

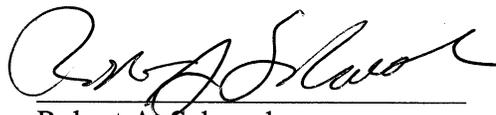
PIPELINE ROUTING PERMIT
FOR A
NATURAL GAS PIPELINE
IN
BLUE EARTH COUNTY, MINNESOTA
ISSUED TO
MANKATO ENERGY CENTER, LLC
MEQB DOCKET NO. 04-77-PRP CALPINE

In accordance with the requirements of Minnesota Statutes section 116I.015 and Minnesota Rules chapter 4415, this Pipeline Routing Permit is hereby issued to

MANKATO ENERGY CENTER, LLC

Mankato Energy Center, LLC a wholly-owned subsidiary of Calpine Corporation, is authorized by this permit to construct a new natural gas pipeline approximately 4.3 miles long in Blue Earth County along a route identified in this Routing Permit and in compliance with the conditions specified in this permit.

STATE OF MINNESOTA
ENVIRONMENTAL QUALITY BOARD



Robert A. Schroeder
Chair

Issued: September 16, 2004

I. PIPELINE ROUTING PERMIT

The Minnesota Environmental Quality Board hereby issues this Pipeline Routing Permit to Mankato Energy Center, LLC a wholly-owned subsidiary of Calpine Corporation (hereinafter the "Permittee") pursuant to Minnesota Statutes section 116I.015 and Minnesota Rules chapter 4415. This permit authorizes the Permittee to construct a natural gas pipeline and associated facilities in Blue Earth County, Minnesota.

II. PROJECT DESCRIPTION

This pipeline will be approximately 4.3 miles long from an interconnection with an existing Northern Natural Gas (NNG) pipeline east of Mankato, Minnesota to the proposed Mankato Energy Center gas-fired large electric power generating plant to be constructed near Mankato, along a route designated in this Permit. The natural gas pipeline authorized by this Permit consists of approximately 4.3 miles of new, welded-steel, fusion-bonded epoxy-coated pipe with a nominal outside diameter of 20 inches. The minimum pipeline throughput design is one million cubic feet (MMcf) per day. It is designed to have a maximum throughput capacity of 126 million cubic feet of natural gas per day at a maximum allowable operating pressure of 936 pounds per square inch gauge (psig). The normal operating pressure of the pipeline will be between 525 psig and 550 psig. The pipeline is more specifically described in the Mankato Energy Center, LLC Application for Pipeline Routing Permit dated April 2004.

III. DESIGNATED ROUTE

The pipeline route designated by the Environmental Quality Board by this Permit is described as follows:

1. The proposed 4.3 mile natural gas pipeline will begin at a tap on the existing Northern Natural Gas Company ("NNG") pipeline located in the southeast $\frac{1}{4}$ of the southeast $\frac{1}{4}$ of Section 27 in Lime Township of Blue Earth County. The Pipeline will be located entirely in Blue Earth County in south central Minnesota.

2. The Pipeline will start at the NNG interconnection point along the eastern edge of the southeast $\frac{1}{4}$ of the southeast $\frac{1}{4}$ of Section 27, Lime Township. The pipeline runs west southwest from this interconnection and then turns sharply south southwest in the southeast $\frac{1}{4}$ of the southeast $\frac{1}{4}$ of Section 27 of Lime Township. Approximately one quarter mile west of the eastern boundary of Section 27 the proposed pipeline route turns due west, running along the southern border of Section 27 and the northern border of Section 34. The route continues due west along the southern boundaries of Sections 27, 28 and 29, which are also the northern borders of Sections 34, 33, and 32 for approximately two and one-half miles. At a point in the southwest $\frac{1}{4}$ of Section 29, the Pipeline will proceed south into the northwest $\frac{1}{4}$ of Section 32. At a point in the NW $\frac{1}{4}$ of Section 32 the Pipeline will proceed in a generally diagonal fashion southwesterly into Section 31 terminating at the power plant, which is located in the SW $\frac{1}{4}$ of Section 31. The Pipeline route is shown most clearly in the map attached to this Permit.

IV. RIGHT-OF-WAY SELECTION

1. The Pipeline will be placed on a permanent right-of-way 50 feet in width. Approximately 24.3 acres of new right-of-way (“ROW”) will be acquired along the 4.3 miles. The majority of the proposed route is immediately adjacent to an existing 115 kV transmission line right-of-way controlled by Xcel Energy. This will minimize potential impacts to the environment and to landowners located along the proposed route. The remaining portion of the Pipeline will follow existing road and railroad ROWs.
2. In selecting the actual right-of-way, both permanent and temporary, for the pipeline within the designated route, the Permittee shall attempt to locate the pipeline along existing rights-of-way such as county roads, along section lines and half section lines, and along headlands. The Permittee shall attempt to minimize the number of drain tile that have to be crossed during construction.

V. EQB REVIEW OF PLAN AND PROFILE AND RIGHT-OF-WAY SPECIFICATIONS

1. At least 14 days before right-of-way preparation begins, Mankato Energy Center shall provide the EQB with a plan and profile of the right-of-way and the specifications and drawings for right-of-way preparation, construction, cleanup, and restoration for the pipeline. The Permittee may not commence construction until the 14 days has expired or until the EQB has advised the Permittee in writing that it has completed its review of the plan and profile and specifications and drawings.
2. If the Permittee intends to make any significant changes in its plan and profile or the specifications and drawings for right-of-way preparation, construction, cleanup, and restoration after review by the EQB, the Permittee shall notify the EQB Chair at least five days before implementing the changes.
3. The Permittee shall also provide the Minnesota Office of Pipeline Safety with the information it gives the EQB.

VI. PERMIT DISTRIBUTION AND NOTIFICATION REQUIREMENTS

1. The Permittee shall, within 10 days of receipt of this pipeline routing permit from the EQB, send a copy of the permit to the office of the auditor of Blue Earth County, the Chair of Lime Township Board, and the clerk of the City of Mankato.
2. At least five days before commencing construction of the pipeline on a landowner’s property, the Permittee shall provide a copy of this pipeline routing permit to the landowner. (Minnesota Rules part 4415.0175, subp. 2).
3. At least ten days prior to commencing construction, the Permittee shall advise the EQB in writing of the person or persons designated to be the field representative for the Permittee with the responsibility to oversee compliance with the conditions of this Permit during construction. This person’s address, phone number, and emergency phone number shall be provided to the EQB, who may make the information available to local residents and

public officials and other interested persons. The Permittee may change its field representative at any time upon written notice to the EQB.

VII. PERMIT CONDITIONS

The following conditions apply to pipeline right-of-way preparation, construction, cleanup, and restoration.

1. The Permittee shall comply with the requirements of the attached "Agricultural Impact Mitigation Plan" developed for this project, unless otherwise negotiated with the affected landowner.
2. The Permittee shall comply with applicable state rules and statutes.
3. The Permittee shall comply with those practices set forth in its application for right-of-way preparation, construction, cleanup and restoration for the new pipeline.
4. The Permittee shall restore the work area as quickly as possible after installation of the pipe.
5. The Permittee shall clear the right-of-way only to the extent necessary to ensure suitable access for construction, safe operation and maintenance. Windbreaks or tree rows will be crossed by using boring or directional drilling techniques that preserve the trees and surround area, unless otherwise negotiated with the affected landowner.
6. The Permittee shall stabilize stream banks disturbed by pipeline construction with vegetation using native plant species indigenous to the area or by other methods required by applicable state or federal permits or laws.
7. The Permittee shall protect and segregate topsoil in cultivated lands, unless otherwise negotiated with the affected landowner.
8. The Permittee shall minimize the compaction of soil on cultivated lands and confine compacted lands to as small an area as practicable.
9. The Permittee shall protect livestock and crops, unless otherwise negotiated with the affected landowner.
10. The Permittee shall take all appropriate precautions to protect against pollution of the environment.
11. The Permittee shall promptly remove and properly dispose of all waste and scrap that are the products of the pipeline construction process.
12. The Permittee shall provide for daily cleanup of all bottles, cans, paper, and other personal litter.

13. The Permittee shall promptly repair or replace all drainage tiles broken or damaged during right-of-way preparation, construction and maintenance activities, unless otherwise negotiated with the affected landowner.
14. The Permittee shall repair private roads and lanes damaged when moving equipment or when obtaining access to the right-of-way, unless otherwise negotiated with the affected landowner.
15. The Permittee shall replace or repair all fences and gates removed or damaged as a result of right-of-way preparation, construction and restoration activities, unless otherwise negotiated with the affected landowner
16. The Permittee shall, to the extent possible, take measures to protect shelter belts and trees in a manner compatible with the safe operation, maintenance and inspection of the pipeline.
17. The Permittee shall, to the extent possible, restore the area affected by the pipeline to the natural conditions that existed immediately before construction of the pipeline. Restoration must be compatible with the safe operation, maintenance and inspection of the pipeline.
18. The Permittee shall follow those specific construction practices and material specifications described in the Application, unless this Permit establishes a different requirement in which case this Permit shall prevail.
19. The Permittee shall repair all private roads and lands damaged when moving construction equipment to site worksites. Sequencing the work to minimize the time driveways are blocked or trenched will minimize this inconvenience to the local businesses and residences. Landowners will be notified in advance of the construction schedule and the timing of driveway disturbances.
20. Temporary access or heavy metal plates will be used to maintain access to driveways. Restoration of disturbed driveways will be completed as soon as practicable following construction.
21. All adjacent and intersected streets and highways along the pipeline route will be kept open during construction.
22. In all cases, road crossing permit requirements will be followed.
23. Barricades, warning signs and other safety measures will be used to ensure the safety of the public during construction. Around road and driveway crossings, fencing or other types of barricading will be employed to protect public safety.
24. The Permittee shall restore the area affected by the pipeline to minimize runoff and other impacts to the extent compatible with construction and operation of the power plant and associated facilities.

25. Approximately two thirds of the pipeline route is along areas containing "Prime Farmland" soils, as defined by Minnesota Rules part 4400.3450, Subp.4. Soil resources, particularly those designated as Prime Farmland soils will be preserved by segregating the topsoil during excavation and backfilling and by employing erosion control best management practices.
26. The erosion control measures will also serve to protect area streams, lakes and wetlands from detrimental deposition of eroded soils.
27. Wetlands crossed by the pipeline will be restored by replacing the subsoils and surface soils in a similar condition as before the project. Any wetland areas crossed during pipeline installation will be replaced or restored to the satisfaction of the Wetland Conservation Act administered by Blue Earth County. The County Wetland Inspector will be notified of pipeline installation dates, so that he may observe excavation installation and restoration are completed properly.
28. One large creek, a drainage ditch and several wetlands have been identified along the proposed Pipeline. The pipeline will also cross an intermittent stream. Figure 4 of the MEC pipeline route permit application shows the location of these features. The proposed method of stream crossing will be conventional open cut or an alternative construction technique in compliance with applicable regulatory requirements. With the wetlands, sufficient care will be taken during installation of the pipeline to avoid, mitigate, or restore these in accordance with existing regulatory requirements. Minnesota Department of Natural resources ("MDNR") stream crossing permit applications will be submitted to the regional MDNR as required. Construction along the pipeline route will cause temporary disturbance, and is not expected to have long term impacts in the area. No significant long term impacts to vegetation and wildlife, geology and soils, and water resources and wetlands are expected.
29. The Permittee shall work with the Minnesota Historical Society prior to commencing construction to determine whether an archaeological survey will be necessary for any length of the proposed pipeline. The Permittee shall mark and preserve any archaeological sites that are found during construction and shall promptly notify the Minnesota Historical Society (MHS) and the EQB of such discovery. The Permittee shall not excavate at such locations until so authorized by the Minnesota Historical Society.
30. The Permittee shall obtain all necessary permits authorizing access to public rights-of-way.
31. The Permittee shall obtain approval of the landowners for access to private property.
32. The Permittee shall work with property owners to identify and address any special problems the landowners may have that are associated with the pipeline.

33. The Permittee shall establish a complaint reporting procedure in accordance with the requirements of Attachment 1 to this permit prior to commencing construction. The Permittee shall advise the EQB in writing when such procedure has been established.
34. The Permittee shall advise the EQB in writing of any substantial complaints received by the Permittee during the course of construction that are not resolved within 30 days of the complaint.
35. The Permittee may apply to the EQB for an amendment of the route designation or to any of the permit conditions in accordance with the requirements and procedures of Minn. Rules part 4415.0185. This permit may be amended at any time by the Environmental Quality Board. Any person may request an amendment of this permit by submitting a request to the Chair in writing describing the amendment sought and the reasons for the amendment. The Chair will mail notice of receipt of the request to the permittee. The EQB may amend the permit after affording the permittee and interested persons such process as is required.
36. The Environmental Quality Board may initiate action to modify or suspend this permit at any time. The EQB shall act in accordance with the requirements of Minnesota Rules part 4415.0205 to modify or suspend the permit at any time a modification or suspension is warranted.
37. Within sixty days after completion of construction of the facility, the Permittee shall submit copies of all the final as-built plans and specifications developed during the project.
38. Within sixty days of completion of construction, the Permittee shall submit to the EQB, in the format requested by the EQB, geo-spatial information (GIS compatible maps, GPS coordinates, etc.) for all above ground structures associated with the pipeline, the connection point with the Northern Natural Gas pipeline, the bends where the pipeline turns, and the point at which the pipeline connects with the power plant.

VIII. PERMIT AMENDMENT

This permit may be amended at any time by the Environmental Quality Board. Any person may request an amendment of this permit by submitting a request to the Chair in writing describing the amendment sought and the reasons for the amendment. The Chair will mail notice of receipt of the request to the permittee. The EQB may amend the permit after affording the permittee and interested persons such process as is required

IX. TRANSFER OF PERMIT

The Permittee may request at any time that the Environmental Quality Board transfer this permit to another person or entity. The Permittee shall provide the name and

description of the person or entity to whom the permit is requested to be transferred, the reasons for the transfer, a description of the facilities affected, and the proposed effective date of the transfer. The person to whom the permit is to be transferred shall provide the EQB with such information as the EQB shall require to determine whether the new permittee can comply with the conditions of the permit. The EQB may authorize transfer of the permit after affording the Permittee, the new permittee, and interested persons such process as is required.

X. REVOCATION OR SUSPENSION OF THE PERMIT

The Environmental Quality Board may initiate action to revoke or suspend this permit at any time. The EQB shall act in accordance with the requirements of Minnesota Rules part 4415.0205 to revoke or suspend the permit.

XI. TERMINATION OF EQB JURISDICTION OVER THE PIPELINE

Upon determination by the Permittee that it has completed construction of the pipeline and implemented all applicable requirements of the permit conditions, the Permittee shall file with the EQB a written certification that the permitted pipeline construction has been completed in compliance with all permit conditions. The certification shall be considered by the EQB within 60 days of its filing. The EQB shall accept or reject the certification of completion and make a final determination regarding costs or reimbursements due. If the EQB rejects the certification, it shall inform the Permittee in writing of which deficiencies, if corrected, will allow the certification to be accepted. When corrections of the deficiencies are completed, the Permittee shall notify the EQB, and the EQB shall reconsider the certification at its next regularly scheduled meeting, provided the notification is received at least 20 days before the meeting. After acceptance of the certification by the EQB, the EQB's jurisdiction over the Permittee's pipeline routing permit shall be terminated. (Minnesota Rules part 4415.0207).

ATTACHMENT 1

ENVIRONMENTAL QUALITY BOARD COMPLAINT REPORT PROCEDURES FOR PIPELINES

1. Purpose

To establish a uniform and timely method of reporting complaints received by the permittee concerning the permit conditions for right-of-way preparation, construction, cleanup and restoration, and resolution of such complaints.

2. Scope

This reporting plan encompasses complaint report procedures and frequency.

3. Applicability

The procedures shall be used for all complaints received by the permittee.

4. Definitions

Complaint - A statement presented by a person expressing dissatisfaction, resentment, or discontent as a direct result of pipeline right-of-way preparation, construction, cleanup and restoration. Complaints do not include requests, inquiries, questions, or general comments.

Substantial Complaint - Any complaints submitted to the permittee in writing that, if substantiated, could result in permit modification or suspension pursuant to the applicable regulations.

Person - An individual, partnership, joint venture, private or public corporation, association, firm, public service company, cooperative, political subdivision, municipal corporation, government agency, public utility district, or any other entity, public or private, however organized.

5. Responsibilities - Everyone involved with pipeline right-of-way preparation, construction, cleanup and restoration is responsible to ensure expeditious and equitable resolution of all complaints. It is therefore, necessary to establish a uniform method for documenting and handling complaints directed to this project. The following procedures will satisfy this requirement:

ATTACHMENT 1

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- A. The permittee shall document all complaints by maintaining a record of all applicable information concerning the complaint, including the following:
1. Name of the permittee and project.
 2. Name of complainant, address and phone number.
 3. Precise property description or tract number (where applicable).
 4. Nature of complaint.
 5. Response given.
 6. Name of person receiving complaint and date of receipt.
 7. Name of person reporting complaint to the EQB and phone number.
 8. Final disposition and date.
- B. The permittee shall assign an individual to summarize complaints for transmittal to the EQB.

6. Requirements

The permittee shall report all complaints to the EQB according to the following schedule:

Immediate Reports - All substantial complaints shall be reported to the EQB by phone the same day received or on the following working day for complaints received after working hours. Such reports are to be directed to Pipeline Permit Compliance, 651-296-5089.

Monthly Reports

By the 15th of each month, a summary of all complaints, including substantial complaints received or resolved during the proceeding month, and a copy of each complaint shall be sent to Pipeline Permit Compliance, Minnesota Environmental Quality Board, 300 Centennial Building, 658 Cedar St., St. Paul, MN 55155.

7. Complaints Received by the EQB

Copies of complaints received directly by the EQB from aggrieved persons regarding pipeline right-of-way preparation, construction, cleanup and restoration shall be promptly sent to the permittee.