NEW MEXICO PUBLIC REGULATION COMMISSION
PIPELINE SAFETY BUREAU

OPERATION AND MAINTNANCE PLAN
(NATURAL GAS SYSTEM)

***Operator Name*:**
Records Location:
Address:
City/State/Zip:
Telephone:
Managing Co:
Address:
City/State/Zip:
Telephone:

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PROCEDURES

SCOPE

These procedures are in accordance with the applicable rules and regulations of the New Mexico Public Regulation Commission, Pipeline Safety Bureau, adopted pursuant to the Pipeline Safety Act [70-3-10 to 70-3-20 NMSA 1978, 1995 Repl. Pamphlet].

OBJECTIVE

The purpose of this document is to outline the procedures for operations and maintenance (O&M Plan) necessary for the safe operation of the gas distribution pipeline system and procedures for handling gas emergencies. The effectiveness of these procedures will depend on the knowledge and understanding of the procedures by the appropriate personnel through a continuing training program. Communication and liaison established with public assistance agencies is necessary in creating awareness of mutual assistance in a gas emergency.

REVIEW & UPDATING

Section 192.605(a) This manual for operations, maintenance, and emergencies will be **reviewed** and **updated** each calendar year but at intervals not exceeding 15 months. A written record of the reviews will be maintained. [Refer to Sec. 192.605 (a) in this manual].

SYSTEM DESCRIPTION

The gas distribution system was constructed in_____.

192.619 The Maximum Allowable Operating Pressure (MAOP) is_____ psig.

	Mains		Service Lines	
Type of Pipe	Size (Outside Diameter)	Length	Size (Outside Diameter)	Estimated Average Length
Bare Steel				
Coated Steel				
Plastic (PVC)				
Plastic (PE)				
	TOTAL LENGTH			

192.13(c) GENERAL REQUIREMENTS

The procedures for operation & maintenance contained herein will be followed as stated in accordance with an established schedule, and modified as needed.

192.16 CUSTOMER NOTIFICATION

Each customer shall be notified with-in 90 days after the customer first receives gas at a particular location of the requirements in Attachment 1A.

192.225 WELDING PROCEDURES

(a) Welding must be performed by a qualified welder in accordance with welding procedures qualified under Section 5 of API 1104. The quality of the test welds used to qualify welding procedures shall be determined by destructive testing in accordance with the applicable welding standard(s).
(b) Each welding procedure must be recorded in detail, including the results of the qualifying tests. This record must be retained and followed whenever the procedure is used.

192.227 QUALIFICATION OF WELDERS

(a**)** Except as provided in paragraph (b) of this section, each welder must be qualified in accordance with section 6 of API 1104 (incorporated by reference, see § 192.7) or section IX of the ASME Boiler and Pressure Vessel Code (incorporated by reference, see § 192.7). However, a welder qualified under an earlier edition than listed in § 192.7 of this part may weld but may not re-qualify under that earlier edition.
(b) A welder may qualify to perform welding on pipe to be operated at a pressure that produces a hoop stress of less than 20 percent of SMYS by performing an acceptable test weld, for the process to be used, under the test set forth in section I of Appendix C of this part. Each welder who is to make a welded service line connection to a main must also first perform an acceptable test weld under section II of Appendix C of this part as a requirement of the qualifying test.

192.283 QUALIFYING JOINING PROCEDURES

Installation of plastic pipe will be done using pipe manufacturer's procedures or other approved and qualified joining procedures, and the procedures will be kept in file.

Plastic pipe will be installed in a manner that ensures protection against damage to the pipe during installation. Soil will be free of rock or debris that could damage the pipe.

Plastic pipe piping must have an electrically conductive tracer wire or other approved means of locating the pipe. To facilitate location of buried plastic pipe, where plastic pipe is installed or replaced the following location methods shall be used.

- A tracer wire shall be installed adjacent to the piping. Tracer wire may not be wrapped around the pipe and must not contact the pipe. Tracer wire or other metallic elements installed for pipe locating purposes must be resistant to corrosion damage, either by use of coated copper wire or by other means.
- Continuous gas pipeline warning tape shall be placed above piping installed by open trenching, and separated from the piping by a minimum of 12 inches.

192.285 QUALIFYING PERSONS

The person(s) joining plastic pipe must be qualified under the applicable joining procedure for the pipe used. If a person has not joined pipe in a specific procedure for 12 months, the person will re-qualify in that procedure prior to joining.

192.355 METERS AND REGULATORS

The pressure regulator will be located where it can properly vent to the atmosphere and away from any opening into a building, and out from under any skirted mobile home. The regulator vent shall be protected from rain or insect penetration.

192.363 SERVICE VALVE REQUIREMENTS

(a) Each service line must have a service-line valve that meets the applicable requirements of Subparts B and D of this part.
Materials for pipe and components must be:

- Able to maintain the structural integrity of the pipeline under temperature and other environmental conditions that may be anticipated; the valve must have a maximum service pressure rating for temperature that equal or exceed the maximum service temperature.
- Each valve must be able to meet the anticipated operating conditions.
- Chemically compatible with any gas that is transported and with any other material in the pipeline with which they are in contact; and,
- Qualified in accordance with the applicable requirements of this subpart.

A valve incorporated in a meter bar, that allows the meter to be bypassed, may not be used as a service-line valve.

(a) A soft seat service line valve may not be used if its ability to control the flow of gas could be adversely affected by exposure to anticipated heat.
(b) Each service-line valve on a high-pressure service line, installed aboveground or in an area where the blowing of gas would be hazardous, must be designed and constructed to minimize the possibility of the removal of the core of the valve with other than specialized tools.

192.365 LOCATION OF VALVES

When a building or home is set up and gas service is connected, there shall be a service line valve in a readily accessible location located outside the building.

192.381 EXCESS FLOW VALVE

Excess flow valves to be used on single residence service lines that operate continuously throughout the year at a pressure not less than 10 p.s.i. (69 kPa) gage must be manufactured and tested by the manufacturer according to an industry specification, or the manufacturer's written specification, to ensure that each valve will:

(1) Function properly up to the maximum operating pressure at which the valve is rated;
(2) Function properly at all temperatures reasonably expected in the operating environment of the service line;
(3) At 10 p.s.i. (69 kPa) gage:

(i) Close at, or not more than 50 percent above, the rated closure flow rate specified by the manufacturer; and
(ii) Upon closure, reduce gas flow-

(a) For an excess flow valve designed to allow pressure to equalize across the valve, to no more than 5 percent of the manufacturer's specified closure flow rate, up to a maximum of 20 cubic feet per hour (0.57 cubic meters per hour); or
(b) For an excess flow valve designed to prevent equalization of pressure across the valve, to no more than 0.4 cubic feet per hour (.01 cubic meters per hour); and

(4) Not close when the pressure is less than the manufacturer's minimum specified operating pressure and the flow rate is below the manufacturer's minimum specified closure flow rate.

192.453 GENERAL REQUIREMENTS

The corrosion control procedures required by §192.605(b)(2), including those for the design, installation, operation, and maintenance of cathodic protection systems, must be carried out by, or under the direction of, a person qualified in pipeline corrosion control methods.

192.455 BURIED PIPELINES

Any steel pipe that is installed will be externally coated. All steel pipe installed will be cathodically protected within one year of installation. Design and installation of cathodic protection will be performed a by qualified person in accordance with Appendix A of this document.

192.459 EXAMINATION OF BURIED PIPELINE

Whenever any portion of a buried pipeline is exposed, the exposed portion will be examined for evidence of external corrosion if the pipe is bare, or if the coating is deteriorated. If external corrosion requiring remedial action under 192.483 through 192.489 is found, investigate circumferentially and longitudinally beyond the exposed portion (by visual examination, indirect method, or both) to determine whether additional corrosion requiring remedial action exists in the vicinity of the exposed portion. A record will be kept and maintained on the condition of the pipe and/or coating that was examined.

192.465(a) CORROSION CONTROL MONITORING

After installation the cathodic protection system will be tested each calendar year at intervals not exceeding 15 months. Isolated pipe segments or separately protected service lines, will be surveyed on a sampling basis. At least 10%, distributed over the entire system, will be tested each calendar year so that 100% of the isolated lines are tested over a ten-year period.

NEGATIVE -0.85 VOLT CRITERIA:

A negative (cathodic) voltage of at least -0.85 volt, with reference to a saturated copper-copper sulfate half cell. Determination of this voltage must be made with the protective current applied, and in accordance with Sections II and IV of 49 CFR, Appendix D.

100 MILLIVOLTS SHIFT:

A minimum negative (cathodic) polarization voltage shift of 100 millivolts. This polarization voltage shift must be determined in accordance with sections III and IV of this appendix.

The polarization voltage shift must be determined by interrupting the protective current and measuring the polarization decay. When the current is initially interrupted, an immediate voltage shift occurs. The voltage reading after the immediate shift must be used as the base reading from which to measure polarization decay. This polarization voltage shift must be determined in accordance with a minimum negative (cathodic) polarization voltage shift of 100 millivolts.

192.465(b) RECTIFIER INSPECTION

If a rectifier or other impressed current power source is used it must be inspected six times each calendar year, but with intervals not exceeding 2 1/2 months, to insure that it is operating.

192.465(d) PROMPT REMEDIAL ACTION

Prompt remedial action will be taken to correct any deficiencies found during cathodic protection monitoring or pipe inspection. When deficiencies are indicated in the cathodic protection monitoring further testing and evaluation will be conducted to determine the cause, including examination of dielectric insulators, short detection survey, and consideration of anode life. New anodes will be installed as necessary. Corrective measures will begin within 90 days of discovery of the deficiency in cathodic protection and will be completed within a monitoring period.

192.467(a) ELECTRICAL ISOLATION

Each buried pipeline must be electrically isolated from other underground metallic structures, unless the pipeline and the other structures are electrically interconnected and cathodically protected as a single unit.

(b) One or more insulating devices must be installed where electrical isolation of a portion of a pipeline is necessary to facilitate the application of corrosion control.

(d) Each steel gas service riser must have dielectric fittings installed for electrical isolation of the underground piping. Except for anodeless risers, each cathodically protected isolated gas service riser will be visually checked to ensure that no metallic object is in contact with the steel pipe or with the dielectric (insulating) union, and that no wire, chain or other device of any type is tied to the riser that can short out the cathodic protection system.

192.475 INTERNAL EXAMINATION

Whenever any pipe is cut out, it will be examined for internal corrosion and the conditions found will be documented. If internal corrosion is found-

(1) The adjacent pipe must be investigated to determine the extent of internal corrosion:

(2) Replacement must be made to the extent required by the applicable paragraphs of §§192.485, 192.487, or 192,489; and,

(3) Steps must be taken to minimize the internal corrosion.

192.479(a) ATMOSPHERIC CONTROL

The operator must clean and coat each pipeline or portion of pipeline that is exposed to the atmosphere, except pipelines under paragraph (c) of this section.
(b) Coating material must be suitable for the prevention of atmospheric corrosion.
(c) Except portions of pipelines in soil-to-air interfaces, we need not protect from atmospheric corrosion any pipeline for which we can demonstrate by test, investigation, or experience appropriate to the environment of the pipeline that corrosion will-
(1) Only be a light surface oxide; or
(2) Not affect the safe operation of the pipeline before the next scheduled inspection. If found, we will take remedial measures and clean and either coat or jacket the areas of atmospheric corrosion with a material suitable for the prevention of atmospheric corrosion.

192.481 ATMOSPHERIC MONITORING

Steel Pipe Exposed to the Atmosphere: At least once every 3 years we will check for atmospheric corrosion. During inspections attention must give particularly to pipe at soil-to-air interfaces, under thermal insulation, under disbonded coatings, and at pipe supports.

If atmospheric corrosion is found, the condition will be corrected by cleaning the affected area and painting it with exterior paint that is made to protect metal from atmospheric corrosion or coated with an approved tape. If serious/extensive atmospheric corrosion is found, the condition will be evaluated and a determination made whether replacement is necessary.

192.483 REMEDIAL MEASURES

(a) Each segment of metallic pipe that replaces pipe removed from a buried pipeline because of external corrosion must have a properly prepared surface and must be provided with an external protective coating that meets the requirements of Sec. 192.461.
(b) Each segment of metallic pipe that replaces pipe removed from a buried pipeline because of external corrosion must be cathodically protected in accordance with this subpart.

192.487 REMEDIAL MEASURES

If below ground corrosion or pitting is found, the pipe segment will be evaluated for replacement. Determination of remaining pipe wall and continued service of the pipe will be made on the basis of system MAOP. If the piperemains in service and is coated pipe, the metal surface will be properly cleaned, primed and wrapped with pipe tape.

192.491 CORROSION RECORDS

(a) We must maintain records or maps to show the location of cathodically protected piping, cathodic protection facilities, galvanic anodes, and neighboring structures bonded to the cathodic protection system. Records or maps showing a stated number of anodes, installed in a stated manner or spacing, need not show specific distances to each buried anode.

(b) Each record or map required by paragraph (a) of this section must be retained for as long as the pipeline remains in service.

(c) We must maintain a record of each test, survey, or inspection required by 49 CFR in sufficient detail to demonstrate the adequacy of corrosion control measures or that a corrosive condition does not exist. These records must be retained for at least 5 years, except that records related to §§192.465(a) and (e) and 192.475(b) must be retained for as long as the pipeline remains in service.

192.509 STEEL MAIN TEST REQUIREMENTS

Each segment of a steel pipeline that is to be operated below 100 psi (680 kPa) gage must be leak tested in accordance with the following:

The test procedure used must ensure discovery of all potentially hazardous leaks in the segment being tested.
(a) Each main that is to be operated at less than 1 psi (6.9 kPa) gage must be tested to at least 10 psi (69 kPa) gage and each main to be operated at or above 1 psig must be tested to at least 90 psi (621 kPa) gage.

192.511 STEEL SERVICE TEST REQUIREMENTS

(a) Each segment of a steel service line must be leak tested in accordance with this section before being placed in service. If feasible, the service-line connection to the main must be included in the test; if not feasible, it must be given a leakage test at the operating pressure when placed in service.

(b) Each segment of a service line (other than plastic) intended to be operated at a pressure of at least 1 p.s.i. (6.9 kPa) gage but not more than 40 p.s.i. (276 kPa) gage must be given a leak test at a pressure of not less than 50 p.s.i. (345 kPa) gage

(c) Each segment of a service line (other than plastic) intended to be operated at pressures of more than 40 p.s.i. (276 kPa) gage must be tested to at least 90 p.s.i. (621 kPa) gage.

192.513 TEST REQUIREMENTS PLASTIC

(a) Each segment of a plastic pipeline must be tested in accordance with this section.

(b) The test procedure must insure discovery of all potentially hazardous leaks in the segment being tested.
(c) The test pressure must be at least 150 percent of the maximum operating pressure or 50 p.s.i. (345 kPa) gage, whichever is greater. However, the maximum test pressure may not be more than three times the pressure determined under §192.121, at a temperature not less than the pipe temperature during the test.

(d) During the test, the temperature of thermoplastic material may not be more than 100(F (38(C), or the temperature at which the material's long-term hydrostatic strength has been determined under the listed specification, whichever is greater.

Repairs by replacement shall be made with material and methods approved for gas piping. All repairs will be performed by qualified personnel.

On any new or maintenance repair work, components such as regulators, connectors, and valves, shall be examined to ensure that they are of listed or approved specifications and pressure ratings for compliance with the current code.

192.603 GENERAL RECORD PROVISIONS

Records will be kept on file in sufficient detail to demonstrate compliance with all functions covered by these procedures. Pipeline system mapping will be part of the records and the mapping will be kept up to date.

192.605(a) MANUAL REVIEW

This procedural manual will be reviewed by at least once each calendar year, at intervals not exceeding 15 months, to ensure that the manual is kept up to date. Employees will receive training annually on all existing procedures and on any revisions made to the procedures. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted. Records of annual reviews and of employee training will be prepared and retained in file.

192.605(b) (3)

It is necessary that maintenance personnel become familiar with the gas system and related procedures as described in this document, and to know the location of the buried gas pipelines as depicted on system maps.

System map(s), records on system operating history including operating pressure, leak history, leak repairs, and any available construction records will be kept accessible for operating personnel at _____ . The above records will be made available to persons requiring such information in the performance of job functions in the operation, maintenance or emergency response involving the gas system .

192.605(b) (4)

Whenever there is an accident involving the release of gas from a pipeline, it must be determined as soon as possible if the there are any injuries requiring hospitalization, deaths, or property damage of $5,000.00 or more, including the cost of gas lost. On-site observations will be made and persons at the scene and witnesses will be interviewed to determine if there are any injuries or deaths and to obtain relevant information. If injuries resulted from the accident, determine if injured persons were hospitalized.

An estimate of property damage will be made using cost obtained from insurance adjuster, property owner, tenants, fire department, or consultant. Information on failed pipe or components will be obtained from the pipe/equipment supplier or a professional consultant.

Gathering Data Needed For Reporting Incidents - Means (sources) by which information is to be obtained for telephonic reporting.
Sources of Information:

A. Person(s) reporting an incident to you, and available witnesses.
B. Employee(s) who have knowledge of the facilities involved in the incident.
C. Internal records, maps, etc, that describe the facilities and maintenance history.
D. On-site inspection, preliminary findings.
E. Fire/Police determinations.
F. Determination of any outside activity prior to the incident such as excavation that could be a contributing factor.

A record will be prepared and retained in file of information obtained for reporting incidents.

192.605(b) (8) REVIEW OF PERSONNEL

Periodically reviewing the work done by operator personnel to determine the effectiveness and adequacy of the procedures and modifying the procedures when differences are found in the procedures and the manner that the work needs to be done such as when there may be a change in materials or equipment. Work performed in all areas covered by Part 192 will be reviewed through records submitted by field personnel and by on-site observation of work preparation, progress, and completion. The work reviews will be done with the applicable procedures in mind and evaluated on that basis. Any deficiencies in the manner any work is being done will be discussed and training and/or modification of the procedures will be done as appropriate.

192.605(b) (9) EXCAVATED TRENCHES

Trenches deeper than_____feet excavated for work on gas pipelines where there is or could be a release of gas, and where gas vapors may accumulate in the trench, a means of ventilation will be provided for persons having to enter the trench to work. Emergency rescue equipment including breathing apparatus, rescue harness and line, will be provided by the owner/operator or contractor/consultant when needed at the excavation site. Employees will be trained in the proper use of this equipment and instructed not to enter a trench without a second person as backup. All possible ignition sources will be eliminated and fire extinguisher kept on site at all times.

192.613 CONTINUING SURVEILLANCE

Aboveground facilities will be observed periodically in the course of daily activities in the area of gas pipelines and each time work is being done in the gas system for unusual conditions that could affect the operation of the gas distribution system. A record will be made of any unusual conditions found and of corrective action taken.

Records for work performed on the system will be reviewed by a supervisor or designated person to check for any pattern that could be developing into an abnormal condition such as an unusual number of leaks on a line, cathodic protection deficiencies, and conditions over and in close proximity to the gas lines such as third party excavations.

192.614 (C) (6) DAMAGE PREVENTION

Provide as follows for inspection of pipelines that an operator has reason to believe could be damaged by excavation activities:
(i) The inspection must be done as frequently as necessary during and after the activities to verify the integrity of the pipeline; and
(ii) In the case of blasting, any inspection must include leakage surveys.

192.625(a) ODORIZATION OF GAS

The combustible gas in the distribution system must contain a natural odorant or be odorized so that at a concentration in air of one-fifth of the lower explosive limit, the gas is readily detectable by a person with a normal sense of smell.

192.625(f)

Odorant sniff tests will be conducted periodically or whenever work is done involving a planned release of gas. Sniff tests will be done as part of response to customer odor complaints. Appliance pilot lights or other

accessible gas source will be used for testing to determine if the odor level in the gas is readily detectable. Customers may participate in sniff tests by instruction of the person doing the test. Additional tests should be taken with different persons if the initial tests indicate inadequate odorization. The gas supplier will be notified promptly if gas odor is believed to be barely detectable or not detectable. A record will be made for each test.
We will comply with this requirement by–

(1) Receiving written verification from their gas source that the gas has the proper concentration of odorant; **and**
(2) Conducting periodic "sniff" tests at the extremities of the system to confirm that the gas contains odorant.

192.627 TAPPING PIPELINES UNDER PRESSURE

Any pipeline taps made under pressure will be done by qualified contractor personnel. Self-tapping tees will be used for service lines.

192.629 PURGING OF PIPELINES

Situations when a pipeline would need to be purged include when piping is placed into service, restoration of service following a gas outage or disconnection for repairs, or when a section of pipeline is being taken out of service.

(a) When a pipeline is being purged of air by use of gas, the gas must be released into one end of the line in a moderately rapid and continuous flow. If gas cannot be supplied in sufficient quantity to prevent formation of a hazardous mixture of gas and air, a slug of inert gas must be released into the line before the gas.

(b) When a pipeline is being purged of gas by use of air, the air must be released into one end of the line in a moderately rapid and continuous flow. If air cannot be supplied in sufficient quantity to prevent formation of a hazardous mixture of gas and air, a slug of inert gas must be released into the line before the air.

192.703 UNSAFE PIPELINES

(a) Each segment of pipeline that becomes unsafe must be replaced, repaired, or removed from service.
(b) Hazardous leaks must be repaired promptly**.**

192.723 LEAKAGE SURVEYS

Unusual conditions of dry vegetation over existing gas lines or other indicators of possible gas leakage shall be promptly investigated.

192.723(b) (2) LEAKAGE SURVEY FREQUENCY

A electronic gas detector type leak survey will be conducted on an established schedule as follows: Outside business districts as frequently as necessary, but at least once every 5 calendar years at intervals not exceeding 63 months. The need for more frequent leak surveys will be determined by the system conditions and leak survey results. A combustible gas indicator (CGI) will be used to pin point underground leaks.
A record will be kept that clearly describes pipelines that are surveyed.

PIPELINES TO BE SURVEYED WILL BE TRACED AND MARKED BEFORE AND OR ACCURATE UP TO DATE MAPS USED FOR TRACKING AND SURVEYING THE PIPELINES TO ENSURE THE LEAK SURVEY PATH IS OVER THE GAS LINES.

THE SUPERVISOR / MANAGER WILL ENSURE PROPER TECHNIQUE IN THE USE OF EACH TYPE OF LEAK DETECTION EQUIPMENT AND IN THE METHOD OF CONDUCTING LEAK SURVEYS. ACCURATE AND COMPLETE RECORDS WILL BE KEPT OF ALL LINES SURVEYED, LEAKS DETECTED AND THEIR CLASSIFICATION.

192.725 TEST REQUIREMENTS FOR REINSTATING SERVICE LINES

(a) Except as provided in paragraph (b) of this section, each disconnected service line must be tested in the same manner as a new service line, before being reinstated.

(b) Each service line temporarily disconnected from the main must be tested from the point of disconnection to the service line valve in the same manner as a new service line, before reconnecting. However, if provisions are made to maintain continuous service, such as by installation of a bypass, any part of the original service line used to maintain continuous service need not be tested.

192.727 ABANDONMENT OR DEACTIVATION OF FACILITIES

Whenever service to a customer is discontinued, one of the following must be complied with:

The valve that is closed to prevent the flow of gas to the customer must be provided with a locking device or other means designed to prevent the opening of the valve by persons other than those authorized.

(1) A mechanical device or fitting that will prevent the flow of gas must be installed in the service line or in the meter assembly.

(2) The customer's piping must be physically disconnected from the gas supply and the open pipe ends sealed.

192.747 VALVE MAINTENANCE

(a) Any distribution main valves designated as key valves (emergency valves) will be checked for leaks, lubricated, and partially operated on an established schedule each calendar year at intervals not exceeding fifteen (15) months.

(b) We will take prompt remedial action to correct any valve found inoperable, or designate an alternative valve if available.

192.751 PREVENTION OF ACCIDENTAL IGNITION

When there is the possibility of a release of gas when making leak repairs, new connections or reconnections, each potential source of ignition must be removed from the area. No gas or electric welding or cutting will be done on pipe containing a combustible mixture of gas and air. Precautions will be taken to control static electricity when preparing to work on PE plastic lines. Use of soapy wet cotton rags or burlap sacks will be used to ground the pipe on both sides where a section is being cut out. Tools and saws being used will be grounded.

NOTE: For any work to be performed in system maintenance by a consultant, the consultant will be directed to perform this work in accordance with the procedures specified herein, and the methods specified in Attachment A of this document for cathodic protection.

18 NMAC 60.2.21 FILING OF PROCEDURAL MANUAL

A copy of this document shall be filed with the Pipeline Safety Bureau. In addition, each change to the procedural manual must be filed with the Pipeline Safety Bureau within twenty (20) days after the change is made.

18 NMAC 60.2.12 CLASSIFICATION & REPAIR OF LEAKS

All leaks upon discovery must be classified into one of the following three general categories:

Hazardous Leak, Grade I or C: A leak which due to its location and/or magnitude constitutes an immediate hazard to persons or property.

Potentially Hazardous Leak, Grade II or B: A leak that does not constitute an immediate hazard, but may become hazardous if not repaired within a reasonable time period.

Non-Hazardous Leak, Grade III or A: A leak which does not constitute a hazard and shows no indication of becoming hazardous before routine scheduled repair could be accomplished.

PRIORITY OF REPAIRS

(Note: All leaks found shall be repaired promptly.)

GRADE 1:
Grade 1 leaks shall be repaired, eliminated or reclassified before leaving the site. You must remain on the scene until you are relieved by an authorized person or a person qualified tomake the repair or until the associated hazard has been eliminated. While on the scene, you must caution the public as needed and evacuate the area if required.

GRADE 2:
Grade 2 leaks shall be repaired within six months, but no later than seven months from the date the leak was reported. Grade 2 leaks shall be re-evaluated at least once every six months until repaired.

GRADE 3:
Grade 3 leaks shall be re-evaluated during the next scheduled leak survey or within fifteen months of the day reported, whichever occurs first until the leak is repaired. Re-evaluation is required each calendar year, not to exceed fifteen months, until the leak is repaired.

191.5 NOTIFICATION OF INCIDENT

In accordance with Section 191.5 of 49 CFR Part 191, we will notify the New Mexico Public Regulation Commission (NMPRC), Pipeline

Safety Bureau, of a natural gas * *incident* occurring on the pipeline system, and the National Response Center, Washington, D.C.

(a) Notice to NMPRC - At the earliest practicable moment following discovery, notice shall be given as specified by Paragraph (b) of each incident defined as:

*(1) An event that involves a release of gas from a pipeline or of liquefied natural gas **and**

A death, or personal injury necessitating in-patient hospitalization; or
Estimated property damage, excluding cost of gas lost, of the operator or others, or both, (Federal DOT/RSPA) of $50,000, (NMPRC) $5,000 or more,

*(2) An event that is significant, in the judgment of the operator, even though it did not meet the criteria of paragraphs (1) or (2).

Giving notice at the earliest practicable moment means:

Telephonic notice must be given within two hours following ***discovery*** of the leak, leak safe and for this reason the person who would ordinarily give notice is unable to do so, then notice must be given within one hour after the area has been rendered safe.

*"*DISCOVERY*" - Means learning of an incident where a leak in the operator's facilities is a possible contributing factor. It does not mean that the operator may delay giving notice until the precise location, cause, and existence of the leak is determined. This is because such a delay could result in destruction of evidence which would hinder investigation by the NMPRC.

Telephonic notice shall include the following information:

1. Geographic location of the incident;
2. The time of the incident;
3. The fatalities and personal injuries, if any; and
4. All other significant facts known that is relevant to the cause of the leak or extent of damage.

Telephonic notification as described above shall be given to one of the staff members in the Pipeline Safety Department as follows: **EMERGENCY/INCIDENT PHONE (505) 490-2375**

(c) Federal DOT/RSPA - The Department of Transportation, National Response Center, will be notified by telephone at (800) 424-8802 within two hours.

EMERGENCY PLAN

192.615(a)

The purpose of this emergency plan is to establish written procedures to minimize the hazard resulting from gas leaks or a gas pipeline emergency.
Receiving, identifying, and classifying notices of events which require immediate response. A map or blueprint of the system will be made available to maintenance personnel and they will be instructed to familiarize themselves with the locations of the valves that may be used in an emergency.

EMERGENCY SITUATIONS - In case of a major leak, broken gas line, fire, or explosion, and upon learning of the incident personnel are instructed to call:

Fire Department: _____ Gas Supplier: _____
Police: _____ Other: _____
Ambulance: _____

Maintenance personnel will follow the procedures for prompt and effective response to each of the following type of emergencies. The following general procedures apply. More specific actions in emergency response may be needed and should be implemented as deemed appropriate, including procedures for the use equipment under various situations.

Investigation of gas leaks:

I. Gas leaks inside

(a) Faint odor or low (non-flammable) concentration of gas.

1. Make effort to determine source of leak on gas appliances.
2. Caution building occupants.
   Ventilate building; open windows, etc.

(b) Strong odor or high concentration of gas (flammable range)

1. Evacuate building; call supervisor for assistance.
2. Eliminate ignition sources; turn off gas meter.
3. Evacuate home or building.
4. Alert additional personnel with emergency equipment.
5. Make an effort to determine source of leak.

If a strong odor of gas is detected inside the home, customers are SPECIFICALLY INSTRUCTED:

DO NOT turn on or off any electrical switches.
DO NOT use matches, lighters, or any gas or electrical appliances.
DO NOT use any telephones. Get neighbors assistance to report the emergency. **DO** leave the home immediately until further notice.

II. Gas leaks outside

(a) Faint odor or low concentration of gas at house or building foundation. 1. Make an effort to determine source of leak using pinpointing technique.

(b) Strong odor or high concentration of gas shown on CGI at house foundation. 1. Evacuate building, turn off gas meter.

2. Alert additional personnel with emergency equipment.
3. Notify the supervisor and fire department.
4. Turn off the gas meter.
5. Barricade and keep people away from the area. (c) Broken gas line

1. Clear all unauthorized persons from the area; eliminate any ignition sources; turn off the gas meters.

2. Alert additional personnel with emergency equipment.
3. Notify the supervisor, gas supplier and fire department.
4. Alert and caution all residents.
5. Barricade and guard the area.

III. Explosion or Fire involving the gas lines or located near the gas lines.

1. Turn off the gas meter.
2. Alert additional personnel with emergency equipment.
3. Notify the Gas Company and fire department.
4. Alert and caution all residents.

5. Barricade and guard the area.

IV. Natural Disaster

The appropriate procedures listed above will be followed for natural disasters that cause gas leakage, fire or explosion.

NMAC 18.60.2.8 (C) (6)

References in 49 CFR 192.605(b), 192.615(a) (7) to "procedures for making safe any actual or potential hazard to life or property" shall include specific procedures for emergency response to excavation damage near buildings that adequately address the possibility of multiple leaks and gas migration into nearby buildings.

192.615(a) (4) EMERGENCY NOTIFICATION LIST, (MANAGER AND/OR MAINTNANCE PERSONNEL)

CONTACT PERSON	DAY TELEPHONE NUMBER	NIGHT TELEPHONE NUMBER

Persons, emergency units and sources available for assistance in an emergency (Names, telephone numbers):

_____
_____
_____
_____

Maintenance personnel will be instructed on the use and location of the following emergency equipment:

_____
_____
_____

192.615(a) (5)

The PRIORITY will be to take action necessary to protect people first and to protect them from any injury in handling the emergency then to protect property.

192.615(a) (6)

Emergency isolation valves will be used as necessary to shutdown or reduce pressure to a section of the system where fire or explosion is involved to minimize hazards to life and property.

192.615(a) (7)

All hazards or potential hazards to life or property will be made safe.

192.615(a) (9)

Shutdown & Outage Procedure: When the gas system or part is shutdown _____ *(person/title)* will follow specific procedures and take the appropriate action as necessary to have gas service resumed as quickly as possible. Guide material is part of this document.

Upon shutdown and interruption of service, all gas outlets at the meters or connection to customers piping, which are affected by the interruption shall be closed and tagged, and customers notified.

The piping system will be thoroughly examined to isolate the problem area. Leak detection survey will be conducted to determine the location and cause of leakage. List of available assistance will be followed if outside sources are necessary to make repairs or to resume service as quickly as possible. [Consider pre-arranged mutual aid].

As soon as possible after the emergency, action will be taken to investigate the cause of any accident or failure according to §192.617.

192.615(b) (1)

A copy of the latest edition of the emergency plan will be provided to supervisors responsible for emergency action.

192.615(b) (2)

Training will be provided to operating personnel on the requirements of the emergency plan and the effectiveness of the training will be documented. After each emergency, employees' activities will be reviewed to determine if the procedures were effectively followed.

192.616(j)

We will provide our customers a public awareness message twice annually that includes:
(1) A description of the purpose and reliability of the pipeline;
(2) An overview of the hazards of the pipeline and prevention measures used;
(3) Information about damage prevention;
(4) How to recognize and respond to a leak; and
(5) How to get additional information.

Written materials will describe the characteristics of natural gas and telephone numbers to call in an emergency. The information will be posted at _____ and will be provided directly to customers by _____ twice annually.

192.616(g)

The program must be conducted in English and in other languages commonly understood by a significant number and concentration of the non-English speaking population.

Whenever there is emergency response that involves natural gas, a log of the events pertaining to the incident will be kept by _____ . Time will be taken following the emergency for evaluation of emergency action to determine if emergency procedures were effective or may need to be revised.

192.617

In the event of an accident or major failure, an investigation will be conducted to determine the cause.

Procedures:

1. Secure site and preserve unmolested, in place, any failed pipe or components.
2. Document any observations, photographs, conditions, and information from any witnesses at the scene.
3. Cooperate and assist in the investigation conducted by State and Federal pipeline safety inspectors.
4. Upon removal from the site, maintain chain of custody of any pipe or components that may have contributed to the cause of the incident.
5. Retain professional investigation agents and test laboratory if necessary.

Reference Materials can be added to this document to provide more detail and guidance to the written procedures, including forms to be used for record keeping.

ATTACHMENT A

Corrosion control & cathodic protection - The following is a guideline for corrosion control:

I. Cathodic Protection Monitoring

a. Cathodic protection criterion being applied is
b. If potentials taken do not meet selected criteria:
    1. Determine the cause for inadequate cathodic protection.
    2. Recommend corrective action.
    3. Pipe-to-soil potentials to verify cathodic protection after repairs are made. d.

Record of pipe-to-soil potentials before and after corrective action is taken.

II. Survey of Steel Gas Lines

a. Pipe-to-soil potentials, volts.
b. Condition of the pipe coating by physical inspection.
c. Current requirements determined by test or calculation.
d. Underground contacts and shorts found and eliminated.
e. Location and condition of dielectric unions/insulators.
f. Description of pipe (type, size, total footage).

III. System Design

a. Selected criteria for cathodic protection.
b. Calculations for size & number of galvanic anodes
    (Based on survey data specified in II above)

IV. Installation Methods Specified

a. Electrical isolation by use of dielectric fittings or valves at each riser.
b. Electrical isolation of gas main.
c. Description of anode placement and installation; depth & spacing of new anodes in relation to the gas line.
d. Map of system shows steel pipe being protected and location of galvanic anodes.

ATTACHMENT 1A

NOTICE

To: All Customers

From: _____

Subject: Maintenance of Customer-Owned Gas Piping

By Congressional mandate through the Natural Gas Pipeline Safety Act, all gas suppliers are required to notify their customers that the portion of the gas line from the meter to the building/home is not maintained by the supplier for the purpose of preventing corrosion, potential leakage, or for detecting and repairing leaks.

In accordance with this mandate (Docket PS-135, Amendment 192-3) the following is provided:

(1) The buried gas piping from the meter/regulator to your home/building is customer-owned piping and is not maintained by

(2) Buried gas piping should be:
- (a) Periodically inspected for leakage;
- (b) Periodically inspected for corrosion if the piping is metallic; and
- (c) Repaired if any unsafe condition is found.

(3) Before excavating near buried gas piping, the piping should be located, marked, and excavated by hand.

(4) We, or the local gas distribution company can provide you with information on plumbers and contractors that can assist in performing the inspections described in (2) above, making leak repairs, and in locating the buried gas lines prior to the start of any planned excavation.

ATTACHMENT B: THE USE OF THIS FORM DOES NOT NECESSARELY CONSTITUTE A RECORD. IT IS TO BE USED AS A REFERRENCE AS TO DUE DATES.

Year 20___

Gas Distribution System
Maintenance & Inspection Schedule

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
192.723 GAS LEAK SURVEY (Once every five years maximum)												
192.465 MONITOR CATHODIC PROTECTION (Annually, not to exceed 15 months)												
192.465(b) CHECK RECTIFIER (Every $2^1/_2$ months, not less than 6 times a year)												
192.747 VALVE MAINTENANCE Distribution main valves checked & serviced (Annually not to exceed 15 months)												
192.605(a) REVIEW PROCEDURAL MANUAL (Annually, not to exceed 15 months)												
192.613 CONTINUING SURVEILLANCE – Unusual operating conditions, noted by date												
192.481 ATMOSPHERIC CORROSION MONITORING At least once every three years												
192.616 CONTINUING PUBLIC EDUCATION												
192.625 ODOR SNIFF TEST (Periodically)												
192.625 ODOR WRITTEN VERIFICATION (Annually)												

Records must be prepared and retained on file.