



## MODEL NEBRASKA COUNTY ORDINANCES FOR REGULATION OF CARBON DIOXIDE PIPELINES

This packet includes the following three model county ordinances and resolutions for carbon dioxide (CO<sub>2</sub>) pipelines:

- A comprehensive special permit or conditional use permit process for CO<sub>2</sub> pipelines to amend an existing county zoning ordinance.
- A “level of cultivation” resolution that will allow counties to specify how deep a pipeline must be buried in agricultural lands.
- An emergency response resolution to support planning in the event of a CO<sub>2</sub> pipeline rupture.

Although the Nebraska legislature has enacted laws to route oil pipelines and reclaim land after oil pipeline construction, Neb. Rev. Stat. § 57-1401 *et seq.* and § 76-3301 *et seq.*, it has not extended these laws to cover pipelines that transport CO<sub>2</sub>. In the absence of state regulation of CO<sub>2</sub> pipelines, Nebraska’s counties may fill this regulatory gap by enacting ordinances to route and limit the damage caused by construction and operation of CO<sub>2</sub> pipelines.

While it is true that federal pipeline safety law prevents state and county regulation of the design, construction, operation, and maintenance of “supercritical” but not gaseous or liquid CO<sub>2</sub> pipelines, it is also true that a number of important exceptions to this federal authority exist. These exceptions are described below.

**Counties May Route CO<sub>2</sub> Pipelines** – The federal Pipeline Safety Act states: “This chapter does not authorize the Secretary of Transportation to prescribe the location or routing of a pipeline facility.” Since Congress has not authorized the federal government to determine the route of CO<sub>2</sub> pipelines, this power remains with the states. States may determine the route of a CO<sub>2</sub> pipeline and enact setbacks from residents and businesses. This is the reason why Nebraska was able to enact its Major Oil Pipeline Siting Act. In the absence of state legislation routing CO<sub>2</sub> pipelines, the power to determine pipeline location and route falls to Nebraska’s counties.

**Counties May Regulate CO<sub>2</sub> Pipeline Construction Mitigation** – Although federal law regulates pipeline construction, it covers only the construction of the pipeline itself, including matters such as the type of steel and welds to be used, pipe handling, the construction of pump stations, and other pipeline-specific standards. Federal law does not include standards for mitigation required during and after construction, such as topsoil management, public and private road protection, maintaining access to homes and farming structures, reseeding, fencing, noise, litter control, and other matters not directly related to pipeline materials, fabrication, and installation. This is the reason why Nebraska was able to enact its Oil Pipeline Reclamation Act. In the absence of state legislation requiring mitigation for CO<sub>2</sub> pipeline, control over such mitigation falls to Nebraska’s counties.

**Counties May Regulate the Depth to Which CO<sub>2</sub> Pipelines Are Buried in Agricultural Lands** – Federal pipeline safety regulations in 49 CFR § 195.248 specify the “depth of cover” that must be provided over supercritical CO<sub>2</sub> pipelines, which generally is 36 inches, but there is an exception for agricultural lands. Specifically, § 195.248 states: “all pipe must be buried so that it is below the level of cultivation,” but

then importantly, the federal pipeline safety regulations do not define the meaning of “level of cultivation.” In fact, no federal law provides this definition. This means that it’s up to states or counties to determine the depth to which cultivation extends. Two states, Minnesota and New York, have laws on their books that expressly define this depth, and pipeline companies have never challenged these laws. Given the variability of land types and agricultural practices, it makes sense that the “level of cultivation” should be defined locally by counties, and not by a distant bureaucrat. This being said, counties should also respect private agreements between landowners and pipeline companies about depth of cover.

**Counties May Regulate Their Own Emergency Response to CO<sub>2</sub> Pipeline Ruptures** – The federal Pipeline Safety Act requires that pipeline operators have an emergency response plan. 49 CFR § 195.402(e). Therefore, counties may not regulate how pipeline companies themselves respond to CO<sub>2</sub> pipeline ruptures. This being said, federal law regulates only how a pipeline operator and its employees and contractors respond to a leak or rupture. Federal law does not regulate state and county emergency response planning or efforts. That is, federal law does not “federalize” local emergency response. Instead, the federal regulations make clear that states and counties will have their own plans, and that pipeline operators are required to coordinate with state and local responders. 49 CFR § 195.65 (provide MSDSs to public responders); § 195.402(c)(12) (share information with public responders on response capacity and communications); § 195.402(e)(7) (notifying and coordinating with local officials). Therefore, Nebraska’s counties may adopt and implement their own emergency response plans for CO<sub>2</sub> pipeline ruptures to be implemented by their own first responders, and request information from pipeline operators so they know what their up against.

**Counties May Regulate Abandoned CO<sub>2</sub> Pipelines** – The purpose of the federal Pipeline Safety Act is to prevent pipeline leaks and ruptures, so that the products they transport do not harm persons and properties. For this reason, the Pipeline Safety Act regulates only pipelines that are “used or intended to be used.” 49 U.S.C. § 60101(a)(5) (definition of “hazardous liquid pipeline facility”). Once an operating pipeline is emptied, disconnected from other pipelines, and sealed, according to the requirements of 49 CFR § 195.402(c)(10), it is no longer “used or intended to be used” to transport hazardous liquids or CO<sub>2</sub>, such that the Pipeline Safety Act no longer regulates it. The pipeline is no longer a “hazardous liquid pipeline facility,” and instead is just scrap steel. Accordingly, neither the Pipeline Safety Act nor its federal regulations contain any rules about what happens to this abandoned steel. Yet, an abandoned pipeline can cause drainage problems, sinkholes, or interfere with farming or building construction. Given the limited jurisdiction of the Pipeline Safety Act, the fate of abandoned pipelines is in state or local government hands. Minnesota, Iowa, and Michigan, and Santa Barbara County, California, all regulate abandoned pipelines. Since Nebraska’s legislature has not passed any laws regulating abandoned pipelines, doing so is left to the counties.



## **Resolution to Protect Citizens and First Responders from the Dangers of Carbon Dioxide Pipeline Ruptures**

**Whereas**, [pipeline developer] has proposed to construct a large high-pressure supercritical carbon dioxide pipeline through [county] for a total of [#] miles;

**Whereas**, no supercritical carbon dioxide pipelines currently exist in [county];

Whereas, carbon dioxide gas in high concentrations can asphyxiate and at lower concentrations can intoxicate humans and livestock, thereby creating a risk of injury or even death;

**Whereas**, a rupture of the [pipeline] has the potential to release a large quantity of carbon dioxide gas at high concentration levels over a potentially large geographic area within [county];

**Whereas**, carbon dioxide gas is colorless and odorless and may not be detected by human senses, making exposure difficult to detect and avoid and danger zones challenging to define;

**Whereas**, carbon dioxide gas can intoxicate citizens and first responders and cause disorientation and confusion, limiting the potential for self-evacuation by citizens and making first responder rescue operations challenging;

**Whereas**, carbon dioxide gas is heavier than air and can settle in and remain in low lying areas and closed structures for significant periods of time;

**Whereas**, high concentrations of carbon dioxide following a rupture of the [pipeline] could cause internal combustion engines in motor vehicles to malfunction or even stop operating, limiting the ability of citizens to use their trucks and cars to self-evacuate, and limiting the ability of first responders to use rescue vehicles;

**Whereas**, emergency alert systems exist, such as Amber alerts and automatic phone calls, that should be used to alert [county] residents within the danger zone for a CO<sub>2</sub> pipeline rupture;

**Whereas**, computer modeling is available to estimate the distance that carbon dioxide can disperse from a pipeline rupture depending on pipeline size and a range of weather conditions and topographies, but such modelling has not been provided to [county] for use by its commissioners, first responders, and residents, such that [county] has no reliable information about the geographic extent of the potential danger zone following a rupture of the proposed [pipeline];

**Whereas**, large high-pressure supercritical carbon dioxide pipelines may rupture with substantial force as the supercritical carbon dioxide depressurizes into a gas, producing explosive running ductile fractures along a pipeline for extensive distances unless stopped

through use of sufficiently strong pipe steel or crack arrestors, putting nearby citizens and properties in danger;

**Whereas**, [state] has enacted statutes and issued regulations that provide state and county emergency planning agencies with authority to plan and prepare for a wide range of emergencies, including release of large quantities of supercritical carbon dioxide; and

**Whereas**, [county] first responders should not bear the cost of the specialized emergency response equipment, training, and other resources uniquely necessary for response to a supercritical carbon dioxide pipeline rupture;

**Now therefore, be it resolved:** that [county] requests that [state]’s emergency planning, first response, and pipeline permitting agencies take the following actions:

- investigate the risks of and emergency planning needed for a potential rupture of the [pipeline] in [county], and in cooperation with [county] first responders prepare an emergency response plan for [county] in the event of such rupture;
- conduct or direct [pipeline developer] to conduct CO<sub>2</sub> dispersion computer modeling to identify the possible extent of CO<sub>2</sub> intoxication and asphyxiation zones from a rupture of the proposed [pipeline] in [county], taking into account a range of weather conditions and the county’s topography, to ensure that [county] can define a danger zone for a rupture of the proposed [pipeline] for emergency planning, response, and rescue purposes;
- identify and recommend emergency response training, equipment, and communication needs of [county] to respond to a rupture of the proposed [pipeline] and require that [pipeline developer] bear the cost of such needs;
- identify and recommend emergency communication resources needed to alert [county] residents, businesses, and first responders in the event of a rupture of the proposed [pipeline], such as automated alert phone calls and text messaging, and require that [pipeline developer] bear the costs of implementing any new alert system or modifying existing alert systems deemed necessary by [county];
- ensure that to the maximum extent allowed by law, [state] agencies condition their permit approvals by including a requirement that [pipeline developer] pay for all training, equipment, and communication needs of [county] to respond to a rupture of the proposed [pipeline]; and
- not grant any state permits for the proposed [pipeline] before completion of all actions requested by this resolution.



## MODEL HAZARDOUS LIQUID AND CARBON DIOXIDE PIPELINE “LEVEL OF CULTIVATION” RESOLUTION

**Whereas**, federal pipeline safety regulations for hazardous liquid pipelines state in 49 C.F.R. § 195.248 that “all pipe must be buried so that it is below the level of cultivation;”

**Whereas**, 49 U.S.C. § 60104(e) of the federal Pipeline Safety Act states: “This chapter does not authorize the Secretary of Transportation to prescribe the location or routing of a pipeline facility,” such that a state, or in the absence of state regulation, a county may determine the “location” of a pipeline subject to the federal Pipeline Safety Act;

**Whereas**, federal pipeline safety regulations do not define the meaning of the term “level of cultivation;”

**Whereas**, no other federal regulation defines the meaning of the term “level of cultivation;”

**Whereas**, no federal court has defined the meaning of the term “level of cultivation” for the purposes of pipeline safety or other purpose;

**Whereas**, no Nebraska statute defines the meaning of the term “level of cultivation” or the minimum depth of cover required for hazardous liquid or carbon dioxide pipeline construction in Nebraska’s agricultural lands, such that action by the County to define this term is not inconsistent with state law;

**Whereas**, neither Neb. Rev. Stat. § 57-1401 *et seq.* (Major Oil Pipeline Siting Act); Neb. Rev. Stat. § 57-1501 *et seq.* (Governor approval of oil pipeline projects); nor Neb. Rev. Stat. § 76-3301 *et seq.* (Oil Pipeline Reclamation Act), apply to carbon dioxide pipelines or define the term “level of cultivation” or otherwise specify a minimum depth of cover for hazardous liquid pipelines in agricultural land;

**Whereas**, the County may define the meaning of the term “level of cultivation” under the powers granted to it by Neb. Rev. Stat. Chapter 23.

**Whereas**, the State of Minnesota defines depth of cover for hazardous liquid pipelines in Minn. Stat. § 216G.07, subd. 1, as follows:

Unless waived in the manner provided in subdivisions 2 or 3, any pipeline installed after May 26, 1979, shall be buried with a minimum level cover of not less than 4-1/2 feet in all areas where the pipeline crosses the right-of-way of any public drainage facility or any county, town or municipal street or highway and where the pipeline crosses cultivated agricultural land. Where the pipeline crosses the right-of-way of any drainage ditch, the pipeline shall be at least 4-1/2 feet below the authorized depth of the ditch, unless waived in the manner provided in subdivisions 2 and 3;

**Whereas**, the State of New York defines the minimum cover in farmlands for liquid petroleum pipelines in 16 NYCRR 258.5 as follows:

Notwithstanding the requirements of 49 CFR 195.248(a) for cover over buried pipelines in cultivated areas, all pipe installed in areas actively cultivated for commercial farm purposes in at least two out of the last five years, as identified by the farmland operator, shall be installed with a minimum cover of 40 inches unless the farmland operator agrees to or requires a different depth.

**Whereas**, no litigation has challenged the right of Minnesota and New York to define depth of cover over a pipeline in agricultural lands;

**Whereas**, neither the federal government, the legislature of the State of Nebraska, nor the Nebraska Public Service Commission have determined the “level of cultivation” or the depth of cover for hazardous liquid pipelines in agricultural lands in County, yet such determination is critical to continued farming productivity and farmer and farming equipment safety; and

**Whereas**, a definition by the county of the “level of cultivation” in County is neither preempted by federal law nor inconsistent with Nebraska statutes;

**Whereas**, the cultivated depth of the soil in agricultural lands is variable and cannot be readily defined by state-wide definition, much less a nationwide definition, but rather is highly dependent on location-specific factors including soil type, drainage, topography, and the nature of the crops produced, therefore, it is reasonable and necessary to define the term “level of cultivation” at a county level;

**Whereas**, a county-level definition of the term “level of cultivation” will benefit the residents and lands of County through: (a) limiting the damage caused to farmland by the construction of hazardous liquid and carbon dioxide pipelines; (b) preventing future conflicts between farming practices and pipeline operations resulting from excessively shallow installation of hazardous liquid and carbon dioxide pipelines; and (c) reducing the potential for possible future injuries to farmers, farming equipment, land, and water resulting from pipeline ruptures and spills by ensuring that operating hazardous liquid and carbon dioxide pipelines are initially installed deep enough to limit the potential for accidental damage due normal farming operations, taking into account possible future soil erosion over pipelines;

**Now, therefore be it resolved**, by the County Board of Supervisors for \_\_\_\_\_ County, Nebraska, that the “level of cultivation” in the County for the purpose of determining hazardous liquid and carbon dioxide pipeline depth of cover shall be [COUNTY TO SPECIFY; suggested language: *two feet below the depth of plowing, decompaction, drainage tiles, or other physical modification of the subsurface soils undertaken in the normal course of agriculture, but in no event less than 4-1/2 feet*], unless otherwise agreed to by mutual agreement between a landowner whose land is subject to an easement for a hazardous liquid or carbon dioxide pipeline and the company that proposes to construct a pipeline on landowner’s land.



## NEBRASKA MODEL COUNTY SPECIAL PERMIT OR CONDITIONAL USE PERMIT ORDINANCE FOR CO<sub>2</sub> PIPELINES

### ADDITION TO DEFINITIONS SECTION:

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 (CO<sub>2</sub>) 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.

### ADDITION TO SPECIAL PERMIT OR CONDITIONAL USE PERMIT SECTION:

#### [Section #]. Carbon Dioxide Pipelines

A Carbon Dioxide Pipeline (CDP) may be allowed by [Special Permit/CUP] in the [AG District] in a route approved by the County upon consideration of the information included in an application for a [Special Permit/CUP] and any other evidence and comments provided by other interested parties, which [Special Permit /CUP] shall include the conditions required by this regulation. The application shall include the following information and proposed conditions:

- a. **Project Location and Description and Notification:** The application shall include the following materials:
  1. A general description of the CDP and its commercial purpose and claimed public use and benefits.
  2. A map and legal description of the proposed location of the CDP right-of-way, a list of properties subject to easements or leases, and a list of all properties owned or intended to be owned in fee by the applicant on which would be located facilities or equipment for the CDP in the County.
  3. A Notice of Location filed by the applicant with the County showing the right-of-way and any pump or compressor stations setting forth a legal description of the right-of-way, the location of the pipeline contained therein, and any pump or compressor stations and other CDP facilities.
  4. GIS data for the CDP and its right-of-way and easement areas.

5. A list of parcels subject to an easement for the CDP, either voluntary or by eminent domain, indicating whether as of the date of the application a voluntary easement has been agreed to for the property.
  6. Confirmation that the Notice of Location has been delivered to all owners of property that would be subject to an easement for the CDP.
  7. A plan by which applicant will contact all impacted property owners to review the timing of construction, discuss site-specific issues, and provide a plan for construction and mitigation for each impacted property.
  8. Engineering drawings for all CDP components and equipment installed in the county.
  9. Technical specifications for the CDP including its maximum design capacity and proposed minimum and maximum operating pressures.
- b. **Construction Mitigation:** The application shall include a proposed Construction, Mitigation and Reclamation Plan (CMRP). The CMRP shall include the following conditions:
1. If the CDP passes within a distance of between one hundred and one (101) feet to two hundred and fifty (250) of any occupied residence or operational commercial structure, then applicant shall implement the following:
    - i. To the extent feasible, the applicant shall coordinate construction work schedules with affected residential and business owners prior to the start of construction in the area of the residences or businesses.
    - ii. Applicant shall install temporary safety fencing to control access and minimize hazards associated with an open trench and heavy equipment in a residential area.
    - iii. Applicant shall notify affected residents and business owners no less than twenty-four (24) hours in advance of any scheduled disruption of utilities and limit the duration of such disruption.
    - iv. Except where practicably infeasible, final grading and topsoil replacement, installation of permanent erosion control structures and repair of drainage tiles, fencing, and other structures shall be completed within ten (10) days after backfilling the trench or after any subsequent repair work. In the event that seasonal or other weather conditions, extenuating

circumstances, or unforeseen developments beyond applicant's control prevent compliance with this timeframe, temporary erosion controls and appropriate mitigating measures shall be maintained until conditions allow completion of cleanup and reclamation.

2. Applicant shall maintain access to all residences and businesses at all times, except for periods when it is infeasible to do so or except as otherwise agreed between the applicant and impacted residents and business owners. Such periods shall be restricted to the minimum duration possible and shall be coordinated with affected residents and business owners, to the extent possible.
3. Should a water well, or water supply, or aquifer be damaged (diminishment in quantity or quality) by CDP construction or operations, applicant shall immediately provide a comparable water supply to the owner of the well and the water well shall be restored or replaced at applicant's expense.
4. Applicant shall promptly remove all construction related debris and material which is not an integral part of the CDP. Such material to be removed includes all litter generated by applicant's employees, agents, contractors, or invitees, including construction crews. Following the completion of applicant's construction activities, applicant shall keep the CDP right-of-way clean and free of all trash and litter which may have been produced or caused by applicant or its employees, agents, contractors or invitees or its operations on the property. Applicant shall not bury or burn any trash, debris or foreign material of any nature within its right-of-way.
5. Following the completion of the CDP construction, applicant will restore the area disturbed by construction to the maximum extent practicable to its original preconstruction topsoil, vegetation, elevation, and contour.
6. Applicant shall, unless otherwise requested by a property owner, abide by all guidelines and recommendations of the local or regional field office of the United States Natural Resources Conservation Service or the CMRP, whichever is more stringent, regarding the removal, storage, and replacement of top soil and other soil horizons.
7. At a minimum, applicant shall remove and segregate topsoil and other soil horizons from the trench and segregate all soils by type. Following the construction and installation of each section of the CDP, the soil shall be replaced by type, to the extent feasible, as near as practicable to its original location and condition. Topsoil deficiency shall be mitigated with imported topsoil that is consistent with the quality of topsoil on the property. Following backfill and after completion of installation of all pipeline equipment, applicant shall decompact the

soil in accordance with the recommendations of the United States Natural Resources Conservation Service.

8. Applicant shall be financially responsible for all construction-related reclamation and mitigation expenses.
9. Applicant shall commence reclamation of the area through which a CDP is constructed as soon as reasonably practicable after construction.
10. Applicant shall complete final grading, topsoil replacement, installation of erosion control structures, seeding, and mulching within thirty days after backfill except when weather conditions, extenuating circumstances including landowner preference of delay due to personal or agricultural land use, or unforeseen developments do not permit the work to be done within such thirty-day period.
11. Applicant shall ensure that all reclamation and mitigation actions, including, but not limited to, choice of seed mixes, method of reseeding, and weed and erosion control measures and monitoring, is conducted in accordance with the Federal Seed Act, 7 USC 1551 et seq., the Nebraska Seed Law, and the Noxious Weed Control Act, United States Natural Resources Conservation Service guidance, and the CMRP, in consultation with landowners.
12. Applicant shall ensure that genetically appropriate and locally adapted native plant materials and seeds are used to reseed pasture and prairie lands based on site characteristics and surrounding vegetation as determined by a pre-reclamation site inventory.
13. Applicant shall ensure that mulch is installed as required by site contours, seeding methods, or weather conditions or when requested by a landowner.
14. Applicant's obligation for reclamation, mitigation, and maintenance of the CDP right-of-way shall continue until the pipeline is abandoned and permanently withdrawn from service and it has fully complied with its abandonment mitigation plan.
15. Applicant must install and maintain adequate warning signs for its buried pipeline that identify all road crossings, crossings into and out of fields, and turns in the pipeline of more than 5 degrees.
16. Applicant shall provide all landowners whose land is subject to an easement for the CDP with a map of the pipeline location on their land at least once every five years.

17. Applicant shall record all easements for the CDP and provide a map showing the as-built location of the CDP with the County Recorder.
  18. Applicant shall provide fencing for all above-ground facilities.
- c. **Public Inquiries and Complaints:** Application shall include a publicly available telephone number and identify a responsible person or position for the public to contact with inquiries or complaints throughout the application process, construction, and operation of the CDP. The applicant shall make a reasonable effort to respond to the public's inquiries and complaints and shall provide a monthly report of such inquiries and complaints to the County, together with actions taken and dates thereof to resolve any complaints. The County shall make this information available to the public upon request.
  - d. **Pipeline Safety:** The application shall contain a discussion of applicant's plans to comply with federal pipeline safety standards, or if no such standards are applicable, a plan to comply with industry standards.
    1. If a CDP is subject safety standards adopted under the federal Pipeline Safety Act, the application shall include information demonstrating that applicant will comply with all such safety standards. An application shall include a description of all CDP components installed in the county, together with a description of the component's compliance with federal safety standards, and attach any engineering studies prepared by the applicant to ensure its compliance with applicable safety standards. When a CDP is subject to safety standards adopted under the federal Pipeline Safety Act, the county shall not adopt conditions that determine the safety of the design, construction, operation, or maintenance of the CDP, but the county may consider the safety information required herein for the purpose of understanding the unavoidable risks to public health and welfare resulting from operation of the CDP, and for the purpose of county emergency planning.
    2. In the event the safety of the CDP is not subject to the jurisdiction of the federal Pipeline Safety Act or state law safety standards, an application shall provide copies of all industry design, materials, construction, equipment, operation, and maintenance standards applicable to the CDP; a description of all CDP components installed in the County together with a description of the component's compliance with applicable standards; a description of all construction activities together with a description of how these activities will comply with applicable industry standards; and a description of all operation and maintenance activities together with a description of how these activities will comply with applicable industry standards. The county may determine if the CDP will adequately comply with such industry standards and may condition a special permit to require such additional safety standards as are determined to be

necessary and reasonable by the county, such as emergency valve placement within the county.

- e. **List of Permit Applications:** The application shall include a list of permits required by the State of Nebraska, the US government, the County, and any municipalities within the county that applicant must acquire prior to construction of the CDP, and provide a description of the status of all such permit applications. Applicant shall update this list during the County's permit review process at least quarterly, but shall also provide an update upon request by the County.
  
- f. **Abandonment Plan:** The application shall include a proposed abandoned pipeline mitigation plan describing the methods, procedures and cost of removing the CDP and all related supporting infrastructure after the pipeline has been abandoned and permanently removed from operation. The abandoned pipeline mitigation plan shall include the following conditions:
  - 1. A notice of abandonment requirement providing that 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 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.
  
  - 2. A commitment to provide a bond or equivalent enforceable financial assurance instrument sufficient to guarantee removal and mitigation of the CDP upon abandonment. The County shall approve the amount and terms of such financial assurance instrument as necessary to protect the public interest.
  
  - 3. 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 Pipeline 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.

4. Upon a CDP owner or operator providing notice of abandonment, or upon issuance of a final decision by the County that a CDP is abandoned due to non-use, the abandoned pipe steel and all underground components shall be removed within one year of decommissioning or revocation of the special permit.
  5. Property owners of land subject to a CDP easement may enter into an agreement with the CDP owner to abandon some or all underground CDP components in-place and for other mitigation requirements, including but not limited to filling abandoned in-place pipe under private roadways with cement 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.
  6. 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.
- g. **County Emergency Response Plan:** The application shall include a proposed county and municipal emergency response plan for a potential full-bore rupture of the CDP. The applicant shall coordinate development of this proposed plan with county, municipal, and state emergency response agencies. This proposed county emergency response plan shall at a minimum include:
1. An estimate of the maximum volume of carbon dioxide that could be released given pipeline size, emergency valve locations, 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 CO<sub>2</sub> 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 computer modeling that at a minimum takes into account amounts of CO<sub>2</sub> and hazardous materials released, release rate,

the volume of material ejected by pump or compressor operation before their shutdown and valve closure, 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 CO<sub>2</sub> 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 CO<sub>2</sub> 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 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.

14. The CDP operator's federally mandated emergency response plan for its personnel, and a description of how the proposed county emergency response plan would coordinate with applicant's emergency response plan.
- h. **Setbacks:** The application shall provide that the CPD shall be constructed in a right-of-way that complies with the following setbacks:
    1. 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 1,000 feet from the home.
    2. For operating 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 500 feet from the structure containing the business.
    3. For structures that typically contain more than 10 persons, the center line of the CDP and the property line of a pump or compressor station shall be setback a minimum of 2,000 feet from such high occupancy structure.
    4. The setbacks may be increased to minimize the number of homes and businesses with the danger zone.
  - i. **Noise:** The application shall contain a proposed noise mitigation plan that includes the following conditions:
    1. No CDP pump or compressor station shall be located as to cause an exceedance of the following noise level standard. The noise level shall be measured at the closest exterior wall of any dwelling located on the property. If a pump or compressor station violates a noise standard on a dwelling, constructed after the CDP is approved, then the CDP becomes a non-conforming use. The noise level shall have a forty-two (42) dBA maximum ten (10) minute Leq for all hours of the day and night, or a three (3) dBA maximum ten (10) minute Leq above background level as determined by a pre-construction noise study.
    2. Each application shall include a professional third-party pre-construction noise study which includes all property within at least one mile of a pump or compressor station and must be able to demonstrate compliance with the noise standards in paragraph 2. The protocol and methodology for such studies shall be submitted to the County Health Department for review and approval. Such studies shall include noise modeling for all four seasons and include typical and worst-

case scenarios for noise propagation. The complete results and full study report shall be submitted to the County Health Department for review and approval.

3. Prior to the commencement of construction, pre-construction noise monitoring may be conducted to determine ambient sound levels in accordance with procedures acceptable to the County Health Department.
  4. Post-construction noise level measurements shall be performed in accordance with procedures acceptable to the County Health Department within one year of completion of construction to determine if the permittee is in compliance with this title and the terms of its special permit. Noise level measurements shall be taken by third party professional acousticians or engineering firms specializing in noise measurements and in accordance with procedures as approved by the County Health Department and shall be performed at the expense of the holder of the Special Permit. Any report, information or documentation produced in accordance with such study or measurements shall be provided to the County Health Department and shall be a public document subject to Nebraska's public records laws.
  5. All noise complaints regarding the operation of any CDP pump or compressor station shall be referred to the County Board. The County Board 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 Board determines that such noise monitoring shall be required, it shall be done at the expense of the holder of the Special Permit in accordance with procedures and by third party professional acousticians or engineering firms specializing in noise measurement approved by the County Health Department. The results of such monitoring shall be provided directly from the party or parties conducting the monitoring to the County Health Department for review and reporting to the Board of Commissioners.
- j. **Roads:** The application shall include a proposed road mitigation plan that includes the following conditions:
1. Prior to the commencement of construction of any CDP, the applicant shall enter into an agreement with the County Engineer regarding use of County roads during construction. This agreement shall ensure the appropriate and timely maintenance of all county roads pursuant to Neb Rev Stat §39-1402 and any amendments thereto.
  2. Applicant shall complete a county road and right-of-way application for each county, township, or municipal road or street and other public infrastructure to be

crossed or used for the purposes of constructing, operating, or maintaining the CDP.

3. Applicant shall, in coordination with the County and other appropriate jurisdictions, conduct a pre-construction survey of roadways and other public infrastructure that may be used or impacted by construction, either as primary or alternative routes. Such survey shall include photographs and written descriptions of the condition of potentially impacted public infrastructure and identify all applicable weight and size limits.
  4. Applicant shall, at its sole expense, restore roads, streets, bridges and other impacted public infrastructure to at least its pre-construction condition.
  5. After construction, County shall inspect all impacted infrastructure and determine the need for and extent of repair and direct applicant to make such repairs. County shall inspect all restored infrastructure. Where such restoration is insufficient, County will require additional restoration so that the infrastructure is restored to at least its pre-construction condition.
- k. **Environmental Impact Assessment:** The application shall include an assessment of impacts of construction and operation on state or federal threatened or endangered species, environmentally sensitive lands and waters such as wetlands, native prairie and grasslands, rivers, streams, and lakes, and public parks, schools, and similar amenities.
- l. **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 Nebraska One-Call Notification System Act and any amendments thereto (Neb Rev Stat §76-2301 to 76-2330), or relieve them of liability for their failure to do so.

**Severability and Separability:** Should any portion of this act be deemed unlawful for any reason or conflict with any existing state or federal law, that fact shall not affect any other portion or section of this act and any unaffected sections or portions of this act shall stand in effect.

**Effective Date:** This regulation shall take effect and be in force from and after the date of adoption by the County Commission.