acquiring anthrax as a result of soil excavation procedures during pipeline construction. Human anthrax is extremely rare in the United States. There are less than 100 cases of human anthrax that occur each year in the world, and except for the anthrax terrorism attack in 2001, we have not seen a case of human anthrax in the United States since 1975. There is little to no risk to humans of contracting anthrax from soil being disturbed, even if naturally occurring anthrax spores are present in the soil.

Anthrax in humans can be acquired in three ways: cutaneous, ingestion, or inhalation. Cutaneous, or skin, anthrax can occur when the bacterial anthrax spores enter an open wound and infect the wound. Ingestion, or gastrointestinal, anthrax occurs in poorer parts of the world where persons may eat animals that have died from anthrax. Inhalational, or lung, anthrax was the route of infection for most of the victims of the 2001 anthrax attack. Most inhalational anthrax cases in the U.S. occurred in the early 1900s, and were in factory or mill workers who were regularly exposed to spores while they directly processed animal hides or hair.

Soil excavation activities occur all over the world, and anthrax spores exist in soil in nearly all continents, but the medical and public health communities have not heard of one case of human anthrax that has been linked to soil disruption. Unlike anthrax spores that have been manipulated for terrorism use to improve their ability to stay aloft in the air, naturally occurring anthrax spores have an affinity to quickly fall to the ground and remain there. And since humans do not graze, they are not at risk of ingesting the spores.

I hope this information alleviates any concerns the public may have about acquiring anthrax as a result of the pipeline construction. If you need additional information, please contact me at 651.201.5085 and I would be happy to provide it.

Sincerely,

Jayne Griffith

Jayne Griffith, MA, MPH
Senior Epidemiologist
Bioterrorism Unit

JG:mkg

cc: Randall Duncan, Natural Resource Group, Inc.
    Allen Frechette, Scott County Health Department
    Linda Glaser, Minnesota Board of Animal Health
    Robert Patton, Minnesota Department of Agriculture

General Information: (651) 201-5000  TDD/TYY: (651) 201-5797  Minnesota Relay Service: (800) 627-3529  www.health.state.mn.us
For directions to any of the MDH locations, call (651) 201-5000  An equal opportunity employer
Appendix B
November 15, 2006

Larry Hartman, EFP Staff
Department of Commerce
857th Place East, Suite 500
St. Paul, MN  55101-2198

Dear Mr. Hartman,

In response to the concern about soil excavation and anthrax, the Board of Animal Health can provide the following information and guidelines. Because anthrax can survive for long periods of time in the ground, disturbance of soil in locations where anthrax affected animals are buried may uncover spores, allowing livestock grazing on these areas to ingest the spores. Livestock that ingest anthrax spores may become infected with anthrax and die. To avoid possible exposure of grazing livestock to disturbed soil that could contain anthrax spores, the board recommends animals not graze on these locations or that livestock are vaccinated for anthrax vaccine each spring before grazing these areas. The anthrax vaccine is extremely effective in preventing anthrax mortality in livestock when animals are vaccinated annually in the spring.

The Board of Animal Health has statutory authority over anthrax infected livestock and requires persons to report suspected and confirmed cases of anthrax in livestock. Herds that contain anthrax affected animals must be quarantined for 30 days after the mortality has ended. There are also requirements for disposal of affected animal carcasses and cleaning and disinfection of any buildings where animals died of anthrax (Minnesota Rules, Chapter 1705.0010-0050.)

The Board also provides educational materials on anthrax. In recent years, the agency has developed an educational campaign in areas of the state where anthrax has affected livestock, educating livestock producers about anthrax and the preventative measures that can be taken. If you would find it useful, the Board would be willing to provide you with our informational materials for your efforts to inform producers concerned about anthrax in livestock.

I hope you find this information useful in planning and responding to citizen concerns about anthrax in association with pipeline construction.

Sincerely,

Linda C. Glaser, DVM
Cattle Programs Division

cc: Robert Patton, AICP, Minnesota Dept. Agriculture
    Allen Frechette, Scott County Environmental Health Manager
    Randall E. Duncan, Natural Resource Group, Inc.
    Jayne Griffith, Minnesota Department of Health
    William Hartman, Minnesota Board of Animal Health