

# DAKOTA GASIFICATION COMPANY PROCEDURE

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Affected A	Area(	s):		Originating Depa	rtment:	
All				Protection Services		
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# I. PURPOSE

The purpose of the Emergency Response plan is to establish a set of guidelines to ensure the public safety in the event of a carbon dioxide pipeline emergency.

The  $CO_2$  pipeline transports  $CO_2$  containing up to 2% H<sub>2</sub>S at 2700 psig from the Dakota Gasification Company Plant Site to a central receiving terminal near Goodwater, Saskatchewan. The  $CO_2$  product transported by this pipeline shall be a gas when released to the atmosphere, therefore this plan addresses an emergency response to a gas release due to line leak or rupture. Because of the gaseous nature of the product, emergency response to spills that may contaminate groundwater, rivers, lakes, pose a hazard to wildlife, or require extensive cleanup have not been included in this plan. Weather related incidents that may affect the pipeline shall also be monitored.

# II. SCOPE

This Emergency Response Plan (ERP), in its entirety is intended to provide the necessary information for pre-emergency planning as well as a step-by-step procedure to be used during an emergency. This plan encompasses the portion of the carbon dioxide pipeline that originates at Dakota Gasification Company, northwest of Beulah, ND and terminates northwest of Noonan, ND at the U.S./Canadian border.

# III. REFERENCES

- DGC Procedure No. 4310 DGC Plant Emergency Plan
- DGC Procedure No. 024 Emergency Planning and Response
- DGC Procedure No. 323 Electrical Utility Notification
- DGC Procedure No. 30-210 R911 Computerized System Procedure
- 74-001 Federal Requirements for Reporting Pipeline Accidents
- 74-002 Federal Requirements for Reporting Carbon Dioxide Pipeline
- 74-018 Response to Abnormal Operating Conditions
- 49 CFR Part 195.402E
- 49 CFR Part 1910.120
- 590-06-EM Pipeline Abnormal

# IV. DEFINITIONS

*Class I Pipeline Emergency Response:* Upon receiving report of potential injury, environmental damage or release involving DGC pipeline, a two-man crew shall be dispatched from the plant site as quickly as possible. The Class I responders shall be Operator Qualified Pipeline Emergency Response Technicians.



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*Class II Pipeline Emergency Response:* In the event the class I response is confirmed by the presence of an abnormal operation condition, three additional Operator Qualified Pipeline Emergency Response Technicians shall be dispatched for entry into the hot zone.

*Class III Pipeline Emergency Response:* Field confirmation indicates there is potential for the incident to escalate and poses a threat to the public, all available Operator Qualified Pipeline Emergency Response Technicians shall be dispatched.

*Class IV Pipeline Emergency Response:* A serious injury or fatality has occurred, and/or there is an ongoing threat to the public. Additional support staff shall be dispatched for incident management and unified command

**Controller:** Those persons (board operator) that monitor SCADA data from the control rooms and have operational authority and accountability for the remote operational functions of the pipeline facility.

**Dakota Gasification Company (DGC):** is a coal gasification plant owned and operated by Dakota Gasification Company. Located northwest of Beulah, ND. Produces, compresses, and exports CO<sub>2</sub> to the pipeline.

**DGC Protection Services Control Center (PSCC):** On-site Emergency Operations center that shall receive first notification of an emergency, shall initiate additional notifications, and shall serve as the incident command center for emergency planning and response.

*Emergency out-calling System / R911:* The emergency "out call" system which is also referred to as the R911 system, is designed to notify those residents living or working within the pipeline corridor that a pipeline emergency has occurred with the potential to affect them. In Canada the pipeline corridor is two kilometers in width on each side of the pipeline or four kilometers total, while in the United States the pipeline corridor is two miles in width, one mile on either side of the pipeline. The population density in this corridor is surveyed and the information updated every year.

When a pipeline emergency is declared, the emergency "out call" system may be initiated from Dakota Gasification Company for those residents on the affected pipeline segment(s). The computer driven system has four hundred dedicated phone lines which shall deliver a recorded message alerting the resident of the pipeline emergency. It shall take approximately one minute to complete these calls. Any unanswered calls shall be repeated nine times at three-minute intervals. During the time between the retry intervals any additional residents in the affected area shall be called.

The emergency "out call" system also has the capability of calling an alternate phone number if unable to reach a resident on the first try.

Each resident shall be notified annually and asked if the current notification numbers are correct and if they wish to provide additional phone numbers.

*Emergency Response Crew:* A five man crew of hazardous material technicians dispatched from the plant site to assess the emergency, establish the hot zone, assist the first responders, and carry out an action plan to resolve the emergency situation.

*EPA (Environmental Protection Agency) Level B Chemical Protection:* A Level of personnel protective equipment that gives the wearer the maximum amount of respiratory



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protection and a medium level of skin protection. Level B equipment consists of a Self-Contained Breathing Apparatus, Chemical Resistant Clothing, Inner and Outer Chemical Resistant Gloves, and Chemical Resistant Safety boots.

#### ESD: Emergency Shut Down

*First Responder:* Local/County fire rescue, medical, or Sheriff Department personnel dispatched to assist with emergency.

*Hot Zone:* Area around a pipeline leak with any concentration of  $H_2S$  gas and/or oxygen levels below 19.5% or greater than 23.5%. Hot Zone shall be determined by the use of gas/air monitoring equipment.

*Incident Commander (IC)*: The individual responsible for directing and coordinating the overall emergency response.

*Incident Command Center:* The communication center set up to receive information from the emergency crew, as well as an assembly point to coordinate response activities and carry out risk assessment.

*Incident Log:* Log completed by Protection Services Control Center and Emergency Response Crew to log all activities during the emergency. Shall include times, names of contacts, names of responders, and all activities performed during the emergency.

*Mainline Valve (MLV):* Valves located along the pipeline route, can be remotely operated from DGC. There are 11 valves between DGC and the U.S. /Canadian border.

**MIS:** Management Information System

**Pipeline Section:** Refers to a section of pipeline between MLV sites. (Example: section 1 refers to the section from DGC to MLV #1, section 2 refers to the section from MLV #1 to MLV #2) Pipeline starts after 8<sup>th</sup> stage flange of CO2 compressors.

*Pipeline Emergency:* unplanned gas release or pipeline failure that may pose a risk to the public or the environment.

**ArcGIS:** Digital mapping program that includes pipeline and receptor locations/information. *ArcGIS* can be found on *Inside Basin*, under *Software Apps*, as *Portal for ArcGIS*.

**Qualified:** An individual that has been evaluated, can perform assigned covered tasks, recognize and react appropriately to abnormal operating conditions.

**Safety Officer:** The Safety Officer assesses hazardous and unsafe situations and develops measures for assuring personnel safety at the incident. The Safety Officer shall be trained to the hazardous materials technician level and reports directly to the incident commander.

*Span of Control:* The maximum number of non-qualified individuals that a qualified individual can direct and observe performing a covered task.

SVPL: Souris Valley Pipeline Limited



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# V. RESPONSIBILITIES

Protection Services in collaboration with the Shift Superintendent, Pipeline Controllers and Operations and emergency response operator qualified personnel are responsible for the implementation, training, and review of this emergency response plan.

Training requirements can be found in DGC Procedure No. 024 Emergency Planning and Response and DGC Procedure No. 4310 - DGC Plant Emergency Plan.

Review of this emergency plan shall occur at intervals not to exceed 15 months, but at least once each calendar year.

# VI. INSTRUCTIONS

A. Emergency Response Quick Reference Flow Chart

#### <u>STEP 1</u>

Pipeline emergency reported to DGC Protection Services Control Center (PSCC).

- All pertinent information is recorded on "Record of Emergency Notification PLR-E-1" (<u>DGC 0342</u>).
- PSCC starts the "Incident Log PLR-E-2 (DGC 0343).
- PSCC notifies Shift Superintendent of the pipeline emergency.
- Shift Superintendent shall review the Record of Emergency Notification PLR-E1 and the decision matrix on page 2 of PLR-E1 to determine the response class for the initial response.
- A Class I Pipeline Emergency response shall be initiated for any unconfirmed report or odor complaint that may involve DGC pipelines and considered an emergency until proven otherwise.
- PSCC establishes Incident Command Center.

#### <u>STEP 2</u>

Shift Superintendent assumes role of Incident Commander and moves to the PSCC, Incident Commander declares a CO2 pipeline emergency and directs the following responses.

- The Incident Commander shall consult with the pipeline controller to determine if there are abnormal operating conditions or other indications that warrant additional class II, III or IV resources be dispatched (refer to the Decision Matrix on page 2 of PLRE1).
  - The qualified Controller has the responsibility and authority to mitigate the effects of the condition by taking extreme measures such as shutting down all or part of the pipeline, utilizing the flare system, curtailing product transfer, or the operation





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of remote values if they believe that continuing to run the pipeline could result in a hazard to the public or the environment.

- The qualified Controller shall contact SVPL, Whitecap Resources and Cardinal Energy Representatives providing an assessment of the incident.
  - Use emergency phone contact numbers listed in attachment A.
- Incident Commander contacts local emergency response agency by (live) telephone informing them of the current situation and establish communication plan.
  - Use attachments B-1 thru B-5 for first responder communication plan.
- PSCC to initiate "out call" phone system for affected pipeline sections and agencies.
- PSCC to notify Pipeline Operator Qualified Superintendent, Supervisor and Operator Qualified pipeline Technicians and DGC Management.
  - Refer to emergency contact list attachment A.
- PSCC to notify SVPL Representative.
- Qualified Superintendent directs (unqualified superintendent advises) O2 Plant Supervision to initiate ESD of the pipeline by closing MLV's to isolate affected pipeline sections and shutdown Tioga Booster.
- Shift Superintendent to notify DOT National Response Center Office of Pipeline Safety (see attachment B for contact info).
- Shift Superintendent to notify North Dakota Public Service Commission (see attachment B for contact info).

#### STEP 3

Class I response: Incident Commander dispatches 1<sup>st</sup> Emergency Response Crew as quickly as possible. The crew consisting of two Operator Qualified Pipeline Emergency Response Technicians to the incident site.

- Emergency Crew shall not enter the "hot zone" without a second backup emergency crew and Safety Officer on site.
- O2 Plant qualified Controller confirms ESD of CO2 pipeline and monitors all communication with the emergency crew via radio or telephone.
- Operator Qualified Supervisor or Operator Qualified Controller confirms MLV site valve closure in the field at location of emergency. (Field verification of ESD)
- PSCC confirms "out call" system notifications were completed and Management contacts have been made.
- PSCC confirms SVPL Representative has been contacted.

Class II response: Incident Commander dispatches 2<sup>nd</sup> Emergency Response Crew consisting of three Operator Qualified Pipeline Emergency Response Technicians.



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# <u>STEP 4</u>

1st Emergency Response Crew arrives at incident site and initiates on scene response.

- Establish communications plan with DGC Incident command.
- Determine if there are injured people requiring immediate rescue.
- Request medical assistance for any injured people.
- Determine exact location of the incident.
- Determine wind speed and direction.
- Establish initial "hot zone" and monitor for changes in size, boundary or direction.
- Restrict access to incident site, keep spectators and traffic away.
- Standby to assist First Responders.
- Assess the need for additional emergency crews or additional resources. STEP 5

Incident Commander performs risk assessment based on information from 1st Emergency Response Crew.

- Determine if there are receptors, population centers or public facilities at risk.
- Determine if involved receptors shall be evacuated or Shelter-In-Place.
- Determine if an environmentally sensitive area is at risk.
- Determine if it is necessary to vent down the pipeline at a lower risk location.
- Determine if additional qualified personnel and support staff (class III &IV response) are needed.

Incident Commander directs the following responses to mitigate the emergency:

- Utilizing population density maps directs 1st Emergency Crew to assist in evacuation of receptors in the risk area as soon as the 2nd emergency Crew is on site to act as backup.
  - Alternative digital mapping is available, go to Inside Basin>Software Apps>Portal for ArcGIS>DGC Emergency.
  - Go to Layer List, activate CO<sub>2</sub> Receptor layer.
- Directs First Responders to the incident site to assist in evacuation, care and treatment of the injured and restrict access to the incident site.
- Directs PSCC to initiate the second "out call" message with specific evacuation or Shelter-In-Place data for the affected receptors.



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# <u>STEP 6</u>

1<sup>st</sup> & 2<sup>nd</sup> Emergency Crews confirm that all receptor locations in the risk area have been checked and the residents successfully evacuated.

# <u>STEP 7</u>

1st Emergency Crew remains at the incident site to assist the First Responders.

2nd Emergency Crew proceeds with blowing down the pipeline at a safe location.

# <u>STEP 8</u>

1st & 2nd Emergency Crews determine pipeline has vented to the atmospheric pressure and no longer provides a hazard to the public, this information is relayed to the Incident Commander.

# <u>STEP 9</u>

Incident Commander informs the First Responders that an emergency condition no longer exists.

# <u>STEP 10</u>

1st & 2nd Emergency Crews prepare a detailed Emergency Response report, make sure the incident site is barricaded to prevent injury to persons or livestock and maintain a 24hr surveillance of the incident site until relieved.

#### <u>STEP 11</u>

After emergency is resolved the Incident Commander shall hold a Critique and Debriefing with all affected personnel involved with the incident.

- B. Initial Notification of a Pipeline Emergency.
  - 1. This notification may be received by DGC Protection Services Control Center (PSCC) from the public, fire/police/sheriff departments, or pipeline operator.
  - 2. Notification may also be received from the Oxygen Plant Control Room based on information provided by the leak detection system.
  - Upon notification of a pipeline emergency, personnel stationed at the DGC Protection Services control center shall record the information on PLR-E-1, "Record of Emergency Notification" (<u>DGC 0342</u>). All information shall be recorded in as much detail as possible.
- C. PSCC Reports to Shift Superintendent.
  - Based on the information provided by PSCC or the leak detection system, the Qualified Shift Superintendent shall determine if an emergency response is required, see decision matrix on page 2 of PLR-E-1, "Record of Emergency Notification". If an emergency response is required, the Shift Superintendent shall assume the role of Incident Commander and direct the following responses:
    - a) Notify Gas Processing & Oxygen Plant Supervision a CO2 pipeline emergency is in progress and to route all CO2 to the boilers. The qualified controller has



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authority to shut down the pipeline if they believe that continuing to run the pipeline could result in a hazard to the public or the environment.

- b) Notify Oxygen Plant (Pipeline Controller) to initiate an ESD of the pipeline by closing MLV's. To isolate affected pipeline sections. Once all MLV valve positions indicate closed this information shall be immediately relayed to the Incident Commander.
  - Pipeline Controller shall inform SVPL representative, Whitecap Resources and Cardinal Energy representatives of the incident and current condition of the pipeline (use contact phone numbers listed in attachment A).
- c) PSCC to establish an Incident Command Center.
- d) PSCC shall determine which receptors and agencies need to be notified. The R911 sessions are assembled to correspond with the pipe section.
  - Use information from PLR E1 and/or mile marker location from Pipeline Controller to determine incident location.
    - Attempt to determine county location in order to establish first responder jurisdiction. Counties are shown on Portal for ArcGIS map (may need to zoom out).
  - If you have the following location information (city, county or township/range/section) utilize the receptor maps to determine incident location and pipe section involved.
    - Portal for ArcGIS map may be helpful in determining exact location.
  - If you have the incident location from the pipeline controller as distance from DGC, go to Receptor List attachment S to determine the pipe section.
    - Portal for ArcGIS map lists pipe sections.
  - If you have a receptor name, go to Receptor List attachment S to determine the pipe section.
  - If the incident is known to involve a main line valve (MLV) site or the Tioga station, the corresponding R911 session shall be used to notify receptors in a 1 mile radius.
  - To determine the appropriate agencies to inform, go to attachment B. Attachment B lists all agencies having jurisdiction by county and pipe section.
- e) PSCC shall prepare and R911 out-call with the appropriate notification message (evacuate or shelter in place) to be launched.
  - Initiate the first out-call session for the receptors in the affected pipeline section or MLV. This call shall broadcast a pre-recorded message warning that a pipeline emergency has occurred that may affect the tenants/ landowners in the area and are advised to evacuate or Shelter-In-Place. (Receptor lists divided by pipeline section are provided with this plan).



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- Initiate the second automated out call session for the agencies in the affected section of the pipeline. This call shall broadcast a pre-recorded message warning that a pipeline emergency has occurred that may affect residents in their district.
- f) PSCC to notify Pipeline Superintendent, Supervisors, technicians, DGC plant management and other resources found on attachment A.
- g) Shift Superintendent to notify Office of Pipeline Safety.
- h) Shift Superintendent to notify North Dakota Public Service Commission (see attachment B for contact number).
- i) Shift Superintendent to notify the DOT National Response Center Office of Pipeline Safety within the first hour of the incident (see attachment B for contact number).
- D. Incident Command Center Established.
  - 1. PSCC shall establish itself as the Incident Command Center until the Incident Commander arrives at the Incident Command Center. PSCC shall begin an incident log, which shall include times, names of responders, and all other activity associated with the emergency response. PLR-E-2 (<u>DGC 0343</u>) can be used for this purpose.
  - 2. The Incident Commander shall report to the PSCC and determine if the PSCC is adequate to remain the Incident Command Center, or if the Incident Command Center need to be relocated to another, more fitting location. A workspace with tables suitable for review of drawings and maps shall be provided as needed to perform the risk assessment. At least two phones shall be available and staffed by Protection Services personnel to coordinate activities with the emergency crews and First Responders.
- E. Emergency Crew Dispatched to Site (class I response).
  - 1. A two-man crew shall be dispatched from the plant site as quickly as possible. The first emergency crew shall consist of Operator Qualified Pipeline Emergency Response Technicians. Additional emergency crews shall be dispatched as soon as they are available. To ensure shortest possible response time, maps as well as instructions for access to the mainline valve sites are included in Section IX of this plan.
    - a) Prior to leaving site:
      - (1) The response vehicle shall have personal protective equipment. Refer to Emergency Offsite Response Vehicle listed on item "V" (Protserv073) of the attachment section of this plan for a detailed list of the required equipment (located in the back of book).
      - (2) Multi-gas detection monitors (with H<sub>2</sub>S sensor) from Protection Services shall be taken to the scene.
  - 2. Before leaving Plant site, the crew shall make the following notifications:





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- a) Notify Shift Superintendent.
- b) Sign out on log at PSCC naming each person in the crew and the suspected destination.
- c) Leave cell phone number with PSCC, and establish a call back time. A call back to the Incident Command Center shall occur before approaching the incident site.
- F. First Emergency Crew Arrives at Site.
  - 1. The first emergency crew approaching the incident site shall follow these guidelines:
    - a) Establish continuous communication with PSCC personnel, if communication is lost, do not approach site, and move to a position where communication can be re-established.
    - b) Have all multi gas monitoring equipment in operation in the vehicle before approaching the incident site to avoid driving into the hot zone without being aware of it.
    - c) Approach the suspected incident site from an upwind direction.
    - d) Make visual observation of area looking for casualties and trying to locate the incident site.
    - e) Park vehicle a safe distance away from, and upwind of incident site.
  - 2. Upon arrival at site, the first emergency crew shall assess the situation and report back to the Incident Command Center with the following information:
    - a) Exact location and severity of emergency.
    - b) Any known injuries, request additional medical staff as needed.
    - c) Any immediate danger to a population center.
    - d) Wind direction and best approach route.
    - e) Evacuation route.
    - f) What additional emergency support is required?
  - 3. Based on the above information, the Incident Commander shall:
    - a) Perform a risk assessment to determine if:
      - (1) A public facility, population center, or gathering area is at risk.
      - (2) An environmentally sensitive area is at risk.
    - b) Direct PSCC to contact and dispatch local and county First Responders using the contact list provided in Attachment B of this plan, and provide them with the location of the incident site and specific directions on how to approach, what roads to restrict access and any casualties requiring medical attention.



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- c) Incident Commander shall establish communication plan with local first responders, see attachment B for contact information.
- d) Incident Commander shall dispatch another emergency crew from the plant site as soon as qualified personnel and emergency equipment is available. Five Operator Qualified Pipeline Emergency Response Technicians shall be the minimum required for entering the hot zone. This is accomplished by the first emergency crew, consisting of two hazmat technicians entering the hot zone wearing EPA level B chemical protection. While the second crew consisting of two Operator Qualified Pipeline Emergency Response Technicians are on standby also wearing EPA level B chemical protection to perform rescue if problems are encountered. The fifth technician is designated as the safety officer and shall oversee the entry operations.
- e) PSCC shall print a data log from the R911 out bound calling on the sessions that they launched. All operator intercepts and unanswered calls from the data log shall be manually called.
- 4. The first emergency crew at the site shall:
  - a) First isolate the incident in all directions a minimum of 1000 feet. This shall be the initial hot zone. A more defined hot zone shall be established with gas monitoring equipment when the second emergency crew arrives on site.
  - b) Protect personnel down wind.
  - c) Restrict access to the site.
  - d) Keep spectators and traffic away.
  - e) Remain at site to assist first responders.
- G. First Responders Arrive at Site.
  - 1. The First Responders primary goal shall be to protect the public. This shall be accomplished by:
    - a) Blocking/barricading roads to restrict access to emergency site. Restrict access to hot zone. First Responders are advised NOT to enter hot zone.
    - b) Evacuate tenants/landowners in the affected area.
    - c) Provide medical attention for the injured.
- H. Additional Emergency Crews Dispatched (class II response).
  - 1. Additional crew dispatched from DGC arrives at site to assist with evacuation.
  - 2. First emergency crew can establish a more defined hot zone with the use of multi gas monitoring equipment.
    - a) With a safety officer and a backup team in place. Two technicians dressed in EPA level B chemical protective clothing equipped with gas monitoring equipment and red flags or red cones can enter the site from the upwind



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direction. At the point where any  $H_2S$  gas is detected, mark the area with red flags. Survey the area upwind and cross wind of the pipeline leak, marking the hot zone where any trace of  $H_2S$  gas is present. The Emergency Response Guidebook recommends that during a large release, persons downwind of the release are protected at a minimum of 1.3 miles during daylight hours and a minimum of 3.9 miles at night.

- b) Incident Commander shall conduct and assessment to determine if additional qualified personnel and support staff (class III & IV response) are needed.
- c) At this point the emergency crew can carry out the action plan that the Incident Commander has developed.
- I. Termination of Emergency.
  - 1. The emergency response crews shall determine when an emergency can be terminated, or declared "ALL-CLEAR" The criteria for making this determination shall include:
    - a) All individuals from the affected area are accounted for and safe from harm.
    - b) The <u>exact</u> location of the leak resulting in an emergency has been identified, that portion of the pipeline has been adequately isolated, and product is no longer being released.
    - c) It is determined that the emergency does not pose a threat to the public or environment.
  - 2. Incident Commander shall contact the First Responders and inform them of the status.
  - 3. After the emergency is resolved the IC shall hold a Critique and Debriefing with all affected personnel involved in the incident. A written report shall be generated and corrective action shall be implemented where deficiencies are found.
- J. Required Reports and Notification of State and Government Agencies.
  - 1. <u>PLR-E-1 Record of Emergency Notification (DGC 0342)</u> shall be completed by DGC Protection Services Control Center at the time initial notification is made. The information on this form shall be required to initiate an accurate response as well as providing details for any subsequent reports, which may be filed.
  - The specialist at Protection Services Control Center as well as the emergency response crew in the field shall complete <u>PLR-E-2 Incident Log (DGC 0343)</u>. This log shall serve as a record of all activity involving the emergency response. This information shall be used as a guide for completing and filing any subsequent accident / incident reports.
  - 3. PHMSAF 7000-1 Accident Report-Hazardous Liquid Pipeline To be completed and filed according to the guidelines in the procedure #74-001 Federal Requirements for Reporting Carbon Dioxide Pipeline Accidents.





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- Canada Energy Regulator in Canada requires a report any time flow is interrupted for an emergency. This is to be sent to the Transportation Safety Board of Canada (TSB.) See attachment K of Souris Valley Pipeline Limited Emergency Response Procedure 4322.
- 5. Notification shall be made to the North Dakota Public Service Commision.

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- K. Statements to the News Media.
  - 1. All "at-the-scene" statements to the media shall be handled in accordance with DGC Plant Management recommendations at the time of the incident.
  - 2. All formal statements to the media shall be generated by Basin Electric Communications department. See attachment A for contact information.

# VII. ATTACHMENTS

A. ATTACHMENT A	#4321 Attachment A - Pipeline Operations and Plant Management Contact List
B. ATTACHMENT B	#4321 Attachment B-First Responders and Emergency Services Contact List
C. ATTACHMENT C	CO2 Williams County (Attachment C) CO2 Divide County (Attachment C) CO2 McKenzie County (Attachment C) CO2 Mercer County (Attachment C) CO2 Dunn County (Attachment C)
D. ATTACHMENT D	CO2 Pipeline Receptor Map 1 of 14 (Attachment D)
E. ATTACHMENT E	CO2 Pipeline Receptor Map 2 of 14 (Attachment E)
F. ATTACHMENT F	CO2 Pipeline Receptor Map 3 of 14 (Attachment F)
G. ATTACHMENT G	CO2 Pipeline Receptor Map 4 of 14 (Attachment G)
H. ATTACHMENT H	CO2 Pipeline Receptor Map 5 of 14 (Attachment H)
I. ATTACHMENT I	CO2 Pipeline Receptor Map 6 of 14 (Attachment I)
J. ATTACHMENT J	CO2 Pipeline Receptor Map 7 of 14 (Attachment J)
K. ATTACHMENT K	CO2 Pipeline Receptor Map 8 of 14 (Attachment K)
L. ATTACHMENT L	CO2 Pipeline Receptor Map 9 of 14 (Attachment L)
M. ATTACHMENT M	CO2 Pipeline Receptor Map 10 of 14 (Attachment M)
N. ATTACHMENT N	CO2 Pipeline Receptor Map 11 of 14 (Attachment N)
O. ATTACHMENT O	CO2 Pipeline Receptor Map 12 of 14 (Attachment O)





Procedure No.

Revision No.

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Procedure Description:

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CO2 Pipeline Emergency Response Plan (U.S. Section)

P. ATTACHMENT P	CO2 Pipeline Receptor Map 13 of 14 (Attachment P)
Q. ATTACHMENT Q	CO2 Pipeline Receptor Map 14 of 14 (Attachment Q)
R. ATTACHMENT R	#4321 Attachment R Receptor List Sorted by Section
S. ATTACHMENT S	#4321 Attachment S Receptor List 20171109
T. ATTACHMENT T	DGC 0342 - PLR-E1 Record of Emergency Notification
U. ATTACHMENT U	DGC 0343 - PLR-E2 Incident Log
V. ATTACHMENT V	Emergency Equipment List - PROTSERV073
W. ATTACHMENT W	Carbon Dioxide MSDS (REV 7)
X. ATTACHMENT X	#4321 Attachment X Mainline Valve Site Locations

