

**MODEL CARBON DIOXIDE PIPELINE
ROUTING AND MITIGATION ORDINANCE**

ADDITION TO DEFINITIONS SECTION OF COUNTY ZONING ORDINANCE:

Carbon Dioxide Pipeline. Carbon Dioxide Pipeline (CDP) shall mean a pipeline with an outer diameter of four inches or greater used to transport a gas, liquid, or supercritical fluid comprised of at least fifty percent carbon dioxide (CO₂) for geologic sequestration, enhanced oil recovery, or other use. A CDP shall include the pipe used to transport carbon dioxide and any structure related to the pipeline and any space, resource, or equipment necessary for such transportation, including but not limited to all related pump or compressor stations, valves, cathodic protection systems, and communication and control systems.

CDP Landowner. CDP Landowner shall mean the fee owner of land subject to an easement for a CDP, or upon delegation by the fee owner of the land, the lessee of land.

[OTHER?]

CROSS REFERENCES TO CONDITIONAL USE PERMIT SECTIONS:

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NEW SECTION FOR CARBON DIOXIDE PIPELINE ROUTING AND MITIGATION:

Section 1. Purpose. The purpose of this ordinance is to ensure that the placement, construction, operation, and decommissioning of carbon dioxide pipelines (CDP) is consistent with the County's land use policies; to minimize the impacts of construction, operation, and decommissioning of CDPs; to establish a fair and efficient process for review of the potential community and environmental impacts of CDPs; and to protect the health, safety and welfare of the County's citizens from the potential adverse impacts of CDPs.

Section 2. Authority. South Dakota Codified Law Chapter 11-2 delegates responsibility for county planning and zoning, including but not limited to the location and use of buildings, structures, and land for industry and other purposes, to the Board of County Commissioners of each county to adopt and enforce land use and zoning regulations designed for the purpose of promoting health, safety, and general welfare of the county. South Dakota Codified Law Chapter 34-48A delegates responsibility to each county to establish a local emergency response organization that develops and implements emergency and disaster plans to manage the response of county and other local responders to both natural and man-made disasters.

Section 3. Federal, State, and County Jurisdiction. The federal Pipeline Safety Act, 49 U.S.C. Section 60101 et seq., regulates the safety of supercritical carbon dioxide pipeline owners and operators with regard to their design, construction, operation, and maintenance, and requires that such owners and operators cooperate with and assist state and local emergency planning and response efforts. The Pipeline Safety Act in 49 U.S.C. Section 60104(e) expressly prohibits federal agencies from determining the location or routing of carbon dioxide pipelines, for safety or any other purpose, such that the location and routing of pipelines remains delegated to states, and in the absence of state control of routing and location, to counties. South Dakota Codified Law Section 49-41B-36 expressly states that the South Dakota Public Utilities Commission has no authority to route a transmission facility, including CDPs. South Dakota Codified Law § 49-41B-28 states that transmission facility routes may not violate local land-use zoning regulations, unless the South Dakota Public Utilities Commission finds that such local regulations are unreasonably restrictive in view of existing technology, factors of cost, or economics, or needs of parties. Neither the federal government nor the State of South Dakota have reserved the right to route a CDP; therefore, the jurisdiction to route such pipelines remains with the County to establish reasonable land-use zoning regulations related to route and land-use regulation including but not limited to mitigation and restoration standards during construction, operation, and after decommissioning of a CDP. In the event of a disaster or emergency caused by a CDP, the County is granted jurisdiction by South Dakota Codified Law Chapter 39-34B to plan for and manage the response by county and other local personnel to such disaster or emergency to protect the lives, health, and welfare of County residents.

Section 4. Applicability. The requirements of this Ordinance shall apply to all CDPs proposed after the effective date of this Ordinance. CDPs for which a permit has been issued prior to the effective date of this ordinance by the South Dakota Public Utilities Commission under South Dakota Codified Law Chapter 49-41B shall not be required to meet the requirements of this Ordinance; provided, that any such pre-existing CDP, which does not provide transportation services for a continuous period of twelve (12) months, shall meet the requirements of this Ordinance prior to recommencing transportation services.

Section 5. More Stringent Standards Required. In the event that a permit granted by the South Dakota Public Utilities Commission imposes a similar standard to a County standard, a CDP owner or operator shall comply with the more stringent standard, unless the Public Utilities Commission expressly finds under South Dakota Codified Law Section 49-41B-28 that the County standard is unreasonably restrictive.

Section 6. Conditional Use Permit Required. No CDP may be constructed in County until the County has approved a conditional use permit for the CDP.

Section 7. Route and Setbacks.

- A. Route.** County Planning and Zoning Board shall consider a preferred route proposed by an applicant for a CDP conditional use permit, as well as all alternative routes proposed

by the applicant or a landowner whose property is subject to condemnation for construction of the CDP. In its evaluation of alternative routes, the Planning and Zoning Board shall comply with the setbacks established in this section and consider the information contained in an application for a conditional use permit; County emergency response planning needs; potential economic and environmental impacts, and information provided by the applicant and other interested parties.

B. Setbacks. The Planning and Zoning Board shall select a route for a CDP that complies with the following setbacks:

1. **Single Family Homes.** For occupied single family homes, the center line of the CDP and the property line of a pump or compressor station shall be setback a minimum of 1 mile from the home. This minimum setback shall be increased to 1.5 miles when the CDP passes by 10 or more occupied single-family homes that are part of a single-family residential development, that incorporated or unincorporated.
2. **Operating Small Businesses.** For commercial properties containing businesses with fewer than 10 employees, the center line of the CDP and the property line of a pump or compressor station shall be setback a minimum of 1 mile from the business.
3. **Structures Containing 10 or More Persons.** For residential, commercial, or industrial structures or facilities that typically contain 10 or more persons, the center line of the CDP and the property line of a pump or compressor station shall be setback a minimum of 1.5 miles from such high occupancy structure.
4. **High Consequence Areas.** For structures containing 10 or more persons with limited mobility, such as nursing homes and hospitals, and for structures with permitted occupancies of 100 or more persons, such as schools, churches, shopping, and entertainment facilities, the center line of the CDP and the property line of a pump or compressor station shall be setback a minimum of 2 miles from such high occupancy structure or facility.
5. **Livestock Facilities.** For livestock facilities containing 100 or more animals, the center line of the CDP and the property line of a pump or compressor station shall be setback a minimum 1 mile from the livestock facility.
6. **Setback Modification.** The Planning and Zoning Board may increase the setback for high consequence areas or decrease or increase one or more of the other setbacks when requested by the County emergency response organization; or when provided with computational fluid dynamic computer modeling and analysis demonstrating that a greater or lesser setback will ensure the safety of residents and County first responders.
7. **Variance.** With exception of setbacks from high consequence areas, the developer of a CDP may apply for a variance from one or more of the foregoing setbacks. The application for variance must include the following:

- i. computational fluid dynamic computer modeling showing the dispersion of a plume of carbon dioxide following a worst-case rupture of the proposed CDP, considering such rupture in both typical and still-air weather conditions in topography typical in the County;
- ii. data and analysis demonstrating that the CDP is proposed to be constructed a sufficient distance from occupied structures so that carbon dioxide concentrations in or near occupied structures will not intoxicate, asphyxiate, or otherwise put harm the health of the humans or livestock therein; and
- iii. a discussion explaining the reasons that the County setback is not practicable.
- iv. Parties whose properties and wellbeing are potentially impacted by a variance may provide the Planning and Zoning Board with comment on an application for variance, including but not limited to data and analysis demonstrating that a variance would put them at risk from a worst-case discharge.

Section 8. Mitigation and Restoration Standards for Construction and Operation

A. Construction Mitigation and Reclamation Plan. The CDP owner or operator shall include in its application a Construction Mitigation and Reclamation Plan (CMR Plan), subject to approval by the Planning and Zoning Board upon such conditions as it determines to be necessary to protect the welfare of the citizens, businesses, land, and water within the County. The CMR shall, at a minimum, contain all of the conditions in this section. The CMR will include will address the following matters:

- 1. training of the CDP owner or operator employees and contractors to ensure compliance with the CMR and all Construction and Operation Agreements;
- 2. environmental inspection;
- 3. advance notice of access to property prior to construction and all other required notices;
- 4. damages to private property;
- 5. appearance and maintenance of worksite;
- 6. access controls and limitations;
- 7. aboveground facilities;
- 8. minimum depth of cover;
- 9. non-hazardous waste disposal;
- 10. hazardous wastes removal and disposal;
- 11. noise control during construction;
- 12. weed control during and after construction;
- 13. dust control during and after construction;
- 14. off road vehicle control during and after construction;
- 15. fire prevention and control;

16. spill prevention and containment during construction and maintenance;
17. road and railroad crossings;
18. adverse weather;
19. archaeological, cultural, paleontological, and historical resources and gravesites;
20. construction spill prevention
21. interference with irrigation systems
22. land clearing;
23. consultation with Natural Resources Conservation Service on soil type identification and reclamation recommendation;
24. soil removal and storage and storage options;
25. grading;
26. temporary erosion and sediment control;
27. stringing;
28. trenching;
29. padding and backfilling;
30. clean up;
31. reclamation, revegetation, and weed control;
32. herbicide and pesticide use;
33. trench dewatering;
34. horizontal directional drilling;
35. pasture and range lands protection;
36. forested lands;
37. protection of residential and commercial/industrial areas;
38. operations and maintenance;
39. fire control and fire response equipment;
40. drain tile systems;
41. wetland crossings; and
42. protection of waterbodies, riparian lands and aquifers.

B. Model Construction and Operation Agreement. The CDP owner or operator shall include a template Construction and Operation Agreement to be executed with all affected County CDP Landowners before the start of construction. The template Construction Agreement is subject to approval by the Planning and Zoning Board upon such conditions as it determines to be necessary to protect the welfare of the citizens, businesses, land, and water within the County. Upon mutual agreement, a CDP Landowner and CDP owner or operator may modify the terms of the Construction and Operation Agreement. Disputes between the CDP owner and operator regarding the terms of a Construction and Operation Agreement are within the exclusive jurisdiction of the Planning and Zoning Board, with appeal to the County Board of Supervisors. The Construction and Operation Agreement shall at a minimum include conditions for the following:

- 1.** 14-day notice prior to the start of construction;
- 2.** options for access routes, including identification of private and new access roads that will be used or required during construction;
- 3.** options for staking, fencing, and site delineation and access control to ensure landowner and resident safety and commercial access;
- 4.** options for utility and private water supply disruption timing;
- 5.** identification of soil types and horizons;
- 6.** use of soil compaction prevention measures such as construction matting to limit soil compaction to the maximum extent feasible;
- 7.** options for trenching and soil removal, stockpiling, replacement, fill, and decompaction;
- 8.** tree removal, replacement, compensation, and limitations to avoid damage to windbreaks, shelterbelts, and forested areas;
- 9.** minimization of wetland and waterway impacts through setbacks and other measures that ensure downstream water quality;
- 10.** disposal of rocks;
- 11.** wet weather construction suspension when construction may cause damage to agricultural lands and roads;
- 12.** soil erosion and sedimentation control measures that address control measures for each project phase and identify plans for grading, construction and drainage of roads and construction areas;
- 13.** identification, protection, and maintenance of records of drainage structures and systems, including but not limited to the sub-meter location of all crossed drainage systems and their types, and construction impacts and modifications, including provision of a copy of all drainage information to the CDP Landowner;
- 14.** livestock protection and access;
- 15.** use, crossing, maintenance, and repair of private roads to ensure access to lands and businesses during and after construction and restoration to at least their pre-construction condition;
- 16.** surveys for and protection of discovered and unanticipated discovery of archaeological, cultural, paleontological, and historical resources and gravesites;
- 17.** protection of wildlife and protection and restoration of wildlife habitat;
- 18.** winterization options;
- 19.** completion of final grading and topsoil replacement and installation of permanent erosion control structures in non-residential areas within 20 days after backfilling the trench and within 10 days in residential areas unless impractical due to weather;
- 20.** a comprehensive re-vegetation plan that uses native plant species to maintain and ensure adequate erosion control and measures to minimize the area of surface disturbance;
- 21.** use of herbicides and pesticides;

22. removal of construction debris, and solid and hazardous waste in accordance with all applicable local, state and federal regulations;
23. an agreement to repair or compensate a CDP Landowner, lessee, or business for all real and personal property damaged by the CDP owner or operator during construction and any diminishment of water quality or quantity that results from construction activities;
24. an agreement to compensate the CDP Landowner for damages or losses that cannot be fully remedied by repair or replacement, such as lost productivity and crop and livestock losses;
25. an agreement to alert the CDP Landowner in the event of a rupture within 1 mile of the CDP Landowner's residence or business, to provide a carbon dioxide alarm system to all of the CDP Landowner's occupied residences and businesses within 1 mile of the CDP, and to provide the CDP Landowner with an evacuation plan for all occupied residents and businesses within 1 mile of the CDP;
26. an agreement to maintain the right-of-way and to mitigate, reclaim, and restore a CDP Landowner's property following damage caused by use of the right-of-way during operation and decommissioning of the CDP;
27. an agreement that the CDP Landowner shall not be responsible for a pipeline leak or rupture that occurs as a result of his/her normal farming practices over the top of or near the pipeline;
28. an agreement that the CDP owner or operator shall pay commercially reasonable costs and indemnify and hold the landowner harmless for any loss, damage, claim or action resulting from the CDP owner's or operator's use of the easement, except to the extent such loss, damage claim or action results from the gross negligence or willful misconduct of the landowner or its agents; and
29. [other as desired by the County].

C. Cultural Resources. Applicant shall provide an Unanticipated Discoveries Plan reviewed and approved by the State Historical Preservation Office and any affected Tribes.

D. Noise. Except to the extent waived by the CDP Landowner in writing or to the extent the noise levels already exceed such standard, the noise levels associated with the CDP pump or compressor station and other noise-producing facilities will not exceed forty-two (42) dBA maximum ten (10) minute Leq for all hours of the day and night at the nearest occupied, existing residence, office, hotel/motel or non-industrial business not owned by the CDP owner or operator. The point of measurement will be within 100 feet of the residence or business in the direction of the pump station facility. Post-construction operational noise assessments will be completed by an independent third-party noise consultant, approved by the County, to show compliance with the noise level at each pump or compressor station or other noise-producing facility. The noise assessments will be performed in accordance with applicable American National

Standards Institute standards. The results of the assessments will be filed with the County. In the event the noise level exceeds the limits set forth in this condition at any pump or compressor station or other noise producing facility, the CDP owner or operator shall promptly implement noise mitigation measures at its expense to bring the facility into compliance with the limits set forth in this condition and shall report to the County concerning the measures taken and the results of post-mitigation assessments demonstrating that the noise limits have been met. All noise complaints regarding the operation of any CDP pump or compressor station shall be referred to the County. The County shall determine if noise monitoring in addition to that required under the paragraph above shall be required to determine whether a violation has occurred. If the County determines that such noise monitoring shall be required, it shall be done at the expense of the CDP owner or operator in accordance with procedures and by third party professional acousticians or engineering firms specializing in noise measurement approved by the County. The results of such monitoring shall be provided to the County, CDP owner and operator, and impacted CDP Landowners. In the event of a violation of the standard herein, the County shall order the CDP owner or operator to modify its noise producing facilities as necessary to come into compliance.

E. Environmental Impact Assessment. The applicant shall include in its application an assessment of impacts of construction and operation within the County on state or federal threatened or endangered species, environmentally sensitive lands and waters such as wetlands, native prairie and grasslands, rivers, streams, and lakes, public parks, and other natural resources, such assessment to be prepared by an independent consultant approved by County.

F. Inspectors and Public Liaison Officer.

- 1. Applicant Inspectors.** The CDP owner or operator shall incorporate mitigation and environmental compliance inspectors into its Construction Mitigation and Reclamation Plan who shall monitor compliance with the CMR Plan and provide weekly information reports to the owner or operator and the County identifying construction status, all known compliance failures, and all known compliance issues raised by residents and businesses within the County.
- 2. County Mitigation Compliance Inspector.** The Applicant shall agree to include the cost of a County mitigation compliance inspector within its CDP permit fee, and allow such County inspector full access to the CDP construction site for the purpose of monitoring compliance with County permit conditions. The Applicant shall agree to provide information in response to reasonable requests by such County inspector. Any affected person may file a complaint with the County Inspector regarding alleged failures by the Applicant to comply with County permit requirements. The County inspector shall investigate the complaint and

make a determination on its merits, and if a complaint has merit direct the CDP applicant to comply with applicable permit conditions. A County inspector decision may be appealed to the [County agency].

- 3. Public Liaison Officer.** Applicant shall provide a public liaison officer, approved by the County, to facilitate the exchange of information between applicant, including its contractors, and landowners, local communities and residents, and to promptly resolve complaints and problems that may develop for landowners, local communities and residents as a result of construction of the CDP. Applicant shall file with the County its proposed public liaison officer's credentials for approval by the County prior to the commencement of construction. After the public liaison officer has been approved by the County, the public liaison officer may not be removed by Applicant without the approval of the County. The public liaison officer shall be afforded immediate access to Applicant's on-site project manager, its executive project manager and to contractors' on-site managers. The Applicant shall provide contact information for the public liaison officer to all landowners crossed by the Project and to law enforcement agencies and local governments in the vicinity of the Project. The public liaison officer's contact information shall be provided to landowners in each subsequent written communication with them. If the County determines that the public liaison officer has not been adequately performing the duties set forth for the position, the County may, upon notice to Applicant and the public liaison officer, take action to remove the public liaison officer in cooperation with other counties and state agencies. Until one year following completion of construction of the CDP, including reclamation, within the County, Applicant's public liaison officer shall report monthly to the County on the status of the CDP construction. The report shall detail problems encountered and complaints received. For the period of three years following completion of construction, Applicant's public liaison officer shall report to the County annually regarding post-construction landowner and other complaints, the status of road repair and reconstruction and land and crop restoration and any problems or issues occurring during the course of the year.
- 4. Public Information and Progress Reports.** Applicant shall implement and keep an up-dated web site covering the planning and implementation of construction and commencement of operations in the County as an informational medium for the public. Until construction of the CDP, including reclamation, is completed within the County, Applicant shall submit monthly progress reports to the County that summarize:

 - i. the status of land acquisition and route finalization;
 - ii. the status of construction;

- iii. the status of environmental control activities;
- iv. implementation of the Applicant and County Emergency Response Plans;
- v. implementation of the other measures required by these conditions;
- vi. the overall percent of physical completion of the project; and
- vii. any design changes of a substantive nature.

Section 9. Avoidance, Mitigation, Repair, and Compensation for Damage to County Lands and Infrastructure

- A. Existing Roads and Rights-of-Way Survey and Permits.** As part of the Construction and Operation Agreement between the Applicant and County, the Applicant shall identify all public roads and rights-of-way to be used for the purpose of transporting CDP pipe segments, other large components, and and/or equipment for construction, operation, or maintenance of the CDP and obtain applicable weight and size permits from the impacted road authorities prior to construction. Where practical, all-weather roads shall be used for all activities associated with the CDP.
- B. Existing Roads and Rights-of-Way.** Applicant shall conduct a pre-construction survey, in coordination with the impacted local road authority(ies), to determine existing road conditions for potentially impacted public roads. The survey shall include photographs and a written agreement to document the condition of the all potentially impacted public infrastructure. The applicant is responsible for on-going road maintenance and dust control measures identified by the County Highway Superintendent or a township official during all phases of construction. The applicant shall be responsible for immediate repair of or compensation for damage to all public roads and rights-of-way stemming from construction, operation, or maintenance of the CDP. Applicant shall notify the County land use and zoning Department of such arrangements.
- C. Post Construction Inspection of Existing Roads and Rights-of-Way.** After construction, County shall inspect all restored roads and rights-of-way and determine the need for and extent of additional repair and restoration. Where restoration is insufficient, County will require additional restoration so that the infrastructure is restored to at least its pre-construction condition.
- D. Recommended Financial Security for Existing County Roads and Rights-of-way.** The County may prepare and submit to the South Dakota Public Utilities Commission an estimate for the amount of an indemnity bond necessary to ensure the restoration or payment of damages sufficient to restore the road(s) and bridges to preconstruction conditions, the purpose of such estimate to provide information for determination of the bond amount authorized by South Dakota Codified Laws Section 49-41B-38.

- E. Permanent and Temporary Access Roads.** Construction of permanent and temporary access roads shall be minimized and shall avoid crossing streams and drainageways wherever possible. If access roads must be constructed across streams and drainageways, the access roads shall be designed in a manner so runoff from the upper portion of the watershed can readily flow to the lower portion of the watershed.
- F. Non-Road County Lands and Infrastructure.** As part of the Construction and Operation Agreement between the Applicant and County, the applicant shall conduct a pre-construction survey, in coordination with the County, of all non-road County lands and infrastructure, including but not limited to County and township drainage systems, parks, and wildlife areas, potentially impacted by construction of the CDP. Following such survey, the applicant shall provide a description of and cost estimates for restoration and repair of such lands and infrastructure. Applicant shall be responsible for immediate repair of or compensation for damage to all non-road public lands and infrastructure stemming from construction, operation, or maintenance of the CDP as close as feasible to preconstruction conditions. Applicant shall notify the County land use and zoning Department of such arrangements.
- G. Post Construction Inspection of Non-Road County Lands and Infrastructure.** After construction, County shall inspect all restored non-roads lands and infrastructure to determine the need for and extent of additional repair and restoration. Where restoration is insufficient, County will require additional restoration so that the infrastructure is restored to at least its pre-construction condition.
- H. Financial Security for Non-Road County Lands and Infrastructure.** The County may require the Applicant to provide financial security for restoration of County non-road lands and infrastructure in a manner approved by the County Attorney's Office up to 130% the cost of all potential damages caused by construction. This requirement may be waived by the Board of Adjustment.

Section 10. Decommissioning Plan

- A. Notice of Abandonment.** Within 90 days of completion of all physical steps necessary to permanently remove the CDP from operation, the CDP operator or owner shall notify the County, municipalities within the County, and all owners of land who own property subject to an easement or right-of-way agreement for the CDP in the County, that the CDP has been abandoned, which notice shall also fully describe the rights of such owners of land to require removal or other reasonable mitigation actions.
- B. Failure to Provide Notice of Abandonment.** In the event the CDP owner or operator fails to give notice of abandonment, the CDP shall be deemed to be abandoned within

the County if the CDP does not provide transportation services for twenty-four (24) consecutive months. At any time after such period, upon discovery of non-use, the County shall provide by certified mail a written Notice of Abandonment to the owner and operator of the CDP and also to each property owner whose property is subject to an easement or right-of-way agreement for the CDP, at the landowner address recorded in the County Treasurers Office. The CDP owner or operator shall have the right to respond to the Notice of Abandonment within sixty (60) days from the date of receipt of such notice to present evidence that it has not abandoned the CDP. The County shall review any such response and determine whether or not the CDP has been abandoned. If it is determined the CDP has not been abandoned or discontinued, the Notice of Abandonment shall be withdrawn and notice of the withdrawal shall be provided to CDP owner or operator. If, after review of the CDP owner or operator's response, the County determines that the CDP has been abandoned or discontinued, notice of such finding shall be provided by certified mail to the CDP owner or operator.

- C. **Decommissioning Plan.** The CDP owner or operator shall file in its application for a conditional use permit a decommissioning plan for the CDP and the estimated cost of implementing such plan. The decommissioning plan shall be prepared in cooperation with CDP Landowners and describe the decommissioning process and how the CDP owner or operator will ensure that resources are available to pay for decommissioning the pipeline. The County shall review the plan and shall approve or disapprove the plan as part of its conditional use permit.
- D. **Decommissioning Period.** Within two (2) years of a notice of decommissioning or of issuance of a final decision by the County that a CDP is abandoned due to non-use, the CDP owner or operator shall complete decommissioning of the CDP, except on properties subject to an abandonment plan negotiated with a CDP Landowner.
- E. **Mitigation Requirements.** Decommissioning and site restoration includes dismantling and removal of all pipe, pump stations, valves, cathodic protection systems, communications systems, and other ancillary equipment, and removal of surface road material and restoration of roads and pipeline right-of-way to substantially the same physical condition that existed immediately before construction of the CDP. To the extent possible, the site must be restored and reclaimed to the topography and topsoil quality that existed just prior to the beginning of construction of the CDP. The CDP owner or operator shall file a monthly report describing how it is fulfilling this obligation.
- F. **Landowner Decommissioning Agreements.** DCP Landowners may enter into an agreement with the CDP owner or operator to abandon some or all underground CDP components in-place and/or for application of other mitigation requirements, including

but not limited to filling with cement under private roadways to prevent roadway collapse; segmenting and plugging the pipe to prevent water drainage; and conducting depth of cover and erosion surveys to assess remaining depth of cover and potential future impacts of the abandoned underground pipe on agricultural operations. A landowner decommissioning agreement supersedes County mitigation requirements on a CDP Landowner's land.

- G. **Financial Assurance.** The County may require a performance bond, surety bond, letter of credit, trust fund, corporate parental guarantee, and/or other form of financial assurance that is acceptable to the County to cover the anticipated costs of decommissioning the CDP.
- H. **Financial Responsibility.** The-owner or operator of a CDP is responsible for the costs of decommissioning its pipeline and all related infrastructure and equipment.
- I. **County Implementation of Decommissioning Plan.** In the event that the CDP owner or operator fails to initiate implementation of its decommissioning plan within 180 days of its notice of abandonment or a notice of abandonment issued by the County, the County may implement the decommissioning plan and seek compensation for the expenses of plan implementation from the financial assurance instrument provided to ensure implementation of the plan, and if such funds are not sufficient, from the current and past owners of the abandoned CDP.
- J. **Landowner Implementation of Decommissioning Plan.** In the event that the CDP owner or operator fails to initiate implementation of its abandonment mitigation plan within 180 days of its notice of abandonment or a notice of abandonment issued by the County, any owner of property subject to an easement or right-of-way agreement may implement the abandonment plan for such landowner's property and seek compensation for the expenses of plan implementation from the financial assurance instrument provided to ensure implementation of the plan, and if such funds are not sufficient, from the current and past owners of the abandoned CDP.

Section 11. County Emergency Response Plan

- A. **Draft County and Municipal Emergency Response Plan.** The application shall include a draft county and municipal emergency response plan for a worst-case discharge following a full-bore rupture of the CDP. The applicant shall retain an independent consultant, subject to approval by the County, to prepare such draft plan. The draft county emergency response plan shall at a minimum include:

1. an estimate of the worst-case discharge volume of carbon dioxide that could be released from the CDP given its internal volume, emergency valve locations, the time to shut down pumps and close valves, and other appropriate factors.
2. an estimate of the size of the danger zone on either side of the pipeline route based on the maximum distance that released CO₂ could travel from the pipeline's centerline from a rupture in the county, at concentrations that are immediately dangerous to life and health (IDLH) (an IDLH of 4 percent or 40,000 parts per million), given a range of weather conditions and topography. The distance estimate shall be based on state-of-the-art computational fluid dynamic computer modeling that at a minimum takes into account the worst-case discharge of CO₂ and hazardous materials released, release rate, the amount of material that would vent to the atmosphere between emergency valves, weather, topography, and the location of structures.
3. an estimate of the concentration of CO₂ at which internal combustion engine motor vehicles may not operate.
4. a list of local emergency response agencies that the CDP operator must notify immediately in the event of a rupture.
5. a list of CDP operator emergency response personnel contacts for use by county and municipal emergency response personnel.
6. a list and map of occupied residential, business, public, and other structures within the danger zone, and a plan for annual updates of this list and map.
7. a telephonic and electronic emergency alert system for individuals who live and operate businesses within the danger zone that provides alerts to evacuate in the event of a rupture.
8. cost-free distribution and replacement of CO₂ detectors with alarms to occupied residences and businesses within the danger zone.
9. an evacuation plan for each occupied residence and business within the danger zone that avoids travel toward the pipeline.
10. a plan for county and municipal first responders to assist with evacuations.

11. an annual reminder of evacuation routes for occupied residences and businesses within one (1) mile of the CDP provided to landowners, business owners, and operators of commercial and public facilities.
12. a list of roadways that pass within the danger zone, and a plan to barricade impacted roadways to prevent vehicles and pedestrians from entering the danger zone.
13. a list of recommended emergency response equipment and training needed by county and municipal emergency response personnel and a commitment to provide such equipment and training to county and municipal agencies and applicant's cost.
14. a copy of the CDP operator's federally mandated emergency response plan for its personnel, and a description of how the draft County emergency response plan would coordinate with applicant's federal emergency response plan.

B. County Emergency Response Plan Approval. Prior to issuance of a conditional use permit, the County shall approve a County Emergency Response Plan for the CDP upon conditions necessary to ensure the safety and welfare of County residents and businesses, and forward the plan to the County emergency response organization for its consideration and approval under South Dakota Codified Law Chapter 34-48.

Section 12. Application Contents.

In addition to the submittal requirements defined for Conditional Use Permit applications, all applications for a CDP must submit the following information or provide a statement why it is impossible for the applicant to submit such information.

A. Ownership and Management. The application shall include:

1. the name and addresses of the applicant and all affiliated entities including the applicant's organizational parents, subsidiaries, and other affiliates having a management, ownership, or financial interest in the development, construction, or operation of the CDP, together with an organizational chart showing the ownership and managerial relationships among all entities; and
2. for all entities identified in paragraph A, a list of the members of the board of directors and a list of the beneficial owners of more than 5 percent of the equity of the company.

B. Design Data. The application shall include:

1. for the segment of the CDP within the County, a description of the nature and location of the CDP and its major components, including its planned use, estimated cost, estimated date of commencement of construction and duration of construction, planned in service date, and estimated years of physical and economic life;
2. for the entire CDP system, a description of the nature and location of the CDP, including its planned use, estimated cost, estimated date of commencement of construction and duration of construction, planned in service date and estimated years of physical and economic life;
3. the initial average annual and daily design capacities at commencement of construction in metric tons and standard cubic feet, and ultimate average annual and daily design capacities assuming sufficient pumping horsepower is installed to operate at maximum operating pressure in metric tons and standard cubic feet;
4. the specifications for the pipe types to be installed within the county, including their diameters, pipe wall thicknesses, pipe steel specifications, and identification of potential and contracted pipe suppliers together with the execution dates of any such contracts;
5. the locations and specifications for the valves to be installed within the county, if any, and the locations and specifications of the nearest valves upstream and downstream from the County, including their diameters, ratings, and whether they are manual, operator controlled, or automatic;
6. the operating specifications for any pumps to be installed within the County, if any, including their maximum capacities, maximum power output in horsepower, efficiency, allowable maximum and minimum operating temperature, and electrical energy and power requirements for each pump and for any pumping station at peak demand;
7. a description of any electrical power line construction or upgrades in South Dakota necessary to allow operation of the CDP in the County, and a list of the electrical utility companies that will undertake such construction or upgrades.
8. the specifications for crack arrestors to be installed within the County, including their diameters and wall thicknesses;

9. the estimated maximum and minimum operating temperatures within the County annually and by month; and
10. the percentage of chemical constituents in the products the CDP is designed to transport, including the percentages of carbon dioxide and all other substances, and a materials safety data sheet for the product at the commencement of operation.

C. Proposed Route. The application shall include:

1. a description of the proposed route of the CDP within the County, including detailed maps of the route and all CDP facilities within the County overlaid on a parcel plat map, a satellite imagery map, a topographic map, a soil type map, and a water and wetland resource map, together with the GIS data used to produce such maps;
2. a list of all parcels within the County subject to an easement or right-of-way permit for the proposed route of the CDP, including contact information for all owners of such parcels and for each parcel a statement of whether or not a voluntary easement or right-of-way permit has been executed at the time of the application;
3. a list of addresses of all occupied structures within two (2) miles of the CDP; and
4. a statement of the reasons for the selection of the proposed route through the county and a description of alternative routes considered with the County

D. Economic and Financial Data. The application shall include:

1. the estimated number of full-time equivalent workers, whether directly employed or contracted, that will be present within the County during the construction phase and the number present during the operating life of the facility.
2. a list of expected carbon capture facilities that will supply or ship carbon dioxide product for transportation during the first five calendar years of operation, showing the name, location, type, and owner of each such facility, the dates and durations of the contracts with the suppliers or shippers, and the quantities of carbon dioxide product expected to be transported from each such facility; and
3. a list of expected carbon dioxide product recipients during the first five calendar years of operation, showing the name, location, type, and owner of each such facility, the dates and durations of the contracts with each receiving facility, and

the quantities of carbon dioxide product expected to be transported to each such facility.

E. Required Plans and Template Agreements. The application shall include:

1. All information and documents required by this Article, including but limited to a Construction Mitigation and Restoration Plan, Template Construction and Operation Agreement, Environmental Assessment, Unanticipated Discoveries Plan; Draft County Emergency Response Plan, and Decommissioning Plan.

F. Application Administrative Information. The application shall include:

1. an estimate of the taxes to be paid to the County by the CDP owner or operator during each of the first ten years of operation;
2. a list of all known federal, state, and local agencies or authorities with which the applicant must file permit applications or seek other approvals for the proposed facility, including:
 - i. the names of all known federal, state, or local permitting or approving agencies or authorities;
 - ii. the title of each required permit or other approval issued by each authority;
 - iii. the date each application was filed or the projected date of future application filings;
 - iv. the actual date a decision was made on any such application or the anticipated decision dates for applications; and
3. the total fee to be paid to the County for the application as prescribed by Section XXXX, and the amount of the fee submitted with the application; and
4. the signatures and titles of the applicant's officers or executives authorized to sign the application, and the signature of the preparer of the application if prepared by an outside agent.

G. Complete Application Required. Upon receipt of an application, the [County staff] will review the information provided and confirm that the application contains all required information. In the event the application is deficient, [County staff] will reject the application and provide Applicant with a list of deficiencies. Applicant may submit a revised application including the omitted information or request a variance based on evidence that providing such information is infeasible or unreasonable.

Section 13. Permit Expiration. The permit shall become void if no substantial construction has been completed within two (2) years of issuance.

Section 14. Indemnification: The application shall contain a proposed indemnification condition with the following terms.

1. The applicant, its heirs, assigns, and successors shall indemnify, defend, and hold harmless County and any property owners whose land is subject to easements or right-of-way agreements from any and all liability, loss, damage, cost, expense, and claim of any kind, including reasonable attorneys' and experts' fees incurred by County and/or such property owners in defense thereof, arising out of or related to, directly or indirectly, the installation, construction, operation, use, location, testing, repair, maintenance, removal, or abandonment of the pipeline and/or related facilities, and the products contained transferred through, related or spilled from said pipeline and appurtenant facilities, including the reasonable costs of assessing such damages and any liability for costs of investigation, abatement, correction, cleanup, fines, penalties, or other damages arising under any law, including all applicable environmental laws.
2. The indemnification shall apply except where individuals or companies damage the CDP or related facility through intentional bad acts.
3. No property owner or tenant or contractor of a property owner shall be held responsible for a leak or rupture of a CPD that occurs as a result of normal agricultural activities.
4. No property owner or tenant or contractor of a property owner shall be held responsible for a leak or rupture of a CPD where the owner or operator of the CPD fails to maintain required warning signs.
5. This indemnification shall not relieve a property owner, or tenant, agent, or contractor of such property owner, from their obligation to comply with the South Dakota One-Call Notification System Act and any amendments thereto (South Dakota Codified Law Chapter 49-7A), or relieve them of liability for their failure to do so.

Section 15. Transfer of Permit. The County conditional use permit shall not be transferable without the approval of the County.

Section 16. Schedule of Fees, Charges, and Expenses. At the time of filing an application an applicant shall deposit with the County an initial amount of funds expected to be sufficient to pay for the estimated cost of investigating, reviewing, processing, and serving notice of an application. The amount shall be deposited with the County treasurer and credited to a sub-fund within the designated revenue fund and shall be disbursed on vouchers approved by the County for the actual cost of investigating, reviewing, processing, and serving notice of the application. The initial fee shall be [\$50,000] per mile. The County shall refund Applicant for any funds not required for processing the application within 30 days of the County's decision on the application. In the event the initial fee is not adequate to pay for County's permit review, County may require that Applicant deposit such amount as may be necessary to pay for the cost of investigating, reviewing, processing, and serving notice of the application.