NORGASCO, INC. 4341 B Street, Suite 306 • Anchorage, Alaska 99503 • (907) 562-5520 FAX 562-5530

September 24, 2009

Mr. Dennis Hinnah
Deputy Director, Western Region,
Office of Pipeline Safety
222 W 7th Ave. Suite 200
P.O. Box 37
Anchorage, AK. 99513

RE: **CPF 5-2009-0021**

Dear Mr. Hinnah,

On September 11, Norgasco received Office of Pipeline Safety's response letter dated September 9th, for the above referenced inspection. Norgasco agrees our OQ program prior to our D.O.T. inspection earlier this year was sub par and was missing items from the most recent published D.O.T. requirements.

Since the inspection from earlier this year, Norgasco has implemented the Iowa Association of municipal utilities OQ format.

Please find the enclosed updated Norgasco OQ program which addresses items, a-g, of probable violations of the above referenced inspection, and items 1-9 of the proposed compliance order.

Item 11 of the proposed compliance order refers to cost associated with the changes and improvements in our OQ program. Norgasco is a very small utility with only seven employees. We have just 50 industrial customers and only two operators on our system at any one time. With our two lead operators and myself, we have over 30 years experience operating our system. We have an advantage of staying updated with OQ items during the long winter months in Deadhorse, but tracking the associated costs would be skewed compared to other utilities. In response to item 1, it costs $10,000.00 to adapt to the new format. Item 2 it costs $15,000.00 (annually) to add and update additional changes.

If you have any questions in regard to these items, please contact me at (907) 562-5520 in Anchorage. Thank you.

Sincerely,

Norgasco, Inc.

encl.: Norgasco OQ Manual

LeRoy H Frank
Vice President of Operations

Norgasco Inc.

Natural Gas Pipeline Operator Qualification Program

Instituted
April 2001

PREFACE

In an effort to promote employee and gas system safety, the creation of this important operator qualification program was developed to assist operators in fulfilling the regulations set by the Office of Pipeline Safety, U.S. Department of Transportations.

It is our intent to include all covered tasks, and procedures in this program. However, managers/supervisors are cautioned that some of the tasks that are performed on your system may be unique and therefore will have to be modified to your system.

It is the intent of this program that all persons in this OQ program are required to test for the fundamentals of natural gas, as a prerequisite to all competencies and skills. A training program for the fundamentals of natural gas must include: characteristics and hazards of natural gas, potential ignition sources: indoor and outdoor, recognizing emergency conditions and recognizing and reporting natural gas leaks.

Division 1 has sections that were intentionally left blank. These blanks are to be filled in by the Plan Administrator to customize the program to your system.

Division 7 is unique to this program and is intended for actual procedures and training materials used, example; Fisher Regulator School, American Meter School.

Plan Administrator is responsible for implementation and modifications in this OQ program and is also responsible for all required documentation in support of this program. This would include documentation from outside contractors, mutual aid agreements and qualification.

FOREWORD

An industry-government small operator task force reviewed several model plans and concluded that the attached model plan provides an excellent model that small operators can use as a model for their OQ compliance programs. This model written operator qualification plan is provided as an example for small operators of natural gas.

- Each of the 8 minimum requirements of regulation is addressed,
- A covered task list of most covered tasks performed on a typical natural gas distribution system is included,
- Examples of competencies and skills (equivalent to the knowledge, skills abilities and abnormal operating conditions in the "How to" guide) required for each covered task are included,
- Examples of evaluation method (written test or observation checklist) for each competency and skill are included,
- Examples of abnormal operating conditions for each task are addressed in the evaluations, and
- Training courses that may be used to provide the necessary competencies and skills to individuals that need training to become qualified are listed.

This plan was developed for operators of natural gas distribution systems. Operators will need to modify it to fit their systems, which means removing those tasks and evaluations that are not applicable to their systems and adding covered tasks, competencies and evaluations for other covered tasks performed on master meter, LP, hazardous liquid and gas transmission pipelines that may not be included in this plan. Information on covered tasks, competencies and/or evaluations for master meter, LP, hazardous liquid and gas transmission pipelines may be available from trade associations or vendors.

Operators are not required to use this plan, however they may use as much or as little of it as desired. If operators choose to use all or part of this plan, they must ensure that it fits its unique system and procedures. Operators using this plan will be responsible for all changes and updates required of this plan.

- Operators should review the covered task list, deleting tasks that are not performed on their system and adding any activity that is performed on their system that is not currently listed. For example, operators of an all-plastic system will not perform cathodic protection tasks. Operators of gas transmission or hazardous liquid pipelines can contact trade associations or vendors for information on covered tasks.

- Operators should review the competencies and skills for each covered task that is performed on their system to ensure the competencies and skills and the evaluations for each addresses what an individual must know to perform each covered task according to their operating and maintenance procedures.

- Operators should ensure that the recommended re-evaluation frequencies are appropriate for their system.

NORGASCO
OPERATOR QUALIFICATION PROGRAM
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DIVISION THREE – REQUIRED COMPETENCIES AND SKILLS

DIVISION FOUR – RECORD KEEPING

DIVISION FIVE – HANDS-ON PERFORMANCE QUALIFICATION (Forms)

INTRODUCTION

The gas operator qualification program is governed by the regulations of the U.S. DOT. Those regulations are found in 49-CFR-191 and 192.

This program is separated into seven divisions:

Division 1. PURPOSE AND SCOPE

The first part of the program explains the purpose and scope of the program. It explains the different methods for qualification, re-evaluation, notices of changes, training, record keeping, mutual aid, and also the time frames for re-qualification.

Division 2. COVERED TASKS

This division explains the procedures required of the gas operator, and the covered tasks associated with the procedure.

Division 3. REQUIRED COMPETENCIES AND SKILLS

In this division is an outline of the required competencies and skills, the method for qualification, the time frames for re-qualification, and suggested training references, these are suggested training references, if other training material is used, the operator should list it, and give an outline of it in Division 7.

Division 4. RECORD KEEPING

This division contains both the individual summary, which belongs to the individual performing the covered tasks, and the group summary, which belongs to the system that owns the plan.

Division 5. HANDS-ON PERFORMANCE QUALIFICATION (Forms)

Division five contains evaluation forms used in the evaluation of the hands-on skills and other documentation processes.

Division 6. WRITTEN EVALUATION OF COMPETENCIES AND SKILLS

In this division is a copy of the written evaluations used to help determine knowledge retention.

Division 7. TRAINING MATERIALS

This division is a list of training materials that operators use other than those found in the qualification process.

OPERATOR QUALIFICATION PROGRAM

1.1 PURPOSE. This program is intended to meet the requirements, effective April 27, 2001, of the Office of Pipeline Safety, U.S. Department of Transportation, for natural gas operators (Reprinted below). By following the provisions in this written program, individuals will be able to meet the October 28, 2002 requirements as specified in 192.809.

Any persons performing covered tasks after October28, 2002 shall be qualified in accordance with this program. Work performance history review is not anticipated to be used as a qualification criteria, except it may be used for outside contractors performing certain covered tasks, that require separate documentation, as required by the O&M manual, for example; Leak surveys, cathodic protection, regulator inspection.

Work performance history may not be used as the sole evaluation after October 28, 2002. (192.809/195.509)

QUALIFICATION OF PIPELINE PERSONNEL
49CFR PART 192 Subpart N

192.801 SCOPE.

(a) This subpart prescribes the minimum requirements for operator qualification of individuals performing covered tasks on a pipeline facility.
(b) For the purpose of this subpart, a covered task is an activity, identified by the operator, that:

1. Is performed on a pipeline facility;
2. Is an operations or maintenance task;
3. Is performed as a requirement of this part; and
4. Affects the operation or the integrity of the pipeline.

192.803 DEFINITONS.

Abnormal operating condition (AOC) means a condition identified by the operator that may indicate a malfunction of a component or deviation from normal operations that may:

(a) Indicate a condition exceeding design limits
(b) Result in a hazard(s) to persons, property, or the environment.

Evaluation means a process, established and documented by the operator, to determine an individual's ability to perform a covered task by any of the following:

(a) Written examination
(b) Oral examination
(c) Work performance history review
(d) Observation during
(e) Performance on the job
(f) On the job training
(g) Simulations
(h) Other forms of assessment.

Qualified means that an individual has been evaluated and can:

(a) Perform assigned covered tasks
(b) Recognize and react to abnormal operating conditions.

192.805 QUALIFICATION.

Each operator shall have and follow a written qualification program. The program shall include provisions to:
(a) Identify covered tasks
(b) Ensure through evaluation that individuals performing covered tasks are qualified
(c) Allow individuals that are not qualified pursuant to this subpart to perform a covered task if directed and observed by an individual that is qualified
(d) Evaluate an individual if the operator has reason to believe that the individual's performance of a covered task contributed to an incident as defined in part 191
(e) Evaluate an individual if the operator has reason to believe that the individual is no longer qualified to perform a covered task
(f) Communicate changes that affect covered tasks to individuals performing those tasks
(g) Identify those covered tasks and the intervals at which evaluation of the individual's qualifications is needed.

192.807 RECORD KEEPING.

Each operator shall maintain records that demonstrate compliance with this subpart.

(a) Qualification records shall include:
1) Identification of qualified individual(s);
2) Identification of the covered tasks the individual is qualified to perform;
3) Date(s) of current qualification; and
4) Qualification method(s).

(b) Records supporting an individual's current qualification shall be maintained while the individual is performing the covered task. Records of prior qualification and records of individuals no longer performing covered tasks shall be retained for a period of five years.

Amdt 192-86 64 FR 46853, Aug 27, 1999

192.809 GENERAL.

Operators must have a written qualification program by April 27, 2001. Operators must complete the qualification of individuals performing covered tasks by October 28, 2002. Work performance history review may be used as a sole evaluation method for individuals who were performing a covered task prior to August 27, 1999.

After October 28, 2002, work performance history may not be used as a sole evaluation method.

Amdt 192-86 64 FR 46853, Aug 27, 1999

1.2 COVERED TASKS, COMPETENCIES AND SKILLS.

This qualification program is divided into specific covered tasks. There are several required competencies and skills for each covered task. Any person performing a covered task must be qualified in the competencies and skills required for that task. In addition, all affected persons, regardless of their performance of specific covered tasks, shall be required to demonstrate knowledge of the Fundamentals of Natural Gas.

(Protocol 2.01 §192.805/195.505)

METHOD USED FOR DETERMINING COVERED TASK LIST

_____

_____

_____

_____

_____

1.3 OUTSIDE CONTRACTORS.

Norgasco does not use Outside contractors to perform covered tasks except for welding but shall qualify by one of the following methods:

1. May qualify through this program.
2. Shall perform the covered tasks under the direct supervision of a qualified individual.
3. Shall submit proof, prior to performing the task acceptable to the operator demonstrating acceptable qualification for the covered tasks by obtaining copies, as described in Section 1.12 of this Division, of the contractor's evaluations and ensure they address the same knowledge' skills' abilities and AOC's as your evaluations for the same tasks.

Outside contractors qualifications have to include the requirements as described in Section 1.16 of this Division.
The Plan Administrator will make sure the evaluations are documented e.g. test questions are written and observation evaluations include checklists indicating what is observed. List these evaluations in this OQ Program as evaluations you accept for these tasks.

(Protocols 192.803/195.503, §192.805/195.505, §192.807/195.507)

Copies of the topics covered are on file.

1.4 QUALIFICATION BY WRITTEN / ORAL AND/OR HANDS-ON EVALUATION.

A written / oral and/or hands-on evaluation is required in each competency or skill. One hundred percent of all specified critical questions and not less than seventy percent of all other questions must be answered correctly to pass the evaluation (this percentage may vary, check with your state pipeline safety regulators.) All of the required competencies or skills must be passed or re-training and successful evaluation must be completed on those that are not passed.

1.5 QUALIFICATION BY PRE-TEST.

A general pre-test may be offered to establish specific knowledge areas. If the test is passed in all areas, at least seventy percent in each competency then demonstration of proficiency through hands-on exercises may be used to establish qualification.

1.6 RE-QUALIFICATION.

Examinations for re-qualification must be passed and documented within the time frames specified in Division 3.

1.7 QUALIFICATION BY PERFORMANCE.

Qualification by work performance is defined as performing a covered task in a safe and effective manner for a period of at least five years. In other words, there have been no reportable gas-related accidents or incidents, (see definition, 1.9 of this Division), or AOC's as a direct result of the individual's work performance.

In the event that an employee is not qualified to perform a certain task, that person may become qualified by successfully performing the task under the direct supervision of an individual, selected by the Plan Administrator, whom is also qualified. The successful performance must be documented on the appropriate evaluation form (e.g. as contained in Division 5 of this program.)

Work performance history may not be used as sole evaluation method after October 28, 2002.

(Protocol 192.803/195.503, §192.805/195.505)

1.8 PERFORMING COVERED TASK UNDER DIRECT OBSERVATION OF QUALIFIED PERSON.

In the event that an employee is not qualified to perform a certain covered task, that person may perform the covered task if under direct observation of a person that is qualified.

Direct observation means, the observer must be in close enough proximity, in the immediate area, to be able to recognize, and react to an action that may create an abnormal operating condition or by not following proper practices, and take immediate action, to prevent it from occurring.

When performing direct observation the observer must appropriately document the observation, form "Direct Observation of Unqualified Person Performing Covered Task Under Direct Supervision of Qualified Individual" in Division 5 can be used to document the observation.

On-the-job training may not be used for fusion, welding, and tapping. Qualification for these covered tasks must be completed prior to performance on a system.

(Protocol 192.805/195.505)

1.9 RE-EVALUATION FOR CAUSE.

Re-evaluation of a person's qualification must be undertaken when his/her performance has created an unsafe environment, been the direct cause of personal injury, or if the Plan Administrator has reason to believe the person's performance of a covered task contributed to an *incident* defined in part 191.

Incident means any of the following events:

1. An event that involves a release of gas from a pipeline and (i) A death, or personal injury necessitating in-patient hospitalization; or (ii) Estimated property damage, including cost of gas lost, of the operator or others, or both, of $50,000 or more.[1]
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).

Re-evaluation is also required if a plastic pipe joiner has 1 joint made under an applicable procedure that is found to be unacceptable by testing under 49 CFR 192.513, that person must requalify under that procedure as an initial qualification.

If at anytime the Plan Administrator has reason to believe that an individual is no longer qualified to perform a covered task, then that individual will have to be re-qualified by hands-on and written and/or oral examination (to same criteria as initial qualifications.) Reasons an individual may no longer be qualified may include: injury or physical limitation, procedures seldom or rarely performed, observation of an error or incorrect procedure, an near-miss incident, evidence of an error or incorrect procedure, or any other evidence the individual may need to be re-evaluated and re-qualified.

(192.803/195.503, §192.805/195.505)

Re-Qualification will be determined by (the department head, the crew leader, or by a third party observer) as approved by the Plan Administrator.

1.10 NOTICE OF CHANGES.

Plan Administrator will communicate i.e. meeting, e-mail, with all affected individuals and contractors to make them aware of any material change, or changes made on the system that require a change of procedures, including changes in the O&M and/or the Emergency Procedures. This meeting will occur as soon after such changes are made as practical, and documented as to the context and attendees using Form "Notice of Change" in Division 5. This may include qualification and re-qualification procedures, equipment change and upgrades, new material specifications, O&M activity and new tasks and evaluations.

(192.801/195.501, §192.805/195.505)

1.11 TRAINING.

The above requirements are accomplished through an on-going training program. This program includes workshops, classroom activities, and various other training methods that are designed to address the different covered tasks performed by each individual.

All training and evaluation shall be conducted by or be in accordance with this training and qualification program.

All hands-on activities will be conducted at the operator's gas facility, a gas facility of similar design, or at a workshop designated for the specific competencies and skills identified as covered tasks.

Any new or amended tasks addressed in Section 1.10 shall have appropriate training materials outlined in Division 7.

Retraining if qualifications are questioned will be conducted as per 1.9 of this Division "Reevaluation For Cause."

(Protocol 192.803/195.503, §192.805/195.505)

1.12 PROGRAM RECORDKEEPING.

Section 4 of this manual contains an Individual Qualification Summary (4a) as well as a Group Qualification Summary (4b). These forms will identify each of the qualified individuals, the covered tasks that each individual is qualified to perform, the dates of current qualification for each task, and the qualification methods. Form 4a is to be maintained by and is the property of the individual. Form 4b is to be maintained by the facility administrator and is the property of the gas facility. If forms 4a and 4b are not used, other appropriate recordkeeping methods may also be acceptable, such as, computer databases and workshop documentation, etc.

Records of individual qualification method, completion of workshop evaluation training records that support qualified person qualifications shall be maintained while the individual is performing the covered task. Prior qualifications and of persons that are no longer performing covered tasks, shall be retained for the time period of five years after the qualification expires.

(192.807/195.507)

1.13 NEW CONSTRUCTION.

Will be regarded as an O&M activity i.e. pipe replacement, main additions regulator station upgrades

1.14 MUTUAL AID.

Both covered by this program, or onsite training will be given on assigned covered tasks, prior to performing these tasks, and individuals will be listed.

Individuals from other entities performing covered tasks on behalf of the operator must be evaluated and qualified consistent with the operator's qualification program requirements prior to being allowed to perform covered tasks on the operator's system.

(Protocols 1.03, 1.04 §192.803/195.503)

List task that are required for Mutual Aid responders and list tasks below:

_____

_____

1.15 QUALIFICATION METHODS.

Qualification methods and time frames required were established by a steering committee of system operators and regulatory personnel. Due to the complexities and uniqueness of the tasks, some are knowledge based, and others are accomplished by performance.

Time frames used were determined in part by the frequencies the tasks are performed, the extent of AOC's that may be involved, and the difficulties in performing the tasks.

(192.801/195.501, §192.805/195.505)

1.16 ABNORMAL OPERATING CONDITIONS

AOC's are included in the Emergency Response Procedures located in the Norgasco O&M manual and in specific tasks, and how to recognize and respond to them are included in the qualification method as outlined in Division 8.

Other training materials/method/school/workshops etc., need to ensure they cover the AOC's required for the task(s) and then listed in Division 7.

(Protocol §192.803/195.503)

1.17 PROGRAM PERFORMANCE, EFFECTIVENESS and IMPROVEMENT

Plan Administrator is to evaluate the program as to performance, effectiveness and improvement. PHMSA wil be notified of any major change in the OQ program.

Example: 1. Changing and or upgrading equipment procedures i.e. Notice of Change form in Division 5.

2. Recognize the need of re-qualification of employees.

Request for changes and/or additions to this plan should be documented by using the "Feedback Form" in Division 5. Copy to be filed at main office.

(Protocol 192.805/195.505)

PROCEDURES WITH COVERED TASKS

The following activities would be considered "tasks" under 49 CFR 192. The competencies and/or skills listed as sections or subsections under each task are those identified in the operator qualification.

P-1 Patrolling Gas System (AOC).

Task

Daily Rounds Procedures

Daily rounds are done once in the morning and once in the evening. Rounds are to be performed by a qualified operator or a trainee under his direct supervision. The rounds consist of the operator driving to several important areas of our pipeline and observing his surroundings and reading instruments and gauges and recording specified data on the daily rounds sheet. The operator must report and respond to any conditions that need action or monitoring.

General observation is an important part of rounds. You are looking for early warning signs of any abnormal conditions. Some examples of abnormal observations could be: hissing gas, bubbling water, gas odors, damaged barricades or markers, backhoes or trenchers parked or working, construction activity, vent stack covers missing, risers or meters covered by snowplows or drifts,

The rounds begin with the operator taking a copy of the daily report spreadsheet and logging the date, name, time, temperature, wind chill. This report sheet has two columns, one for morning rounds and one for evening rounds. The operator then walks around the camp and fills in the blanks on the spreadsheet such as, water and potable water, boiler data, and number of camp occupants.

Then the operator drives to skid 2 and skid 3. There he must record pressures, volumes, temperatures, and other specifics according to the spreadsheet.

Next the operator drives to Halliburton, a convenient midpoint in our distribution system, and records the distribution mainline pressure.

From there he drives to TDX, the electric utility, and our biggest customer. He records pressures and volumes according to the reports spreadsheet.

The last stop on our distribution system is at ASTAC. Astac is very near the end of our distribution system. At this point the operator does a sniff test of the gas and records it in the appropriate blank.

The operator now travels to Skid 1 to record pressures and temperatures concerning our transmission line. The operator must pass through the East security checkpoint.

To do this he must have a field badge, drivers license, safety glasses, plus seatbelt buckled and headlights on. The truck must have an ID badge displayed in the windshield.

This concludes the morning rounds. All data recorded on the rounds sheet will recorded on computer and a hard copy kept on file in the Deadhorse and Anchorage offices.The evening rounds are the same.

For safety reasons, during the rare occasions when there is only one operator on the slope, the rounds will be reduced to one time a day during daylight. Also, if weather is harsh, then skid 1 may be skipped.

Should the Operator observe Abnormal Operating Conditions (AOC) he will alert the other operator immediately. The Operators will then contact the Operations Manager(OM). Depending on the abnormality, either extreme high pressure or extreme low/no pressure. The OM and operators will contact upstream Operators at the CGF facility to obtain information on the malfunction.

P-2 OPERATE, REGULATORS, LOCATED AT NORGASCO SKID ONE.

Task

Regulator Adjustment in Skid 1

Fisher-Rosemount 675

Wear proper safety gear and use the CGI to monitor for explosive atmospheres at all times.

Open the 657 control panel box and locate the adjustment bolt on the scaled plate. Carefully unscrew the adjustment bolt counter clockwise until the bolt is loose. (about 1 turn).

To increase down stream pressure move the bolt to the right slightly. The regulator noise will increase slightly as it adjusts. Monitor the downstream pressure to see the incremental increase. Repeat the process until you have achieved the desired pressure. Once you have the desired pressure secure the adjustment bolt firmly by turning it clockwise.

To decrease pressure, move the control bolt slightly to the left. The regulator noise will go quite momentarily as the regulator adjusts. Monitor the downstream pressure to see the incremental decrease in pressure. Repeat the procedure until you have achieved the desired pressure. Once you have the desired pressure secure the adjustment bolt firmly by turning it clockwise.

Fisher 310

Wear proper safety gear and use the CGI to monitor for explosive atmospheres at all times.

Locate the adjustment bolt on the control valve just off the main body of the regulator. Loosen the lock nut counter clockwise to free the adjustment bolt for movement. (about three turns).

To increase downstream pressure turn the adjustment bolt clockwise about a half turn to increase downstream pressure slightly. The regulator noise will increase slightly as the regulator adjusts. Monitor the downstream pressure to see the incremental increase. Repeat this procedure until you have achieved the desired pressure. Once you have the desired pressure secure the locknut firmly To decrease downstream pressure turn the adjustment bolt counterclockwise about a half turn. The regulator will go quite as the regulator adjusts. Monitor the downstream pressure to see the incremental decrease. Repeat this procedure until you have reached the desired pressure. Once you have reached the desired pressure secure the locknut firmly.

Monitor all your pressures in the skid for a several minutes to make sure everything is normal. Any abnormal regulator performance will be reported to the Operations manager(OM).

P-3 OPERATE, RELIEF VALVE LOCATED AT NORGASCO SKID ONE.

Task

Relief Valve Adjustment in Skid 1

Continental 1912 Relief Valve

Wear proper safety gear and use the CGI to monitor for explosive atmospheres at all times.

Currently the relief valve is set to relieve at 340 psi. Both regulators are operating at 310 psi.

The Fisher 310 regulator in skid one has a spring range from 250- 600 psi. To check Continental relief valve, increase the downstream pressure of the Fisher 310 regulator to 350 psi. The Fisher 657 regulator will not respond as it only senses that enough pressure is being passed.

Under normal operations the relief valve should begin venting gas between 340 and 350 psi. Reduce the 310 downstream pressure again to 310 psi. If the relief valve did not properly reseat, gas may be heard leaking by the seat. Repeating the procedure usually stops the leak by.

To increase the relief pressure of the valve, turn the spring adjustment nut on top of the valve clockwise. Do this incrementally and by checking it by the above procedure.

To decrease the relief pressure, turn the spring adjustment nut counter clockwise. Again checking the relief pressure by the above stated procedure.

Monitor all your pressures in the skid for a several minutes to make sure everything is normal. Any abnormal regulator/relief performance will be reported to the Operations Manager.

REQUIRED COMPETENCIES AND SKILLS

	Competencies and Skills	Original Qualification Method	Re-Qualif. Method	Re-Qualif. Period	Suggested Training Reference[1]
A	Pingstaff Training Pipeline Const.	Written evaluation	Review Videos	60 months	Pingstaff Video
B	Fisher-Rosemount Regulator and relief	Written evaluation	Review VIDEOS	60 months	Fisher-Rosemount Videos
C	Code of Federal Regulations 49 Part 192	Written Test Open Book	N/A	N/A	CFR 49 Part 192
D	Norgasco Operations and Maint. Manual	Written Test **Open Book**	Written evaluation	N/A	Norgasco Operations and Maint. Manual
	Key Procedures				
P-1	DAILY PATROLLING (ROUNDS)	Hands On Demonstration	Hands On Demonstration	60 months, not to exceed 60 months	Procedure Manual P-1
P-2	Operate Regulators Skid 1	Written evaluation	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-2
P-3	OPERATE, RELIEF VALVE IN SKID ONE.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-3
P-4	OPERATE, REGULATORS IN SKID TWO.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-4
P-5	OPERATE RELIEF VALVE SKID TWO.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-5
P-6	OPERATE REGULATOR IN SKID THREE.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-6
P-7	OPERATE RELIEF VALVE IN SKID THREE.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-7
P-8	BYPASS REGULATORS IN NORGASCO SKID ONE.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-8

	Competencies and Skills	Original Qualification Method	Re-Qualif. Method	Re-Qualif. Period	Suggested Training Reference[1]
P-9	BYPASS REGULATORS IN SKID TWO.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-9
P-10	BYPASS SKID TWO FILTER POT AND FILTER CHANGE.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-10
P-11	BYPASS SKID TWO KNOCK OUT TANK AND INSPECT	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-11
P-12	BYPASS SKID TWO	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-12
P-13	MERCAPTAN Chang out	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-13
P-14	Drain Skid 2 Knock out tank	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-14
	Key Small Equipment				
P-15	Operate R-70 Ditchwitch Line Locator	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-15
P-16	Operate RKI CGI Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-16
P-17	Operate LD-222 CGI Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-17
P-18	Operate Odorometer Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-18
P-19	Operate FI (ionization) Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-19
P-20	Operate Butt Fusion Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-20
P-21	Operate Electro Fusion Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-21
P-22	Operate Dresser Coupling repair clamp	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-22

	Competencies and Skills	Original Qualification Method	Re-Qualif. Method	Re-Qualif. Period	Suggested Training Reference[1]
P-23	Operate CP Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15months	Procedure Manual P-23
	Key Equipment				
P-24	O/M John Deere Backhoe	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 24 months	Procedure Manual P-24
P-25	O/M Ditchwitch Trancher	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 24 months	Procedure Manual P-25
P-26	O/M Volvo Loader	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 24 months	Procedure Manual P-26
P-27	O/M Tioga Heater	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 24 months	Procedure Manual P-27
P-28	O/M Welding Macine	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 24 months	Procedure Manual P-28
P-29	O/M Air Compressor	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 24 months	Procedure Manual P-29
P-30	O/M Plate Compactor	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 24 months	Procedure Manual P-30
	Surveys				
P-31	INSPECT MAINLINE REGULATORS AND RELIEF VALVES	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-31
P-32	INSPECT AND MAINTAIN KEY MAINLINE VALVES	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-32
P-33	SURVEY GAS SYSTEM FOR LEAKS	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-33
P-34	CP SURVEY OF BURIED STEEL LINE	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-34

	Competencies and Skills	Original Qualification Method	Re-Qualif. Method	Re-Qualif. Period	Suggested Training Reference[1]
P-35	INSPECT FOR EXTERNAL / INTERNAL CORROSION	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-35
	New Construction				
P-36	SIZING A NEW SEVICE	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-36
P-37	INSTALLING A NEW SEVICE	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-37
P-38	PRESSURE TEST NEW SEVICE	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-38
P-39	CONSTRUCTING NEW SEVICE RISERS	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	Procedure Manual P-39
P-40					
P-41					
P-42					
P-43					

This portion of the Operator Qualification Program contains an Individual Qualification Summary. This form will identify the qualified individual, the covered tasks that each individual is qualified to perform, the dates of current qualification for each task, and the qualification methods. Form 4a is to be maintained by and is the property of the individual. If forms 4a is not used, other appropriate recordkeeping methods may also be acceptable, such as, computer databases and workshop documentation, etc. Training records that support qualified person qualifications shall be maintained while the individual is performing the covered task and of persons that are no longer performing covered tasks shall be retained for the time period of five years.

INDIVIDUAL QUALIFICATION SUMMARY

For

_____

This table is used to record the progress of an individual in successfully demonstrating qualification in a competency or skill required to perform tasks necessary for the operation of a natural gas system. A certificate for each competency or skill, which verifies qualification by written evaluation or performance evaluation, must be attached. (192.807/195.507)

	Competencies and Skills	Original Qualification Method	Re- Qualif. Method	Re-Qualif. Period	Original Date Qualified
A	Pingstaff Training Pipeline Const.	Written evaluation	Review Videos	60 months	
B	Fisher-Rosemount Regulator and relief	Written evaluation	Review VIDEOS	60 months	
C	Code of Federal Regulations 49 Part 192	Written Test Open Book	N/A	N/A	
D	Norgasco Operations and Maint. Manual	Written Test Open Book	Written evaluation	N/A	
	Key Procedures				
P-1	DAILY PATROLLING (ROUNDS)	Hands On Demonstration	Hands On Demonstration	60 months, not to exceed 60 months	
P-2	Operate Regulators Skid 1	Written evaluation	Written or hands-on eval.	12 months, not to exceed 15months	

	Competencies and Skills	Original Qualification Method	Re- Qualif. Method	Re-Qualif. Period	Original Date Qualified
P-3	OPERATE, RELIEF VALVE IN SKID ONE.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15months	
P-4	OPERATE, REGULATORS IN SKID TWO.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15months	
P-5	OPERATE RELIEF VALVE SKID TWO.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15months	
P-6	OPERATE REGULATOR IN SKID THREE.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15months	
P-7	OPERATE RELIEF VALVE IN SKID THREE.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15months	
P-8	BYPASS REGULATORS IN NORGASCO SKID ONE.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15months	
P-9	BYPASS REGULATORS IN SKID TWO.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15months	
P-10	BYPASS SKID TWO FILTER POT AND FILTER CHANGE.	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15months	
P-11	BYPASS SKID TWO KNOCK OUT TANK AND INSPECT	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15months	
P-12	BYPASS SKID TWO	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15months	
P-13	MERCAPTAN Chang out	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15months	
P-14	Drain Skid 2 Knock out tank	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
	Key Small Equipment				
P-15	Operate R-70 Ditchwitch Line Locator	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-16	Operate RKI CGI Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	

	Competencies and Skills	Original Qualification Method	Re- Qualif. Method	Re-Qualif. Period	Original Date Qualified
P-17	Operate LD-222 CGI Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-18	Operate Odorometer Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-19	Operate FI (ionization) Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-20	Operate Butt Fusion Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-21	Operate Electro Fusion Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-22	Operate Dresser Coupling repair clamp	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-23	Operate CP Equipment	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
	Key Equipment				
P-24	O/M John Deere Backhoe	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 30 months	
P-25	O/M Ditchwitch Trancher	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 30 months	
P-26	O/M Volvo Loader	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 30 months	
P-27	O/M Tioga Heater	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 30 months	
P-28	O/M Welding Macine	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 30 months	
P-29	O/M Air Compressor	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 30 months	

	Competencies and Skills	Original Qualification Method	Re- Qualif. Method	Re-Qualif. Period	Original Date Qualified
P-30	O/M Plate Compactor	Hands On Demonstration	Hands On Demonstration	24 months, not to exceed 30 months	
	Surveys				
P-31	INSPECT MAINLINE REGULATORS AND RELIEF VALVES	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-32	INSPECT AND MAINTAIN KEY MAINLINE VALVES	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-33	SURVEY GAS SYSTEM FOR LEAKS	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-34	CP SURVEY OF BURIED STEEL LINE	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-35	INSPECT FOR EXTERNAL / INTERNAL CORROSION	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
	New Construction				
P-36	SIZING A NEW SEVICE	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-37	INSTALLING A NEW SEVICE	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-38	PRESSURE TEST NEW SEVICE	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-39	CONSTRUCTING NEW SEVICE RISERS	Hands On Demonstration	Hands On Demonstration	12 months, not to exceed 15 months	
P-40					
P-41					

Division 4b of the Operator Qualification Program contains a Group Qualification Summary. This form will identify each of the qualified individuals, the covered tasks that each individual is qualified to perform, and the dates of current qualification for each task. Form 4b is to be maintained by the facility administrator and is the property of the gas facility. If form 4b are not used, other appropriate recordkeeping methods may also be acceptable, such as, computer databases and workshop documentation, etc. Training records that support qualified person qualifications shall be maintained while the individual is performing the covered task and of persons that are no longer performing covered tasks shall be retained for the time period of five years.

OPERATOR QUALIFICATION (GROUP) SUMMARY

For

_____

(Name of Utility/Organization)

Where the employer copy of individual qualification summaries and related written and hands-on performance evaluations are retained in individual employee records or elsewhere, this table may be used by the operator to summarize the individual qualifications of all or a group of individuals who perform tasks necessary for the operation of a natural gas system.
(Protocol 3.01 §192.807/195.507)

Competencies and Skills		List date of current qualification for each procedure					
A	Pingstaff Training Pipeline Const.						
B	Fisher-Rosemount Regulator and relief						
C	Code of Federal Regulations 49 Part 192						
D	Norgasco Operations and Maint. Manual						
	Key Procedures						
P-1	DAILY PATROLLING (ROUNDS)						
P-2	Operate Regulators Skid 1						
P-3	OPERATE, RELIEF VALVE IN SKID ONE.						

	Competencies and Skills						
P-4	OPERATE, REGULATORS IN SKID TWO.						
P-5	OPERATE RELIEF VALVE SKID TWO.						
P-6	OPERATE REGULATOR IN SKID THREE.						
P-7	OPERATE RELIEF VALVE IN SKID THREE.						
P-8	BYPASS REGULATORS IN NORGASCO SKID ONE.						
P-9	BYPASS REGULATORS IN SKID TWO.						
P-10	BYPASS SKID TWO FILTER POT AND FILTER CHANGE.						
P-11	BYPASS SKID TWO KNOCK OUT TANK AND INSPECT						
P-12	BYPASS SKID TWO						
P-13	MERCAPTAN Chang out						
P-14	Drain Skid 2 Knock out tank						
	Key Small Equipment						
P-15	Operate R-70 Ditchwitch Line Locator						
P-16	Operate RKI CGI Equipment						
P-17	Operate LD-222 CGI Equipment						
P-18	Operate Odorometer Equipment						
P-19	Operate FI (ionization) Equipment						
P-20	Operate Butt Fusion Equipment						

	Competencies and Skills						
P-21	Operate Electro Fusion Equipment						
P-22	Operate Dresser Coupling repair clamp						
P-23	Operate CP Equipment						
	Key Equipment						
P-24	O/M John Deere Backhoe						
P-25	O/M Ditchwitch Trancher						
P-26	O/M Volvo Loader						
P-27	O/M Tioga Heater						
P-28	O/M Welding Macine						
P-29	O/M Air Compressor						
P-30	O/M Plate Compactor						
	Surveys						
P-31	INSPECT MAINLINE REGULATORS AND RELIEF VALVES						
P-32	INSPECT AND MAINTAIN KEY MAINLINE VALVES						
P-33	SURVEY GAS SYSTEM FOR LEAKS						

	Competencies and Skills						
P-34	CP SURVEY OF BURIED STEEL LINE						
P-35	INSPECT FOR EXTERNAL / INTERNAL CORROSION						
	New Construction						
P-36	SIZING A NEW SEVICE						
P-37	INSTALLING A NEW SEVICE						
P-38	PRESSURE TEST NEW SEVICE						
P-39	CONSTRUCTING NEW SEVICE RISERS						
P-40							
P-41							
P-42							
P-43							

EVALUATION OF HANDS-ON SKILLS

This portion of the Operator Qualification Program contains evaluating and qualifying hands-on demonstrations of skills necessary to perform tasks on gas systems. Operators may use the forms in Division 5 or attend appropriate workshops in obtaining qualification or re-evaluation. Appropriate documentation forms, attendance records, or manufacturer's procedures maybe used in lieu of the forms supplied.

When performing direct observation the observer must appropriately document the observation, form "Direct Observation of Unqualified Person Performing Covered Task Under Direct Supervision of Qualified Individual" can be used to document the observation.

When communication of notice of change use form "Notice of Change."

When communicating a request for change and/or additions to this plan use form "Feedback Form."

NORGASCO

NOTICE OF CHANGE

This page is used for recording changes to the Operator Qualification Program.

Date of Change: _____

Task(s) Impacted		O&M Procedure(s) Impacted		Regulations Impacted		Incidents, For Cause, Near Miss		Industry Accidents	
Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

What Communicated: (Attach any supporting documentation.)

_____

_____

_____

_____

How Communicated:

_____

_____

Tasks Impacted:

_____

_____

_____

Individuals Impacted:

Name of Individual(s) receiving the changes associated with the performance of covered tasks.	Place an "X" in the boxes below when communication is completed for that individual

Name and Position of Person Processing the Change:

_____

After completing this form file in Division 7.

NORGASCO

FEEDBACK FORM

Address: _____

Phone: _____ **Date:** _____

Change or Addition Requested:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Person Requesting Change:

_____

When form completed submit to Operations Manager.

Operations Manager Response:

_____
_____
_____
_____
_____
_____
_____
_____

NORGASCO

Competency/skill: Direct Observation of Unqualified Person Performing Covered Task Under Direct Supervision of Qualified Individual

DATE: _____

LOCATION:

_____
_____
_____

TASK BEING PERFORMED:

_____
_____
_____
_____
_____
_____

PROCEDURES USED:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Unqualified Individuals Name: _____ **I.D. Number:** _____
(Print)

Number of unqualified persons being observed at one time: _____

_____ _____
Qualified Observer Signature **Unqualified Individual Signature**

Competency/skill

P-1 Patrolling Gas System (AOC).

Daily Rounds Procedures

Daily rounds are done once in the morning and once in the evening. Rounds are to be performed by a qualified operator or a trainee under his direct supervision. The rounds consist of the operator driving to several important areas of our pipeline and observing his surroundings and reading instruments and gauges and recording specified data on the daily rounds sheet. The operator must report and respond to any conditions that need action or monitoring.

General observation is an important part of rounds. You are looking for early warning signs of any abnormal conditions. Some examples of abnormal observations could be: hissing gas, bubbling water, gas odors, damaged barricades or markers, backhoes or trenchers parked or working, construction activity, vent stack covers missing, risers or meters covered by snowplows or drifts,

The rounds begin with the operator taking a copy of the daily report spreadsheet and logging the date, name, time, temperature, wind chill. This report sheet has two columns, one for morning rounds and one for evening rounds. The operator then walks around the camp and fills in the blanks on the spreadsheet such as, water and potable water, boiler data, and number of camp occupants.

Then the operator drives to skid 2 and skid 3. There he must record pressures, volumes, temperatures, and other specifics according to the spreadsheet.

Next the operator drives to Halliburton, a convenient midpoint in our distribution system, and records the distribution mainline pressure.

From there he drives to TDX, the electric utility, and our biggest customer. He records pressures and volumes according to the reports spreadsheet.

The last stop on our distribution system is at ASTAC. Astac is very near the end of our distribution system. At this point the operator does a sniff test of the gas and records it in the appropriate blank.

The operator now travels to Skid 1 to record pressures and temperatures concerning our transmission line. The operator must pass through the East security checkpoint. To do this he must have a field badge, drivers license, safety glasses, plus seatbelt buckled and headlights on. The truck must have an ID badge displayed in the windshield.

This concludes the morning rounds. All data recorded on the rounds sheet will recorded on computer and a hard copy kept on file in the Deadhorse and Anchorage offices.The evening rounds are the same.

For safety reasons, during the rare occasions when there is only one operator on the slope, the rounds will be reduced to one time a day during daylight. Also, if weather is harsh, then skid 1 may be skipped.

Should the Operator observe Abnormal Operating Conditions (AOC) he will alert the other operator immediately. The Operators will then contact the Operations Manager(OM). Depending on the abnormality, either extreme high pressure or extreme low/no pressure. The OM and operators will contact upstream Operators at the CGF facility to obtain information on the malfunction.

Participant Name: _____ **I.D. Number:** _____

Test Date: _____ **Location:** _____

Evaluation: ☐ **Qualified** ☐ **Not Qualified**

_____ _____

Qualified Observer Signature Participant Signature

Competency/skill

P-2 OPERATE, REGULATORS, LOCATED AT NORGASCO SKID ONE.

Regulator Adjustment in Skid 1

Fisher-Rosemount 675

Wear proper safety gear and use the CGI to monitor for explosive atmospheres at all times.

Open the 657 control panel box and locate the adjustment bolt on the scaled plate. Carefully unscrew the adjustment bolt counter clockwise until the bolt is loose. (about 1 turn).

To increase down stream pressure move the bolt to the right slightly. The regulator noise will increase slightly as it adjusts. Monitor the downstream pressure to see the incremental increase. Repeat the process until you have achieved the desired pressure. Once you have the desired pressure secure the adjustment bolt firmly by turning it clockwise.

To decrease pressure, move the control bolt slightly to the left. The regulator noise will go quite momentarily as the regulator adjusts. Monitor the downstream pressure to see the incremental decrease in pressure. Repeat the procedure until you have achieved the desired pressure. Once you have the desired pressure secure the adjustment bolt firmly by turning it clockwise.

Fisher 310

Wear proper safety gear and use the CGI to monitor for explosive atmospheres at all times.

Locate the adjustment bolt on the control valve just off the main body of the regulator. Loosen the lock nut counter clockwise to free the adjustment bolt for movement. (about three turns).
To increase downstream pressure turn the adjustment bolt clockwise about a half turn to increase downstream pressure slightly. The regulator noise will increase slightly as the regulator adjusts. Monitor the downstream pressure to see the incremental increase. Repeat this procedure until you have achieved the desired pressure. Once you have the desired pressure secure the locknut firmly
To decrease downstream pressure turn the adjustment bolt counterclockwise about a half turn. The regulator will go quite as the regulator adjusts. Monitor the downstream pressure to see the incremental decrease. Repeat this procedure until you have reached the desired pressure. Once you have reached the desired pressure secure the locknut firmly.

Competency/skill:

P-39 CONSTRUCTING NEW SEVICE RISERS

A. One inch Riser

Service risers for 3/4" CTS HDPE are fabricated by first cutting a 21' stick of 1" black steel pipe in half. Next, the cut end is smoothed to avoid nicks to the HDPE pipe. The 3/4 CTS HDPE pipe is now inserted into the steel pipe until approximately 1' of HDPE pipe protrudes from the threaded end of the 1" steel pipe. The HDPE pipe is then cut with PVC cutters so that approximately 2' of HDPE pipe protrude from the cut end of the 1" steel pipe. The entire assembly is then inserted into a Greenlee bender and bent in the middle to 90 degrees. The HDPE protruding from the threaded end of the 1" steel pipe is then cut so that 1 1/4" protrudes past the threads. Next, an approved compression fitting is fitted to the threaded end of the assembly. Currently, the only fittings approved by NORGASCO for this purpose are manufactured by Continental Industries. Finally, the entire riser is wrapped with corrosion proof pipe wrap or painted. Pressure test with procedure P-38.

B: Two inch Riser

Service risers for 2" HDPE pipe are fabricated by first cutting a 21' stand of 2" pipe in half, cleaning and beveling the cut end and preparing it for a weld. Next, an approved 2" transition fitting is welded to the prepared end of the 2" pipe following manufacturer's recommendations (including wrapping the transition area of the fitting with a wet rag while welding). Finally, the 2" pipe is bent in the middle to 90 degrees and wrapped with corrosion proof pipe wrap or painted. Pressure test with procedure P-38.

C: Larger than two inch

Manufacture of any other size risers for HDPE pipe must be approved by the Operations Manager on an individual basis.

Participant Name: _____ **I.D. Number:** _____

Test Date: _____ **Location:** _____

Evaluation: ☐ **Qualified** ☐ **Not Qualified**

_____ _____

Qualified Observer Signature Participant Signature

WRITTEN EVALUATION OF COMPETENCIES AND SKILLS

Division 6 of the Operator Qualification Program may contain copies of tests used in the written evaluation and qualification competencies and skills necessary to perform tasks on gas systems. Copies of examination instruments are generally not included, where qualification is certified by an outside training organization.

TRAINING MATERIALS

Division 7 of the Operator Qualification Program may contain attachments describing course descriptions or outlines, lesson plans, and other materials used to prepare personnel for qualification through this program. For example, a brochure describing a welder qualification workshop could be retained in this division to document the operator's efforts to provide training in required competencies and skills.

When communication of change, when using the "Notice of Change" form is completed, file in Division 7.

(192.803/195.503, §192.805/195.505)

Norgasco O & M Manual
Operator of small gas systems
Pingstaff Training Vidoes
Fisher Rosemount Training Videos

Operators Manuals for the following Equipment

Ditchwitch Line Locator
RKI CGI
Industrial Instument LD-222)CGI
Heath Tech Odorometer
Heath Tech FI Unit
McElRoy HDPE Butt Fusion
Central Plastics HDPE Electo Fusion
Dresser Coupling Product manual
John Deere Backhoe
Ditchwitch R100 Trencher
Volvo L90 Loader
Tioga Mobile Heater