UNDERGROUND INJECTION CONTROL AREA PERMIT NUMBER IAS1152D0003 AUTHORIZATION TO OPERATE CLASS IID INJECTION WELLS

In compliance with provisions of the Safe Drinking Water Act, as amended, (42 U.S.C. §300f-300j-11, commonly known as the SDWA), the Resource Conservation and Recovery Act (42 U.S.C. §6901-6991i, commonly known as RCRA) and attendant regulations promulgated by the U.S. Environmental Protection Agency under Title 40 of the Code of Federal Regulations,

Natural Gas Pipeline Company of America, LLC. 370 Van Gordon Street Lakewood, CO 80228

is authorized by this permit to inject fluids into the Cambrian-Ordovician Aquifer, Mount Simon Sandstone through up to three Class IID injection wells at their Columbus Junction, Iowa Facility, located at 21864 120th Street, Columbus Junction, Louisa County, Iowa in accordance with the conditions set forth herein. The area permit boundary is shown in Attachment B of this permit and includes portions of Section 5, 6, 7, 8, 9, 15, 16, 17 and 18 of T74N, R4W in addition to minor portions of Sections 1 and 12 of T74N, R5W.

All conditions applicable to this permit are incorporated in this permit expressly or by reference including specific regulatory citation. All references to Title 40 of the Code of Federal Regulations are to the corresponding regulations in effect on the date that this permit becomes effective.

This permit shall become effective on the date signed.

This permit and its authorization to inject shall remain in effect for the life of the wells, unless modified, revoked and reissued, or terminated for cause pursuant to Paragraph I.B. herein

Signed this TTH day of DecemBER Jeffer Robichaud

Director Water, Wetlands & Pesticides Division U.S. EPA - Region 7

PART I - Conditions Applicable to all UIC Permits

A. Effect of Permit

The permittee is allowed to engage in underground injection in accordance with the conditions of this permit. The underground injection activity otherwise authorized by this permit, shall not allow the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 C.F.R. Part 141 or may otherwise adversely affect the health of persons. Compliance with terms of this permit does not constitute a defense to any action brought under Part C and the imminent and substantial endangerment provisions in Part D of the Safe Drinking Water Act (SDWA) or any other common or statutory law for any breach of any other applicable legal duty.

B. Permit Actions

This permit can be modified, revoked and reissued or terminated for cause as specified in 40 C.F.R. § 144.12, 144.39 and 144.40. Also, the permit is subject to minor modifications as specified in 40 C.F.R. § 144.41. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee shall not stay the applicability or enforceability of any permit condition.

C. Transfer of Permits

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the SDWA. (See 40 C.F.R. § 144.38; in some cases, modification or revocation and reissuance is mandatory.)

D. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

E. State Laws

Nothing in this permit shall be construed to preclude any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation

G. Property Rights

This permit does not convey any property rights of any sort or exclusive privilege.

- H Financial Responsibility
 - 1 Financial Responsibility The permittee, including any transferor of this permit, shall

establish financial responsibility to close, plug and abandoning each constructed well covered under this permit prior to commencing injection into that well and shall maintain resources to close, plug and abandon each well until: (1) the well has been plugged and abandoned in accordance with Part II, Section C(1) of this permit; (2) the well has been converted in compliance with the requirements of 40 C.F.R. § 144.51(n); or (3) the transferor of a permit has received notice from the Director that the owner or operator receiving transfer of the permit has demonstrated financial responsibility for each well.

I. General Requirements

1. <u>Duty to Comply</u> The permittee must comply with all conditions of this permit Any noncompliance constitutes a violation of the SDWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; except that the permittee need not comply with the provisions of this permit to the extent and for the duration such noncompliance is authorized in an emergency permit under 40 C.F.R. § 144.34.

2. <u>Penalties for Violations of Permit Conditions</u> Any person who operates this well in violation of permit conditions shall be subject to civil penalties, fines, and other enforcement action under the SDWA and may be subject to actions under the Resource Conservation and Recovery Act. In addition, any person who willfully violates a permit condition may be subject to criminal prosecution.

3. <u>Need to Halt or Reduce Activity Not a Defense</u> It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. <u>Duty to Mitigate</u> The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit

5. <u>Proper Operation and Maintenance</u> The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

6. Duty to Establish and Maintain Mechanical Integrity The permittee shall establish prior to commencing injection and thereafter maintain the mechanical integrity of each permitted injection well pursuant to 40 C.F.R. § 146.8. If at any time the Director determines that a well lacks mechanical integrity pursuant to 40 C.F.R. § 146.8, the Director may, by written notice, require the permittee to demonstrate mechanical integrity or take other steps to prevent the movement of fluids into or between underground sources of drinking water caused by the lack of mechanical integrity.

7. <u>Duty to Provide Information</u> The permittee shall furnish, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

8 Inspection and Entry The permittee shall allow the Director or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- a Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- Have access to and copy, at reasonable times any records that must be kept under the conditions of this permit;
- c Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit: and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

9. Signatory Requirements

- a. All reports required by this permit and other information requested by the Director shall be signed and certified as follows (see 40 C.F.R. § 144.32):
 - for a corporation, by a responsible corporate officer of at least the level of vice-president;
 - (2) for a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
 - (3) for a Municipality, State, Federal, or other public agency by either a principal executive or a ranking elected official
- b. A duly authorized representative of the official designated in paragraph a. above may also sign only if:
 - the authorization is made in writing by a person described in paragraph a above;
 - (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or a position of equivalent responsibility. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and
 - (3) the written authorization is submitted to the Director.
- c. If an authorization under paragraph b. of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph b. of this section must

be submitted to the Director prior to or together with any reports, information or applications to be signed by an authorized representative

d. Any person signing a document under paragraph a. or b. of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

10. Confidentiality of Information

- a. In accordance with 40 C.F.R. Parts 2 (Public Information) and § 144.5, any information submitted to the Director pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 C.F.R. Part 2 (Public Information) and § 144.5.
- b. Claims of confidentiality for the following information will be denied:
 - A. The name and address of any permit applicant or permittee.
 - B. Information which deals with the existence, absence, or level of contaminants in drinking water

Part II - Construction and Operation

A. Construction Requirements

1. <u>Siting</u> Notwithstanding any other provision of this permit, each injection well authorized by this permit shall inject only into intervals which are separated from any underground source of drinking water by a confining interval that is free of known open faults or fractures within the Area of Review. The additional well allowable under this area permit may only be constructed within the Natural Gas Pipeline Company of America, LLC. Area Well Boundary as delineated in the permit application and provided as Attachment B in this permit.

 <u>Casing and Cementing</u> Each injection well authorized by this permit shall be cased and cemented as described in the permit application to prevent the movement of fluids into or between underground sources of drinking water. 3 <u>Aquifer Testing</u> After the construction of the additional injection well allowable under this area permit, the proposed injection interval for that well shall be tested prior to injection to determine if it is an underground source of drinking water. If the proposed injection interval is determined to be an underground source of drinking water, then an aquifer exemption must be applied for and approved by EPA under 40 C.F.R. § 146.4 prior to injection activities commencing.

4. <u>Mechanical Integrity</u> Injection operations are prohibited into any new well covered under this permit until the permittee demonstrates that the well has mechanical integrity in accordance with 40 C.F.R. § 146.8 through successful performance of the tests specified below or alternative mechanical integrity tests that have been approved by the Director.

- a A pressure test will be conducted on the tubing/casing annulus by pressurizing the annulus to at least 100 psi above the maximum permitted injection pressure. Failure to achieve the test pressure or failure of the well to hold the test pressure for thirty minutes with less than a five (5) percent change will indicate mechanical integrity failure; and
- b. Conduct an audio/noise log to determine if any injection related fluid movement is occurring across the injection interval/primary confining interval.

A representative of EPA must be given thirty (30) days advance notice of testing and the opportunity to witness the initial and any subsequent mechanical integrity demonstration conducted on any well covered under this permit. The permittee shall ensure that all gauges used in mechanical integrity demonstrations are properly calibrated prior to the demonstration. If a well fails its mechanical integrity demonstration, the permittee shall not commence/continue injection operations into that well until the problem is corrected and mechanical integrity can be shown.

In addition to the above requirements, a mechanical integrity test demonstration by pressure testing of the annulus shall be conducted on any well covered by this permit: whenever tubing is removed from the well; the packer is reseated in the well; prior to the resumption of injection into a well after it has been temporarily abandoned for a period of 365 days or greater; or after written notice to the permittee of a determination by the Director that the well lacks mechanical integrity.

Upon the receipt of a notice from the Director that the mechanical integrity demonstration is satisfactory the permittee may commence/continue injection.

B. Operating Requirements

1 <u>Injection Formation</u> Injection shall be limited to the Lower Cambrian-Ordovician Aquifer Mt. Simon Sandstone in the subsurface intervals specified in Attachment A.

 Injection Fluid The permittee shall not inject any hazardous waste as defined by 40 C.F.R. § 261, nor any other fluids, other than the fluids generated by operation of the Cairo, Columbus City and Keota Storage Fields.

3 Injection Volume Limitation Injection volume into each permitted well shall not exceed the injection volume limitations specified in Attachment A. Upon demonstration, and approval from the

Director, an increased injection rate may be used for wells covered under this permit if the demonstration indicates the increased injection rate will not result in an increase to injection pressures beyond the permitted limit. Any proposed method which will be used to make the demonstration must be reviewed and approved by the Director prior to implementation.

4. <u>Injection Pressure Limitation</u> Injection pressure for each permitted well, measured at the surface, shall not exceed the limitations specified in Attachment A. Upon approval by the Director, the permittee may inject at the maximum pressure attained during any step-rate test conducted on an injection well authorized by this permit. Step-rate injectivity test procedures must be approved by the Director prior to conducting the test and the test may be witnessed by EPA or an agent designated by EPA. Injection at a pressure which initiates new fractures or propagates existing fractures in the confining zone adjacent to underground sources of drinking water or causes the movement of injection or formation fluids into an underground source of drinking water is prohibited. Upon discovery of these situations the permittee and EPA will take steps to determine a new maximum injection pressure for the well to prevent this from occurring.

5. <u>Well Treatment, Stimulation and/or Hydraulic Fracturing</u> Notification for any well treatment, stimulation and/or hydraulic fracturing of a well which is covered under this permit shall be provided to the Director at least 30 day prior to the event and may be witnessed by EPA or an agent designated by EPA. In the case of hydraulic fracturing of any well which is covered under this permit, the operator shall also submit a plan as part of the notification outlining the procedure so a review can be conducted to ensure that the operation will not initiate new fractures or propagate existing fractures in the confining zone adjacent to underground sources of drinking water or cause the movement of hydraulic fracturing or formation fluids into an underground source of drinking water as are prohibited by 40 C.F.R. § 146.23(a)(1)

6. <u>Additional Injection Limitation</u> Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited, as is injection into any underground source of drinking water.

7. Annulus Operation The annulus between the tubing and the long-string casing shall be filled with a liquid designed to inhibit corrosion. The annulus pressure shall be maintained at a pressure of approximately 0 psig with an acceptable operating range of -5 psig to +95 psig unless written documentation of conditions observed after operation commences supports a change of these values. The annulus shall be monitored with a gauge or other device designed to indicate both a vacuum (below atmospheric) and positive pressure (above atmospheric). Within 90 days of commencing operation of a well, the permittee shall provide the Director with a written explanation of any justification for operating pressures in a final target range (if different from the initial specified range). The permittee shall notify the Director within 24 hours of discovery that the annulus pressure is outside the final target pressure range. With this notice, the permittee shall provide an explanation to the Director for the change in pressure and steps that have/will be taken to restore annulus pressure to achieve compliance with this Section If the cause of annulus pressure change is not corrected within 48 hours, the permittee shall cease injection unless such order to cease operation is waived by the Director. A written submission shall also be provided to the Director within 5 days of correcting the problem that provides: an explanation for the change in pressure; the daily recorded annular pressure for the 5 days preceding the incident; and measures that were taken to restore annulus pressure to achieve compliance with this Section.

8. Loss of Mechanical Integrity During Operation When the Director determines that an

injection well lacks mechanical integrity pursuant to 40 C.F.R § 146.8, he shall give written notice of his determination to the owner or operator. Unless the Director requires immediate cessation, the owner or operator shall cease injection into the identified well(s) within 48 hours of receipt of the Director's determination. The Director may allow plugging of the well(s) pursuant to the requirements of (40 C.F.R § 146.10) or require the permittee to perform such additional construction, operation, monitoring, reporting and corrective action as necessary to prevent the movement of fluid into or between underground sources of drinking water caused by the lack of mechanical integrity. The owner or operator may resume injection into the well(s) upon written notification from the Director that the owner or operator has demonstrated mechanical integrity pursuant to (40 C.F.R. § 146.8).

The Director may allow the owner or operator of a well which lacks mechanical integrity pursuant to (40 C.F.R. § 146.8) to continue or resume injection, if the owner or operator has made a satisfactory demonstration that there is no movement of fluids into or between underground sources of drinking water.

9. <u>Seismicity</u> It is the Director's sole discretion to determine if injection activities covered under this permit are to be immediately limited or suspended in response to nearby seismicity. Information to be considered by the Director will include, but is not limited to, the magnitude and proximity of a seismic event to a well. Additionally, based on this information the Director may require that an MIT be run to ensure that well integrity was not compromised and underground sources of drinking water are not endangered.

10. <u>Corrective Action</u> The permittee shall shut in an injection well whenever they and/or the Director determines that operation of the well may be causing upward fluid migration through the well bore of any improperly plugged or unplugged well in the area of review and shall take steps to properly plug the offending well(s) or take other steps as may be found acceptable by the director. Any operation of an injection well which may cause upward fluid migration from an improperly plugged or unplugged well that endangers an underground source of drinking water will be considered a violation of this permit. The permitted well will remain shut in until such time as the owner or operator has made a satisfactory demonstration to the Director that there is no upward fluid migration occurring as a result of the injection activities or an appropriate corrective action can be affected. Injection may then commence upon receipt of written approval to resume injection from the Director

· C. Plugging and Abandonment

1. <u>Plugging and Abandonment</u> The permittee shall plug and abandon each permitted well as provided in the approved plugging and abandonment plan in Section 2.Q (EPA Form 7520-14) of the permit application, which is hereby incorporated, and in accordance with the reporting and notification provisions of Part III, Section D(10) of this permit.

D. Financial Responsibility

1 <u>Financial Responsibility</u> The permittee shall maintain financial responsibility for plugging and abandoning each permitted and constructed well and shall maintain resources in at least the amount of \$100,808 per constructed well to close, plug and abandon each well until: (1) the well has been plugged and abandoned in accordance with an approved plugging and abandonment plan and has submitted a plugging and abandonment report pursuant to the requirements of this permit, (2) the well has been converted in compliance with the requirements of 40 C.F.R. § 144.51(n), or (3) the transferor of a permit has received notice from the Director that the owner or operator receiving transfer of the permit has demonstrated financial responsibility for each well. The Director may, based on a reasonable determination that the owner or operator may no longer have resources in at least the amount of \$100,808 per constructed well to close, plug and abandon each well, require the owner or operator to submit, within 60 days of notice of the Director's determination, to submit a new demonstration of financial assurance. Additionally, within one hundred twenty (120) days after the close of each fiscal year, the permittee shall submit updated financial assurance information to the Director if the cost of plugging and abandonment has exceeded the pre-existing estimate.

The permittee shall not substitute an alternative demonstration of financial assurance for that which the Director has approved, unless they have previously submitted evidence of that alternative demonstration to the Director and the Director provides written notification that the alternative demonstration of financial responsibility is acceptable.

2. <u>Insolvency</u> The permittee must notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within ten (10) business days after the commencement of the proceeding. A guarantor of a corporate guarantee must make such a notification if he/she is named as debtor, as required under the terms of the guarantee.

Part III - Records, Monitoring, Reporting, and Notification

A. General

Copies of all reports and notifications required by this permit shall be signed and certified in accordance with the requirements of Part 1, Section D(8) of this permit and shall be submitted to the Director at the following address:

U. S. Environmental Protection Agency - Region VII Attention: Iowa UIC Program Coordinator Water, Wetlands, and Pesticides Division US Environmental Protection Agency Region 7 11201 Renner Boulevard Lenexa, KS 66219

B. Record Retention

The permittee shall retain records of all monitoring information, including the following:

1 Calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, daily monitoring records, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time; and

2. The nature and composition of all injected fluids until three years after the completion of any plugging and abandonment procedures specified under 40 C.F.R. § 144.52(a)(6). The Director may require the owner or operator to deliver the records to the Director at the conclusion of the retention period. The owner or operator shall continue to retain the records after the three year retention period unless they deliver the records to the Regional Administrator or obtains written approval from the Regional Administrator to discard the records.

3. Records of monitoring information shall include:

- a The date, exact place, and the time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- A precise description of both sampling methodology and the handling (custody) of samples;
- d. The date(s) analyses were performed;
- e. The individual(s) who performed the analyses;
- f The analytical techniques or methods used; and
- g The results of such analyses.

IAS1152D0003 PAGE 11 OF 16

4. Monitoring of the nature of injected fluids shall comply with applicable analytical methods cited in Part III, Section C of this permit.

5. All environmental measurements required by the permit, including, but not limited to measurements of pressure, temperature, mechanical integrity (as applicable) and chemical analyses shall be conducted with devices and methods sufficient to be representative of the monitored activity.

C. Monitoring Requirements

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Grab samples shall be used for the laboratory analysis of the physical and chemical characteristics as specified in Part III, Section C(3). Test methods and procedures shall be as specified at 40 C.F.R. § 136.3 or 40 C.F.R. Part 261, Appendix III. When the analytical method for a particular parameter is not specified at either 40 C.F R. § 136.3 or 40 C.F.R. Part 261, Appendix III, the permittee must obtain the Director's approval of the method used. The permittee shall identify the types of tests and methods used to generate all monitoring data. Reports to be generated from monitoring data are specified in Part III, Section D

2. Injection pressure, annulus pressure, flow rate and cumulative volume shall be observed and recorded daily for each well which is actively being used for injection. For each monthly period, the cumulative volume and maximum recorded injection pressure and flow rate shall be subsequently reported as required under Part III, Section D(9) of this permit. The calculated bottomhole pressure shall be determined both prior to and at the end of each active injection period and reported as part of the annual report as required under Part III, Section D(9) of this permit.

3. The nature of the injected fluid shall be analyzed at least once every twelve (12) months and whenever changes are made to the injection fluid. Analyses shall be made a minimum of once each calendar year, with no two sampling events being separated by less than 60 days. For wells that resume injection after having been shut-in for a period of one year or more, the permittee will have thirty (30) days from the date injection resumes for the submission of the injection fluid analysis. This analysis shall include the following:

(a) pH, Total Dissolved Solids, Specific Conductance, Specific Gravity, Alkalinity, Hardness, Barium, Calcium, Total Iron, Magnesium, Manganese Sodium, Bicarbonate, Carbonate, Chloride, Sulfate ; and

(b) provide a list of all chemicals and their composition used for any treatment, stimulation and/or hydraulic fracturing conducted on a permitted well during that sampling year; and a list of any additives used and their chemical composition, including any inhibitors used to prevent scaling, corrosion, or bacterial growth These lists should indicate the brand name of the product and the manufacturer

On the written request of EPA, an injection fluid analysis shall also include any or all of the following additional constituents: Dissolved Carbon Dioxide, Dissolved Oxygen, Hydrogen Sulfide, Total Organic Carbon, Benzene, Toluene, Ethylbenzene and Xylene.

4. A demonstration of mechanical integrity in accordance with 40 C.F.R. § 146.8 shall be

made prior to injection into a new well and again within five (5) years of the last successful demonstration of mechanical integrity for that well, through performance of the tests specified in Part II, Section A(4) of this permit.

D. Reporting and Notification Requirements.

I. <u>Report on Permit Review</u> Within thirty (30) days of receipt of this permit, the permittee shall report to the Director that he or she has read and is personally familiar with all terms and conditions of this permit.

2. <u>Commencing Injection</u> The operator may not commence injection into a new injection well until construction is complete, and:

- a. The permittee has submitted notice of completion of construction to the Director and
- b The Director has inspected or otherwise reviewed the injection well and finds it is in compliance with the conditions of the permit; or
- c The permittee has not received notice from the Director of his or her intent to inspect or otherwise review the injection well within thirteen (13) days of the date of the notice in paragraph (a) of this permit condition, in which case, prior inspection or review is waived and the permittee may commence injection. The Director shall include in his notice a reasonable time period in which they shall inspect the well; and
- d. The permittee has demonstrated to EPA that the proposed injection interval for a new well does not meet the criteria of being an underground source of drinking water or an aquifer exemption has been granted by EPA to allow for injection to occur.
- e The permittee has demonstrated to EPA that the injection well has mechanical integrity in accordance with 40 C.F.R. § 146.8 and the permittee has received written notice from the Director that such demonstration is satisfactory.
- 3. Twenty-four Hour Reporting
 - a. The permittee shall report to the Director any noncompliance which may endanger health or the environment including:
 - (1) Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water.
 - (2) Any noncompliance with a permit condition, or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water, or failure of mechanical integrity test demonstrations.

b. Any information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

4. <u>Anticipated Noncompliance</u> The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

5. <u>Other Noncompliance</u> The permittee shall report all other instances of noncompliance not reported at the time monitoring reports are submitted. The reports shall contain the information listed in Part III, Section D(3) of this permit

6. <u>Planned Changes</u> The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility, or changes in the injection fluids. Within ten (10) days prior to injection, an analysis of new injection fluids shall be submitted to the Director for approval in accordance with Part III, Section C of this permit.

7. <u>Conversion</u> The permittee shall notify the Director thirty (30) days prior to the conversion of a well to an operating status other than an injection well.

8. <u>Temporary Abandonment</u> The permittee shall notify the Director prior to the temporary abandonment of an injection well. For the purpose of this permit, temporary abandonment shall be considered a period of 365 days or more where there is no planned injection activity into a well.

9. <u>Annual Report</u> The permittee shall submit an annual report (EPA Form 7520-11) to the Director summarizing the results of the monitoring required by Part III, Section C of this permit. This report shall include monthly monitoring records of injected fluids including the cumulative volume and maximum recorded injection pressure and flow rate, the calculated bottomhole pressure the results of any mechanical integrity test(s), and any major changes in characteristics or sources of injected fluids. The Annual Report shall be submitted not later than January 31st summarizing the activity of the calendar year ending the previous December 31st.

- 10. Plugging and Abandonment Reports and Notifications
 - a. The permittee shall notify the Director forty-five (45) days before the plugging and abandonment of a well. The Director may allow a shorter notice period upon written request.
 - Revisions to the Plugging and Abandonment Plan must be submitted to the Director no less than forty-five (45) days prior to plugging and abandonment. The Director may allow a shorter notice of revisions period upon written request. The Director must approve the revisions prior to the start of plugging

operations

- Within sixty (60) days after plugging a well, the permittee shall submit a report to the Director which shall consist of either:
 - A statement that the well was plugged in accordance with the plan previously submitted to and approved by the Director; or
 - (2) Where actual plugging differed from the plan previously submitted, an updated version of the plan, on the form supplied by the Director, specifying the different procedures used. Any deviation from a previously approved plan, which may endanger Underground Sources of Drinking Water, is cause for Director to require the operator to replug the well

The report shall be certified as accurate by the person who performed the plugging operation.

11 <u>Compliance Schedules</u> Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than thirty (30) days following each schedule date.

12. <u>Mechanical Integrity Tests</u> The permittee shall notify the Director of their intent to conduct any mechanical integrity test at least thirty (30) days prior to such a demonstration unless waived by the director

13. <u>Cessation of Injection Activity</u> After a cessation of injection into a well for two years the owner or operator shall plug and abandon the well in accordance with the Plugging and Abandonment Plan unless he or she:

- a. Provides notice to the Director and
- b Describes actions or procedures, satisfactory to the Director, that the permittee will take to ensure that the well will not endanger underground sources of drinking water during the period of temporary abandonment. These actions and procedures shall include compliance with the technical requirements applicable to an active injection well unless waived in writing by the Director.

.

Attachment A: Well Operational Information

Well Name	Well Location	Injection Interval (feet bgs)	Maximum Injection Rate (gpm)	Maximum Injection Pressure (psig)
NGPL SWD #1	Long: W -91° 20' 52.48" ; Lat: N 41° 14' 10.82"	2,810 - 3,306	240	570
A. Griffin M-1 SWD	Long [,] W -91° 19' 54 31" ; Lat: N 41° 13' 4.42"	2,806 - 3,056	120	566
TBD	твр	TBD	TBD	TBD

30



Attachment B. Natural Gas Pipeline Company of America, LLC. Area Well Boundary