



**Welding & Fabricating, Inc.**

**OPERATOR QUALIFICATION PROGRAM**

<b>TITLE</b>	<b>PAGES/RECORDS</b>	<b>SECTIONS</b>
--------------	----------------------	-----------------

<b>Written Statement</b>	<b>Pages 1-17</b>	<b>Section 1</b>
<b>Contractor Covered Task</b>	<b>Page 18</b>	<b>Section 2</b>
<b>Covered Task Performance Evaluation List</b>	<b>Pages 19-30</b>	<b>Section 3</b>
<b>Covered Task Assessment Forms</b>	<b>Pages 31-42</b>	<b>Section 4</b>
<b>Methods and Frequency List</b>	<b>Records Only</b>	<b>Section 5</b>
<b>Employee Matrix</b>	<b>Records Only</b>	<b>Section 6</b>
<b>Employee Information Records</b>	<b>Records Only</b>	<b>Section 7</b>



Welding & Fabricating, Inc.

## **BROCATO CONSTRUCTION, INC. OPERATOR QUALIFICATION PROGRAM**

### **INTRODUCTION**

In compliance with the Operator Qualification Program and in association with the Pipeline Safety Regulations/Code of Federal Regulations 49, Part 192, Subpart N. Brocato Construction, Inc. through policy and procedure meets the requirements for training and evaluating the qualifications of employees and or contractors performing operating and maintenance tasks on natural gas transmission and distribution pipeline systems and facilities. Record keeping and scheduling shall be structured so as to identify employees and or contractors performing the covered tasks identified in the Operator Qualification Program Final Rule and the preamble located in Appendix D of the CFR 49, Part 192, Subpart N.

- ***Implementation of Final Rule***

Brocato Construction, Inc. Operator Qualification Program will be available for review on or after April 27, 2001. The effective date of the final rule will be October 26, 1999. Qualification of all affected company and or contractor employees performing covered tasks shall be completed before October 28, 2002 and shall be available for review on or after October 28, 2002. This Operator Qualification Program being in compliance with the Operator Qualification Final Rule shall be made available upon request of it's establishment date of April 27, 2001. The program has been reviewed by the Office of Pipeline Safety and so credited with compliance of Operator Qualification Phase II. Completion of qualification dates of this operator herein known as Brocato Construction, Inc. system shall be accessible through the Recordkeeping section of this program manual located in Section #8.

- ***Written Statement***

This written statement addresses the established criteria for determining methods for evaluating and satisfying qualification of affected personnel performing a covered task and to recognize and respond to abnormal conditions in performance of a covered task. Identifying the covered tasks and the evaluation process used to qualify all affected personnel working for Brocato Construction, Inc. Operator. This process details the evaluation of any and all covered tasks identified through the process as well as identification of progressive work performance and abnormal conditions as they arise during performance of covered tasks. See Section #4 (Covered Task Performance Evaluation List.)

Records to ensure full compliance of Operator Qualification Final Rule will be maintained at all times and made available for review. See Section #8 (Covered Task Employee Information Records or the inspector's Evaluation Records book.) Re-qualification schedules shall be observed in Section #7 (Employee Matrix.)

## **ORGANIZATIONAL AREA OF RESPONSIBILITY**

The candidate chosen to maintain and ensure proper compliance of the Operator Qualification Program shall hold the title of Administrator of Operator Qualification. The Administrator of the Operator Qualifications Program/Master Evaluator shall possess the knowledge and experience to integrate and direct affected personnel as well as provide detailed information to regulatory authorities. These individuals shall be subject matter experts. The Administrator of the Operator Qualifications Program/Master Evaluator shall be responsible for the following: (1) create and direct the operations of the Operator Qualification Program, (2) ensure integrity of the Operator Qualification Program, (3) issue and clarify Operator Qualification Program mandates to all affected personnel, (4) apprising personnel of changes and updates to all affected personnel, (5) ensure all schedules and dates are maintained and adhered too. Notification of pre-schedule dates for training and evaluations shall be provided to all affected personnel and contractors prior to qualification expiration dates. 60 day notification

## **OPERATOR QUALIFICATION COMMITTEE**

The Operator Qualification Administrator shall be responsible for guiding and maintaining the Operator Qualification Program as well as detailed inspection of covered tasks as changes occur. Advisory members are as follows:

- Administrator of Operator Qualification Program
- Operations and Maintenance personnel
- Engineering personnel
- Training Representative
- Experienced field personnel

*NOTE: The Administrator of Operator Qualification is responsible for all training and qualifying materials of the Operator Qualification Program. The responsibility of providing a comprehensive copy of the company's Operator Qualification Program shall be provided by the Administrator of Operator Qualification.*

## **EVALUATION ADVISORY COMMITTEE**

The Evaluation Advisory Committee shall be responsible for the creation and validation of the training and evaluations of all covered tasks performed by affected personnel. The advisory committee shall also be responsible for retraining and reevaluation due to scheduled reevaluations as well as changes in technology and or procedural requirements. Suggested advisory committee members should consist of the following:

- Administrator of Operator Qualification
- Member of management
- Supervisor/Lead position of covered task
- Experienced field representative who performs the covered task

*NOTE: The Evaluation Advisory Committee and the Operator Qualification Administrator/Master Evaluator may be one in the same.*

*NOTE: The authorized personnel that will be providing the assessment evaluation must possess the ability to assess personnel qualifying for the covered task.*

## **COVERED TASK**

Covered tasks will be determined by using the four part criteria listed as follows:

- Performed on a pipeline facility.
- Operation or maintenance task.
- Performed pursuant to a requirement in 49 CFR, Part 192.
- Affects the operations or integrity of the pipeline facility.

The Operator Qualification Administrator/Master Evaluator will use the following as a means to identify and legitimize a covered task list:

- 49 CFR, Part 192 and 195
- Operations and Maintenance Manual
- Service Policy Manual
- Emergency/Disaster Plan
- Private Operator Qualification Manual and or software
- Engineering documentation/definitions and clarification
- Job description /assigned job duties
- Any outside operations manual that will assist in identification
- Assistance of Gas Agency publications/written permission

The Operator Qualification Administrator/Master Evaluator will use a Covered Task Assessment Form in order to break-down, detail and identify each covered task. This form will be used to identify whether the task is either a covered task or a non-covered task. **NOTE:** These forms shall be kept as identification of any assessed covered and non-covered task. The forms shall be kept for potential review by a contracting company, regulatory authority and any union organization.

## **EVALUATION PROCEDURE**

When a task is identified as a covered task by using the Covered Task Assessment Form it shall be assigned a task name and number. Once the task has been identified and assigned a name and number, it then shall be followed up by the Evaluation Advisory Committee. The Evaluation Advisory Committee shall use the Covered Task Performance Evaluation Form. This form shall be used to identify the duties required to perform the covered task and any abnormal operating conditions associated with the covered task. The Evaluation Advisory Committee shall be responsible for identifying the evaluation method, intervals for training, re-training and re-qualification, and the skills required to qualify for each covered task as well as assigning a qualified evaluator for each covered task evaluation by using the Covered Task Evaluation Methods Form. Training and evaluation development is the Evaluation Advisory Committee's responsibility. A thorough investigation by the committee into the covered task and all aspects of abnormal conditions must be inexhaustible. If the evaluation of the covered task requires testing such as a written, CBT, field check or an on the job observation check off list, then all training, testing and or check lists shall be attached to the Covered Task Performance Evaluation Form and the Covered Task Evaluation Method Form and submitted to the Operator Qualification Administrator/Master Evaluator for approval. The evaluation method substantiates the skill and knowledge required to recognize and eliminate any abnormal operating condition ascertained on the Covered Task Performance Evaluation Form. This program is designed to evolve prior to each occurrence of re-qualification of a covered task. **NOTE:** This Operator Qualification Program is designed to train all affected personnel to the next progression level prior to all re-qualifications of

a specific covered task. Written, CBT, field check or an on the job observation check off list shall be conducted only after training at the next progression level. Training and evaluations can not be fully achieved during individual training sessions. The progression for complete qualifications is based on continued elevated education and training. Spasmodic observations using check off lists shall not be used to evaluate the qualifications of personnel during long periods between evaluations. Legal accountability issues can only be addressed if proper training is documented and exercised prior to qualifications by written, CBT, field check or on the job observation check off list.

The evaluation method is defined as;

<b><i>Transitional</i></b>	Qualification completed by October 28, 2002, of individuals who have been performing a covered task on a regular basis prior to the effective date of the rule. (October 28, 2002).
<b><i>Initial</i></b>	Any individuals who were not performing a covered task on a regular basis prior to the effective date of the rule (August 27, 1999).
<b><i>Subsequent</i></b>	Evaluation of an individual's qualification, after "transitional" or "initial" qualification, and at the interval established by the operator. (The scheduled date for training, testing or retesting).
<b><i>Frequency of Subsequent Qualification</i></b>	The frequency of subsequent qualification is the time interval between testing dates and shall be based on the frequency of performing a covered task.

***NOTE: Work performance history review may be used as the sole evaluation method for individuals who were performing a covered task prior to August 27, 1999. Personnel hired after August 27, 1999 shall be trained and evaluated before October 28, 2002 and shall not use the Work Performance History Review as a means of qualification. After the date October 28, 2002 the Work Performance History Review shall not be used as means of qualification of a specific covered task.***

Assessment types of the evaluation methods that may be used to satisfy qualification of a covered task are as follows:

- On the Job Training (OJT).
- On the job performance observation.
- Field check evaluation.
- Simulation of covered task.
- Written.
- Oral.
- Computer Based Training (CBT).
- Other.

In selecting an evaluator he/she need not be qualified under the rule, but must possess the ability to assess personnel performing a covered task and to identify and correct an abnormal operating condition while performing an assigned covered task. The criteria for choosing an evaluator should be based on the individuals work experience, certifications/licenses, educational background, technical background, training background, and supervisory skills as stated in the Final Rule. The evaluator shall be assessed and chosen by the Evaluation Advisory Committee and approved by the Administrator of the Operator Qualification Program/Master Evaluator.

Training and testing development is the Evaluation Advisory Committee's responsibility. A thorough investigation by the committee into the covered task and all aspects of abnormal conditions must be inexhaustible. If the evaluation of the covered task requires testing such as a written, hard copy computer test, field check or an on the job observation check off list then all test and or check lists shall be attached to the Covered Task Performance Evaluation Form and submitted to the Operator Qualification Administrator/Master Evaluator for approval. All written testing and observation check off list shall be kept for review and available to regulatory authority and the operator electronically. All evaluating check off lists forms shall be maintained and updated electronically by the Operator Qualification Administrator/Master Evaluator. These forms shall be the vehicle for observation and rating of personnel performing covered task on the operator's pipeline facility. All such evaluation check lists of personnel performance shall be kept for the entirety of that qualification frequency. All records, hard copy or electronic shall be accessible for review.

**NOTE:** It shall be the responsibility of the gas operator to verify qualification of all affected company employees and contractor(s) personnel performing contract services. Contractor personnel working for the Operator of the Local Distribution Company must submit documentation of the individuals qualification, specifically the covered task being performed. All testing, and evaluating of the operator's personnel, contractor(s) and or sub-contractor(s) who perform covered task duties for the Operator shall maintain an accepted grade or performance rating not less than 70%. *The operator is responsible for ensuring the qualifications of the company providing the contracted services. Contractor/sub-contractor shall submit for review an Operator Qualification Program that equals or exceeds the gas operators program prior to work being performed. Contract services may be performed on the gas operator's/master meter operator's facility without submitting an operator qualification program if the contracting company operates within the criteria addressed in the Operator Qualification Program Final Rule and the preamble located in Appendix D of the CFR 49, Part 192, Subpart N. The service can only be performed using the following means addressing compliance of the final rule.*

- ① The contractor personnel (non-qualified) shall be permitted to perform work or services covered under the final rule, if a qualified representative from the operator is present and observing all activities within close proximity of the work so as in the event an abnormal operating condition where to occur during the performance of the specific covered task the qualified representative could respond and perform corrective actions.
- ② The contractor personnel (non-qualified) may be trained and evaluated for qualifications under the gas operator/master meter operator's Operator Qualification Program. A representative of the gas operator/master meter operator shall witness and observe to ensure the covered tasks being performed by contract services is being performed in accordance with the training and evaluations addressed in the operator's Operator Qualification Program as well as exacting procedures identified in the operators Operating and Maintenance Manual.

#### **ACTIONS AND RESPONSIBILITIES FOR NON-QUALIFIED PERSONNEL**

The responsibility of ensuring a qualified work force lies with the Gas Operator. Qualification and scheduling records shall be handled by the Administrator of the Operator Qualification Program. The Administrator of the Operator Qualification Program shall delegate to management the duty of notifying personnel of schedules for training and qualification of covered task which affect their job tasks. The Administrator of the Operator Qualification Program shall be notified of any personnel deemed to be no longer qualified to perform a covered task by management. The Administrator of the Operator Qualification Program shall schedule the personnel in question for immediate testing to ensure compliance of the rule.

Newly hired employee(s) shall be assigned to qualified employee(s) who are qualified for specific and task sensitive covered tasks. The qualified employee(s) shall teach and observe the newly hired employee(s) and familiarize those employee(s) of company policies, procedures and tasks performed as part of that new employee's task duties. The newly hired employee(s) shall be observed while under the guidance of qualified employee(s) at all times while in the performance of a covered task. Qualified personnel shall be in close proximity to non-qualified personnel and shall be accessible to divert any and all abnormal operating condition that may arise. This recommended guidance and observation interval of newly hired employee(s) by qualified employee(s) should not be less than 6 months. After such time, the qualified employee(s) shall recommend the newly hired employee(s) be trained and evaluated in order to be in compliance with the Operator Qualification Final Rule.

Personnel that has been unsuccessful in their endeavor to qualify for a covered task evaluation shall not be allowed to participate in the performance of that covered task. They may be observed by a qualified individual during the performance of the covered task, but the qualified individual must be able to take immediate and corrective action to eliminate a potential incident if necessary. The non-qualified personnel must be exposed to proper training and retested as soon as the Operator Qualification Administrator/Master Evaluator deems appropriate. After successful retesting, the non-qualified personnel may resume unobserved performance of the covered task.

If there are non-qualified and qualified personnel performing covered tasks, it then becomes the responsibility of management to ensure the non-qualified personnel are teamed with qualified personnel in the performance a covered task. It is imperative that management notify the qualified personnel of the identity of the non-qualified personnel in order to closely observe the individual's performance of the covered task. At no time shall the non-qualified personnel perform a covered task out of sight of qualified personnel. Qualified personnel shall be within reaction distance of a non-qualified personnel performing a covered task.

Management must be notified immediately of any non-qualified personnel being observed performing a covered task without supervision of qualified personnel.

In the event of an emergency or disaster on an operator's pipeline facility whereas the operator would invoke a Mutual Assistance Agreement or Neighboring Assistance Aid from other gas operators or contractors, the operator would ensure all personnel providing assistance is qualified under an Operator Qualification Program and those qualifications shall meet or exceed the requesting gas operator's qualification standards in order to perform any and all covered task needing corrective action. The gas operator/master meter operator would need the assisting agency's operator qualification program with evaluation records and dates of evaluations of all personnel performing assistance to the requesting operator. These qualifications shall be kept on file for the life of the qualification of the personnel that has performed the specific covered task within the operator's facility. All such files must be made available for inspection by regulatory authorities.

Management shall be kept informed through records, qualification forms and postings as to the qualification status of all personnel performing a covered task by the Administrator of the Operator Qualification Program. All records are available upon request to the Administrator of the Operator Qualification Program.

A Qualification Records Form stating an individual's qualifications shall accompany personnel performing contract services of a covered task on any pipeline facility. Forms shall be presented to appropriate personnel before a covered task may be performed. Verification of qualifications of participating personnel shall be presented upon request of proof of qualifications (LDC's, local authority, and regulatory inspections). Management shall be responsible for safe keeping and maintaining a copy of

the Qualification Records Form, documenting all participating personnel's qualifications and schedule dates for re-qualification.

**CHANGES AFFECTING A COVERED TASK**

All affected covered tasks implemented by the operator shall be reviewed at least once each calendar year in order to evaluate the effectiveness of the training and evaluation process of the program. The program shall address the legal accountability of all procedural operations. Any changes to how a covered task is performed must be communicated too and evaluated by the Administrator of the Operator Qualification Program. The Administrator of the Operator Qualification Program shall review and assess the change and determine whether the Evaluation Advisory Committee shall be involved in the reevaluate of the covered task. A new Evaluation Form shall be initiated for a new evaluation. Any changes to the current evaluation must be reviewed and approved by the Administrator of the Operator Qualification Program. The original covered task Evaluation Form must be kept until all affected personnel are re-trained and re-qualified for the covered task. Changes that may affect a covered task are as follows:

<i>Policies and procedures</i>	Policies and procedural changes that affect the way a task is performed may create or eliminated a covered task associated with a job description.
<i>New technology</i>	New technology may eliminate the need to perform a covered task or may change how the covered task is performed.
<i>New product line</i>	New products may alter a process and the procedures associated with a covered task.
<i>Code and regulation amendments</i>	Local and Federal government rule making bodies may change the wording, interpretation or completely eliminate a code or section of a code.
<i>Staff realignment</i>	Staff may be moved into areas where covered tasks are in place.
<i>Added duties to job descriptions</i>	Incorporated tasks may change a covered task. A revision may be needed to the evaluation.
<i>Abnormal conditions associated with all of the above</i>	Abnormal conditions need to be anticipated anytime there is a change to a covered task or the associated evaluation of the covered task.

Changes made by the Evaluation Advisory Committee are submitted to the Administrator of the Operator Qualification Program for review and approval. After approval of changes to the covered task and the evaluation process, the Administrator of Operator Qualification shall distribute the informational changes to the following personnel:

<i>Management</i>	Upper management/supervisory personnel/lead personnel.
<i>Personnel performing the covered task</i>	Affected personnel performing the covered task.

<b>Engineering</b>	Any planning/drawings and or procedures that are affected by a change to a covered task.
<b>Personnel Department</b>	Notification to areas that would handle an employee no longer qualified to perform a covered task. Personnel and Wage & Salary.
<b>Union Representatives</b>	The union office and representatives of the union shall be notified of changes that may affect an employees qualification status/salary.
<b>Contractor</b>	Contractors performing a covered task must be notified of changes in order to satisfy the required qualifications or changes to the already qualified work force. <b>NOTE:</b> Contractors must be given ample time to qualify affected work force performing a covered task. Contractors qualification intervals shall equal or exceed the operator's re-qualification schedule and be submitted to the operator for approval.
<b>Regulatory Authority</b>	The operator shall be responsible for notification to the regulatory authority of any changes and or modifications to the operator's Operator Qualification Program. Operator Qualification protocol shall be applied to any and all changes to the operator's program to ensure compliance of the final rule by the Operator Qualification Administrator.

**NOTE:** The Administrator of Operator Qualifications shall chose new members and rotate existing members on and off of the Evaluation Advisory Committee as the administrator deems necessary in order to ensure the committee's success in addressing Operator Qualification issues. If there is no Evaluation Advisory Committee then the Administrator of Operator Qualifications shall initiate changes and shall communicate said changes to all affected parties performing covered tasks within the gas operator/master meter operator's facility. When committee members are promoted and or rotated to areas that are not covered task sensitive, their length of time removed from these covered task activities needs to be evaluated in order to determine if it would not be better served to replace these key individuals for individuals that are involved with the daily actives associated with the covered tasks. The choice of these individuals should be reviewed with the current committee members and a consensus of all committee members should be reached. The over all success of the committee depends on the teamwork of all of the committee members.

#### **POOR PERFORMANCE OF A COVERED TASK**

If during the performance of a covered task by personnel that is qualified for that covered task and who demonstrates poor performance of that covered task, the performance information shall be reported to the Administrator of the Operator Qualification Program using an Operator Qualification Incident Report Form. The supervisor and or lead personnel must perform a thorough investigation and submit a detailed report to the Administrator of the Operator Qualification Program. Poor performance shall be identified as any condition that impairs an individuals ability to perform a specific covered task successfully, such as; ❶ impaired judgement, ❷ disoriented, ❸ confused, ❹ loss of knowledge of operation of the task, ❺ physically impaired during performance of the task and ❻ angry or agitated. The report shall detail the following information:

- Name of the individual
- Task description
- Task number

- Date/time of incident
- Location
- Description of the incident
- Rating of the performance of the covered task
- Description of any related task that may need to be observed
- Signature of reporter of performance/Management or Operator Qualification Administrator/Master Evaluator

The Administrator of the Operator Qualification Program shall meet with the Evaluation Advisory Committee and discuss the action needed to be taken. The Administrator of the Operator Qualification Program shall determine the type evaluation for re-qualification and the evaluator to perform the evaluation testing. See Section #6 (Covered Task Methods and Frequency List.)

<b>RE-QUALIFICATION</b>	<b>QUALIFICATION STATUS</b>
<i>Satisfactory</i>	After re-evaluation, and the participant is deemed to have been successful, he/she may resume performing the covered task in question. If the participant is successful his/her qualification date shall be reestablished from this evaluation testing date.
<i>Unsatisfactory</i>	After re-evaluation by the master evaluator, and the participant is deemed to have been unsuccessful, the master evaluator shall issue the Operator Qualification Incident Report sheet to the Administrator of the Operator Qualification Program. The Administrator of the Operator Qualification Program shall notify the participant's immediate supervisor that the participant is no longer qualified to perform the covered task. A copy of the Operator Qualification Incident Report Form shall be issued by the Administrator of the Operator Qualification Program to affected management personnel and shall be kept on file by the operator and made available upon request by regulatory agency inspectors.

**NOTE: The number of re-qualification attempts and the interval between each attempt shall be established by the Administrator of the Operator Qualification Program.**

**INCIDENT DURING THE PERFORMANCE OF A COVERED TASK**

In the event that a qualified individual was directly involved in an incident as defined in the Code of Federal Regulations, Title 49, Part 191.3, *Incident*, the individual in question shall cease to perform activities involving the covered task unsupervised until the incident can be investigated. Following a DOT/Regulatory Authorities reportable incident that is consequential, an investigative team shall conduct an investigation and submit the findings to the Administrator of the Operator Qualification Program/Master Evaluator. The investigation criteria shall be based on the following: ① *Cause of emergency*, ② *Extent of damages and injuries*, and ③ *Recommended action to prevent a similar occurrence*. The incident performance information shall then be reported using an Operator Qualification Incident Report Form. The supervisor and or lead personnel must perform a thorough investigation and submit a detailed report to the Administrator of the Operator Qualification Program. The report shall detail the following information:

- Name of the individual
- Task description

- Task number
- Date/time of incident
- Location
- Description of the incident
- Rating of the performance of the covered task
- Description of any related task that may need to be observed
- Signature of reporter of performance/Management or Operator Qualification Administrator/Master Evaluator

The Administrator of the Operator Qualification Program shall meet with the Evaluation Advisory Committee and discuss the action needed to be taken. The Administrator of the Operator Qualification Program shall determine the type evaluation for re-qualification and the evaluator to perform the evaluation testing. See Section #6 (Covered Task Methods and Frequency List.)

<b>RE-QUALIFICATION</b>	<b>QUALIFICATION STATUS</b>
<b>Satisfactory</b>	After re-evaluation, and the participant is deemed to have been successful, he/she may resume performing the covered task in question. If the participant is successful his/her qualification date shall be reestablished from this evaluation testing date.
<b>Unsatisfactory</b>	After re-evaluation by the master evaluator, and the participant is deemed to have been unsuccessful, the master evaluator shall issue the Operator Qualification Incident Report sheet to the Administrator of the Operator Qualification Program. The Administrator of the Operator Qualification Program shall notify the participant's immediate supervisor that the participant is no longer qualified to perform the covered task. A copy of the Operator Qualification Incident Report Form shall be issued by the Administrator of the Operator Qualification Program to affected management personnel and shall be kept on file by the operator and made available upon request by regulatory agency inspectors.
<b>NOTE: The number of re-qualification attempts and the interval between each attempt shall be established by the Administrator of the Operator Qualification Program.</b>	

**RECORD KEEPING**

A record keeping system shall be established for the purpose of tracking the qualifications of all affected personnel. Total compliance of the rule shall be adhered too and maintained. The record keeping shall meet the following criteria:

<b>An individuals personnel information; (1) name, (2) employee ID, and (3) classification.</b>
<b>A detailed list of the individuals qualifications, such as; (1) covered task title and number, (2) evaluation method of covered task, (3) covered task qualification date, (4) expiration date of qualification, and (5) previous qualification information such as testing and retesting dates and performances.</b>
<b>Qualification records shall be kept current and made available for review to agencies and or regulatory authority, etc.</b>

All contractor qualification records shall be kept current and shall be made available for review upon request of said qualification records. Qualification records shall be presented to the Operator of the Local Distribution Company as proof of qualifications and shall be kept with the contracting company's written plan. A contractor's written Operator Qualification Plan shall be included and incorporated into the Operator of the LDC's written plan. The contractor shall satisfy the written Operator Qualification Plan of the LDC.

Through attrition, records shall be kept for a period not less than five years after an individual has ceased to perform the covered task, such as; (1) retirement, (2) promotion, (3) death, and (4) termination.

The following shall be used to record and maintain Operator Qualification records: (1) database, (2) hard copy (paper) and photo ID. Backup copies shall be kept in the database. Recordable disc backup and secured in a secure and fire safe location.

**NOTE:** Records shall be kept by using the following methods:

- Qualification Records Matrix
- Employee Information Record
- Evaluation Records
- Technical Hands-on Data Sheets
- Photo Identification Records

<b>MUTUAL ASSISTANCE AID/CONTRACTORS COVERED TASK LIST</b>	
<b>01</b>	<b><i>Odorant and Odorizer 192.625, 706</i></b>
<b>02a</b>	<b><i>Rectifier Inspection 192.455, 489</i></b>
<b>02b</b>	<b><i>Rectifier Troubleshooting 192.455, 489</i></b>
<b>02c</b>	<b><i>Pipe-To-Soil Voltage Reading 192.455, 489</i></b>
<b>03</b>	<b><i>Purging of Natural Gas 192.629</i></b>
<b>04</b>	<b><i>Operating and Maintaining Primary Gas Valves 192.745, 747</i></b>
<b>05</b>	<b><i>Abandonment/Deactivation of Gas Facilities 192.727</i></b>
<b>06</b>	<b><i>Maintaining and Repairing of Steel Piping 192.309</i></b>
<b>07</b>	<b><i>Maintaining and Repairing of Cast Iron Piping 192.275, 277, 753, 755</i></b>
<b>08</b>	<b><i>Maintaining and Repairing of PE Pipe 192.281, 287</i></b>
<b>09</b>	<b><i>Plastic Pipe Fusion and Inspection of Joints 192.281, 287</i></b>
<b>09a</b>	<b><i>PE Plastic Butt Fusion Joint 192.281, 287</i></b>
<b>09b</b>	<b><i>PE Plastic Socket Fusion Joint 192.281, 287</i></b>
<b>09c</b>	<b><i>PE Plastic Saddle Fusion Joint 192.281, 287</i></b>
<b>09d</b>	<b><i>PE Plastic Socket Electrofusion Joint 192.281, 287</i></b>
<b>09e</b>	<b><i>PE Plastic Saddle Electrofusion Joint 192.281, 287</i></b>
<b>10</b>	<b><i>Patrolling 192.705, 706, 721, 723</i></b>
<b>11</b>	<b><i>Leak Survey 192.723</i></b>
<b>12</b>	<b><i>Locating and Marking Gas Pipelines 192.706, 723</i></b>
<b>13</b>	<b><i>Tapping and Stopping 192.627</i></b>
<b>14</b>	<b><i>System Upgrading 192.555, 557</i></b>
<b>15</b>	<b><i>Inspecting Pressure Regulating Stations 192.181, 199, 201, 457, 505</i></b>
<b>16</b>	<b><i>Vault Inspection 192.183, 185, 187, 189, 355, 727, 749</i></b>
<b>17</b>	<b><i>Pressure Testing to Establish Gas Service 192.707, 725</i></b>
<b>18</b>	<b><i>Leak Investigation and Odor Complaints 192.705, 706, 721, 723</i></b>
<b>19</b>	<b><i>Customer Leak Investigation and Odor Complaint 192.705, 706, 721, 723</i></b>
<b>20</b>	<b><i>Repairs on Transmission Lines 192.711, 713, 715, 717</i></b>
<b>21</b>	<b><i>Welding on Distribution Gas Lines 192.225, 227, 229, 231</i></b>
<b>22</b>	<b><i>Non-Destructive Testing and Inspection of Welds 192.241, 243</i></b>

23	<i>Monitoring Atmospheric Corrosion 192.479, 481</i>
24	<i>Inspecting and Maintaining Telemetry Equipment 192.471</i>
25	<i>System Operation Monitoring and Remotely Controlling Gas 192.195, 199, 203, 615, 741</i>
26	<i>Accidental Release of Natural Gas 192.736, 751</i>
27	<i>Inspecting and Maintaining Pipeline Heater 192.739</i>
28	<i>Gas Meter Disconnect / Turn-off 192.727(d)</i>
29	<i>Field Repair Pipe Coating 192.455, 457, 459, 461, 463, 479, 483</i>
30	<i>Tamping and Backfilling 192.319, 361</i>
31	<i>Excavating and Shoring 192.319, 361</i>
32	<i>Maintaining and Repair of Hazardous Liquid Pipelines 192.165, 167 (Part 193 &amp; 195)</i>
33	<i>Homeland Security (Non-Regulatory Issue)</i>

This covered task list addresses the contractor(s) or mutual aid who may perform those tasks the operator does not perform, or is not qualified to perform. It identifies the standard for the covered task list for those who perform those tasks for the operator. This is not the operator's covered task list. See operator's "CUSTOMIZED COVERED TASK LIST."

#### **DETAILED INFORMATIONAL DERIVATIVES OF THIS COVERED TASK LIST**

- ✦ Measure structure-to-electrolyte potential (02a, 02b, 02c)
- ✦ Conduct Close Interval Survey (02a, 02b, 02c)
- ✦ Measure Soil Resistivity (02c)
- ✦ Install galvanic anodes (02a, 02b, 02c)
- ✦ Inspect and maintain galvanic ground beds/anodes (02a, 02b, 02c)
- ✦ Install impressed current ground beds (02a, 02b, 02c)
- ✦ Installation and Maintenance Mechanical Electrical Connections (tracer wire/test leads/bonds) (02a, 02b, 02c, 08, 09, 12, 20, 21, 29, 30, 31)
- ✦ Installation of Exothermic Electrical Connections (tracer wire/test leads/bonds) (02a, 02b, 02c, 08, 09, 12, 20, 21, 29, 30, 31)
- ✦ Inspect or Test Cathodic Protection System (bonds/isolation devices) (02a, 02b, 02c)
- ✦ Troubleshoot Cathodic Protection System (bonds or isolation devices or interferences or shorts) (02a, 02b, 02c, 08, 09, 12, 20, 21, 29, 30, 31)
- ✦ Inspect Rectifier and Obtain Readings (02a, 02b)
- ✦ Maintain Rectifier (02a, 02b)
- ✦ Troubleshoot rectifier (02a, 02b)
- ✦ Operate Rectifier (02a, 02b)
- ✦ Conduct Close Interval Survey (02a, 02b, 02c)
- ✦ Measure Soil Resistivity (02a, 02b, 02c)
- ✦ Install galvanic anodes (02a, 02b, 02c, 08, 09, 12, 20, 21, 29, 30, 31)
- ✦ Inspect and maintain galvanic ground beds/anodes (02a, 02b, 02c, 08, 09, 12, 20, 21, 29, 30, 31)
- ✦ Install impressed current ground beds (02a, 02b, 02c, 08, 09, 12, 20, 21, 29, 30, 31)
- ✦ Installation and Maintenance Mechanical Electrical Connections (tracer wire/test leads/bonds) (02a, 02b, 02c, 08, 09, 12, 20, 21, 29, 30, 31)
- ✦ Installation of Exothermic Electrical Connections (tracer wire/test leads/bonds) (02a, 02b, 02c, 08, 09, 12, 20, 21, 29, 30, 31)

- ✱ Inspect or Test Cathodic Protection System (bonds or isolation devices) (02a, 02b, 02c)
- ✱ Troubleshoot Cathodic Protection System (bonds or isolation devices or interferences or shorts) (02a, 02b, 02c)
- ✱ Inspect Rectifier and Obtain Readings (02a, 02b)
- ✱ Maintain Rectifier (02a, 02b)
- ✱ Troubleshoot rectifier (02b)
- ✱ Operate Rectifier (02a, 02b, 02c)
- ✱ Collect sample for internal corrosion monitoring (02a, 02b, 02c, 06, 12, 20, 21, 22, 29, 30, 31)
- ✱ Measure internal corrosion (02a, 02b, 02c, 06, 12, 20, 21, 22, 29, 30, 31)
- ✱ Insert and remove coupons/probes for internal corrosion monitoring (02a, 02b, 02c, 06, 12, 20, 21, 22, 29, 30, 31)
- ✱ Obtain readings from on-line monitoring devices for internal corrosion (probes) (02a, 02b, 02c)
- ✱ Visual inspection for atmospheric corrosion (23)
- ✱ Visual Inspection of buried pipe and components when exposed (05, 06, 08, 12, 20, 21, 23, 29, 31, 32)
- ✱ Measure external corrosion (23)
- ✱ Operate and Maintain Sensing Devices (pressure switches/press/temp/differential transmitters) (24, 25)
- ✱ Operate and Maintain Programmable Logic Controllers (24, 25)
- ✱ Operate and Maintain Flow Computers (24, 25)
- ✱ Operate and Maintain - Overfill Devices (Level Switches and Tank Gauging) (01, 24, 25)
- ✱ Operate and Maintain Tank Gauges for Leak Detection (01, 24, 25)
- ✱ Prove Flow Meters for Leak Detection (manual) (17, 18, 19, 24, 28)
- ✱ Operate and Maintain Flow Meters for Leak Detection (17, 18, 19, 24, 28)
- ✱ Operate and Maintain Gravimeters/Densitometers for Leak Detection (17, 18, 19, 24, 28)
- ✱ Manually Operate Valves (curb box valves and lock wings) (04, 23, 28)
- ✱ Manually Throttle Valves (curb box valves and lock wings) (04, 23, 28)
- ✱ Valve Corrective Maintenance (04, 23, 28)
- ✱ Valve - Visual Inspection and Partial Operation (04, 23, 28)
- ✱ Pneumatic Actuator/Operator Preventive and Corrective Maintenance (01, 03, 04, 06, 08, 13, 15, 17, 18, 19, 24, 25, 26, 28)
- ✱ Pneumatic Actuator/Operator Operating and Adjustment (01, 03, 04, 06, 08, 13, 15, 17, 18, 19, 24, 25, 26, 28)
- ✱ Electric Actuator/Operator Preventive and Corrective Maintenance (01, 03, 04, 06, 08, 13, 15, 17, 18, 19, 24, 25, 26, 28)
- ✱ Electric Actuator/Operator Operating and Adjustment (01, 03, 04, 06, 08, 13, 15, 17, 18, 19, 24, 25, 26, 28)
- ✱ Hydraulic Actuator/Operator Preventive and Corrective Maintenance (01, 03, 04, 06, 08, 13, 15, 17, 18, 19, 24, 25, 26, 28)
- ✱ Hydraulic Actuator/Operator Operating and Adjustment (01, 03, 04, 06, 08, 13, 15, 17, 18, 19, 24, 25, 26, 28)
- ✱ Pressure Regulating Device Preventive and Corrective Maintenance, and Operating (15, 26, 28)
- ✱ Pressure Limiting and Relief Device Preventive/Corrective Maintenance, and Operating (15, 26, 28)
- ✱ Compressor Start-up and Shutdown - CNG/LNG (24, 25)
- ✱ Pump - Start-up and Shutdown - CNG/LNG (24, 25)
- ✱ Compressor Preventive Maintenance CNG/LNG (24, 25)
- ✱ Reciprocating Compressor Corrective Maintenance CNG/LNG (24, 25)
- ✱ Centrifugal Compressor Corrective Maintenance CNG/LNG (24, 25)
- ✱ Rotary Compressor Corrective Maintenance CNG/LNG (24, 25)
- ✱ Operate New, Replaced or Rebuilt Compressor CNG/LNG (24, 25)
- ✱ Pump Preventive Maintenance CNG/LNG (24, 25)

- ⊛ Centrifugal Pump Corrective Maintenance CNG/LNG (24, 25)
- ⊛ Reciprocating Pump Corrective Maintenance CNG/LNG (24, 25)
- ⊛ Rotary Pump Corrective Maintenance CNG/LNG (24, 25)
- ⊛ Screw Pump Corrective Maintenance CNG/LNG (24, 25)
- ⊛ Operate New, Replaced or Rebuilt Pump CNG/LNG (24, 25)
- ⊛ Explosive Atmosphere Detection/Alarm System Operation/Corrective Maintenance/Performance Test (03, 04, 06, 08, 10, 11, 12, 14, 15, 18, 19, 26, 28, 31)
- ⊛ Pressure Test - Non-liquid Medium - Test Pressure Less Than 100 psi (03, 04, 06, 08, 11, 12, 14, 15, 18, 19, 26, 28)
- ⊛ Pressure Test - Non-liquid Medium - Test Pressure Greater Than or Equal To 100 psi (03, 04, 06, 08, 11, 12, 14, 15, 18, 19, 26, 28)
- ⊛ Pressure Test - Liquid Medium (03, 04, 06, 08, 11, 12, 14, 15, 18, 19, 26, 28)
- ⊛ Leak Test at Operating Pressure (03, 04, 06, 08, 11, 12, 14, 15, 18, 19, 26, 28)
- ⊛ NDT - Radiographic Testing (Qualify in accordance with ASNT TCIA Level 2 Minimum) (20, 21, 22)
- ⊛ NDT - Dye Penetrant Testing (Qualify in accordance with ASNT TCIA Level 2 Minimum) (20, 21, 22)
- ⊛ NDT - Magnetic Particle Testing (Qualify in accordance with ASNT TCIA Level 2 Minimum) (20, 21, 22)
- ⊛ NDT - Ultrasonic Testing (excludes wall thickness determination with a UT wall thickness device) Qualify in accordance with ASNT TCIA Level 2 Minimum (20, 21, 22)
- ⊛ Visually Inspect Pipe and Components Prior to Installation (20, 21, 22, 23)
- ⊛ Routine visual inspection of breakout tanks (20, 21, 22, 23)
- ⊛ Inspection of Breakout Tanks (in-service or out of service) Qualify in accordance with API 653 (20, 21, 22, 23)
- ⊛ Flange Assembly/Maintenance standards (04, 05, 06, 13, 14, 15, 17, 18, 19, 20, 21, 28)
- ⊛ Mechanical Joining of Pipe (compression joints) (04, 05, 06, 13, 14, 15, 17, 18, 19, 20, 21, 28)
- ⊛ Threaded Joining of Pipe (04, 05, 06, 13, 14, 15, 17, 18, 19, 20, 21, 28)
- ⊛ Copper Pipe Joining - Brazing or Soldering (K and L)(Antimony and Bismuth application procedure) (04, 05, 06, 13, 14, 15, 17, 18, 19, 20, 21, 28)
- ⊛ Sealing Cast Iron Joints (04, 05, 07, 13, 14, 15, 17, 18, 19, 20, 21, 28)
- ⊛ Tubing & Fitting Installation (Tube fabrication criteria) (04, 05, 06, 13, 14, 15, 17, 18, 19, 20, 21, 23, 24, 25, 26, 28)
- ⊛ Plastic Pipe - Butt/Socket/Saddle/Socket Electrofusion/Saddle Electrofusion/Tapping) (03, 09, 09a, 09b, 09c, 09d, 09e, 13, 17, 18, 19, 26, 28)
- ⊛ Welding (Oxy-acetylene/SMAW/GMAW/GTAW/Plasma) (03, 04, 05, 06, 13, 17, 18, 19, 20, 21, 22, 28, 29, 30, 31)
- ⊛ Installation of Pipe - Open Trench (excavation completed) (03, 04, 05, 06, 13, 17, 18, 19, 20, 21, 22, 28, 29, 31, 32)
- ⊛ Installation of Pipe - Other Than Open Trench (e.g., boring, plowing, insertion) (boring completed) (03, 04, 05, 06, 13, 17, 18, 19, 20, 21, 22, 28, 29, 30, 31)
- ⊛ Installation of Pipe Above Ground (03, 04, 05, 06, 13, 17, 18, 19, 20, 21, 22, 28, 29, 30, 31)
- ⊛ Supports and Anchors - Operate, Preventive or Corrective Maintenance (03, 04, 05, 06, 13, 17, 18, 19, 20, 21, 22, 28, 29)
- ⊛ Installation and Maintenance of Casing Spacers, Vents and Seals (03, 06, 13, 16, 17, 18, 19, 20, 21, 22, 29)
- ⊛ Achieve or Maintain Minimum Cover (05, 06, 07, 08, 09, 20, 21, 22, 29, 30, 31)
- ⊛ Achieve or Maintain Minimum Underground Clearances (05, 06, 07, 08, 09, 20, 21, 22, 29, 30, 31)
- ⊛ Backfilling (includes padding and shading) (05, 06, 07, 08, 09, 20, 21, 22, 29, 30, 31)
- ⊛ External Coating Installation and Repair (05, 06, 07, 08, 09, 20, 21, 22, 29, 30, 31)
- ⊛ Install Mechanical Clamps and Sleeves (05, 06, 07, 08, 09, 20, 21, 22, 29, 30, 31)

- ✱ Install Weld Repair Sleeve (05, 06, 07, 08, 09, 20, 21, 22, 29, 30, 31)
- ✱ Install Composite Sleeves (05, 06, 07, 08, 09, 20, 21, 22, 29, 30, 31)
- ✱ Repair of Steel Pipe by Grinding/Annealing/beta silicon phase elongation/increased tensile strength (05, 06, 20, 21, 22, 29, 30, 31)
- ✱ Tapping a Pipeline (tap diameter 2 inch and less)(tap diameter greater than 2 inch) (05, 06, 07, 08, 09, 13, 20, 21, 22, 29, 30, 31)
- ✱ Tapping a Pipeline with a Manual Cutter (built-in cutter) (05, 06, 07, 08, 09, 13, 20, 21, 22, 29, 30, 31)
- ✱ Tapping Cast and Ductile Iron Pipe, and Low Pressure Steel Pipe (05, 06, 07, 08, 09, 13, 20, 21, 22, 29, 30, 31)
- ✱ Bagging and Stopping Low Pressure Pipe (diaphragm/bladder) (05, 06, 07, 08, 09, 13, 20, 21, 22, 29, 30, 31)
- ✱ Stopper (Stopp) Pipe (05, 06, 07, 08, 09, 13, 20, 21, 22, 29, 30, 31)
- ✱ Squeeze off Pipe (05, 06, 07, 08, 09, 13, 20, 21, 22, 29, 30, 31)
- ✱ Purging (03, 04, 05, 06, 07, 08, 09, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 26, 28)
- ✱ Installing Customer Meters and Regulators (pilfer proof cock/security/liability) (03, 04, 05, 06, 07, 08, 09, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 26, 28)
- ✱ Valve Replacement (03, 04, 05, 06, 07, 08, 09, 11, 12, 13, 14, 17, 18, 19, 20, 21, 26, 28, 29, 30, 31)
- ✱ Service Discontinuance/Abandonment ((03, 04, 05, 06, 07, 08, 09, 11, 12, 13, 16, 17, 18, 19, 20, 21, 26, 28)
- ✱ Odorization - Sniff Test (01, 04, 06, 07, 08, 09, 15, 18, 19, 24, 25, 26)
- ✱ Odorization - Odorizer Maintenance (01, 04, 06, 07, 08, 09, 15, 18, 19, 24, 25, 26)
- ✱ Odorization - Operate or Replace Odorizer (01, 04, 06, 07, 08, 09, 15, 18, 19, 24, 25, 26)
- ✱ Inside Gas Leak Investigation (01, 02c, 04, 06, 07, 08, 09, 11, 12, 15, 17, 18, 19, 26, 28)
- ✱ Outside Gas Leak Investigation (01, 02c, 04, 06, 07, 08, 09, 11, 12, 15, 17, 18, 19, 26, 28)
- ✱ Prevention of Accidental Ignition (01, 02c, 04, 06, 07, 08, 09, 11, 12, 15, 17, 18, 19, 26, 28)
- ✱ Hazardous Liquid Leak Investigation (01, 02a, 02b, 02c, 04, 06, 07, 08, 09, 11, 12, 15, 17, 18, 19, 20, 21, 23, 24, 25, 26, 28, 29, 30, 31)
- ✱ Walking Gas Leakage Survey-Flame Ionization Unit (03, 10, 11, 12, 18, 19)
- ✱ Mobile Gas Leakage Survey - Flame Ionization Unit (03, 10, 11, 12, 18, 19)
- ✱ Mobile Gas Leakage Survey - Optical Methane/Vegetation Investigation (03, 10, 11, 12, 18, 19)
- ✱ Locate Underground Pipeline and Facilities (11, 12, 18, 19)
- ✱ Install and Maintain Pipeline Markers/Crossing/Warning (03, 06, 07, 08, 09, 12, 18, 19, 20, 21, 29, 30, 31)
- ✱ Inspect Pipeline Facility Surface Conditions - Patrol Right Of Way/Easement/Ariel/Mobile (03, 06, 07, 08, 09, 12, 18, 19, 20, 21, 29, 30, 31)
- ✱ Excavation or Encroachment Notification (Third Party) (03, 06, 07, 08, 09, 12, 18, 19, 20, 21, 29, 30, 31)
- ✱ Determine Damage Prevention Requirements For Third Party Excavations or Encroachments (03, 06, 07, 08, 09, 12, 18, 19, 20, 21, 29, 30, 31)
- ✱ Damage Prevention During Operator Excavation or Encroachment Activities (03, 06, 07, 08, 09, 12, 18, 19, 20, 21, 29, 30, 31)
- ✱ Damage Prevention Inspection During Third Party Excavation or Encroachment Activities (03, 06, 07, 08, 09, 12, 18, 19, 20, 21, 29, 30, 31)
- ✱ Protection During Disturbance of Segment Support/Heaving/Loading/Seismic/Blasting (03, 06, 07, 08, 09, 12, 18, 19, 20, 21, 29, 30, 31)
- ✱ Vault Inspection and Maintenance (Vault/Enclosure Protection/Security) (03, 04, 06, 07, 08, 16, 20, 21, 23, 24, 25, 26, 29)
- ✱ Launching and Receiving Pigs (03, 04, 06, 07, 08, 16, 20, 21)
- ✱ Station Emergency Shutdown Device(s) - Operate, Maintenance and Performance Test (01, 02a, 02b, 02c, 04, 06, 07, 08, 09, 11, 12, 15, 17, 18, 19, 20, 21, 23, 24, 25, 26, 28, 29, 30, 31)

- ② Operate Gas Pipeline - System Control Center Operations (remote control of multiple facilities) (24, 25)
- ② Operate Gas Pipeline - Local Facility Remote-Control Operations/Telemetry (24, 25)
- ② Operate Liquids Pipeline - System Control Center Operations (remote control of multiple facilities) (01, 02a, 02b, 02c, 04, 06, 07, 08, 09, 11, 12, 15, 17, 18, 19, 20, 21, 23, 24, 25, 26, 28, 29, 30, 31)
- ② Operate Liquids Pipeline - Local Facility Remote-Control Operations/Telemetry (01, 02a, 02b, 02c, 04, 06, 07, 08, 09, 11, 12, 15, 17, 18, 19, 20, 21, 23, 24, 25, 26, 28, 29, 30, 31)
- ② Confirmatory Direct Assessment - Data Analysis, Verification Method/Location Selection (02a, 02b, 02c, 04, 06, 10, 11, 12, 18, 19, 20, 21, 26, 29, 30, 31)
- ② External Corrosion Direct Assessment - Data Analysis, Verification Method/Location Selection (02a, 02b, 02c, 04, 06, 10, 11, 12, 18, 19, 20, 21, 26, 29, 30, 31)
- ② Internal Corrosion Direct Assessment - Data Analysis, Verification Method/Location Selection (02a, 02b, 02c, 04, 06, 10, 11, 12, 18, 19, 20, 21, 26, 29, 30, 31)
- ② Stress Corrosion Direct Assessment - Data Analysis, Verification Method/Location Selection (02a, 02b, 02c, 04, 06, 10, 11, 12, 18, 19, 20, 21, 26, 29, 30, 31)
- ② Inline Inspection - Data Analysis (Qualify in accordance with ASNT ILI PQ) (02a, 02b, 02c, 04, 06, 10, 11, 12, 18, 19, 20, 21, 26, 29, 30, 31)
- ② Evaluate Inline Inspection or Hydrostatic Assessment (ILI & Hydro) Results, Make Re-mediation and Mitigation Decisions, and Establish Re-inspection Intervals, Applicability to Rest of System From ILI & Hydro Tests (02a, 02b, 02c, 04, 06, 10, 11, 12, 17, 18, 19, 20, 21, 26, 29, 30, 31)
- ② Conduct Inline Inspection (02a, 02b, 02c, 04, 06, 10, 11, 12, 18, 19, 20, 21, 26, 29, 30, 31)
- ② Indirect Inspection Techniques (AC Current Mapping, Close Interval Survey, Instant On/Off Potential Survey, Soil Resistivity) (02a, 02b, 02c, 04, 06, 10, 11, 12, 18, 19, 20, 21, 26, 29, 30, 31)
- ② Direct Examination Techniques ( Ultrasonic examination, coating holiday testing, visual examination) (02a, 02b, 02c, 04, 06, 10, 11, 12, 18, 19, 20, 21, 26, 29, 30, 31)
- ② Analyze & Evaluate Data and Information, and Establish and Revise Integrity Management Plan (02a, 02b, 02c, 04, 06, 10, 11, 12, 18, 19, 20, 21, 26, 29, 30, 31)

<b>UTILITY WELDING CODE AGENCIES</b>	
<b>ANSI</b> American National Standards Institute 11 W. 42 <sup>nd</sup> Street New York, NY 10036	<b>API</b> American Petroleum Institute 2101 L Street, NW Washington, DC 20005
<b>ASME</b> American Society of Mechanical Engineers 345 East 47 <sup>th</sup> Street New York, NY 10017	<b>AWS</b> American welding Society 550 NW LeJeune Road Miami, FL 33126
<b>ASNT</b> American Society for Nondestructive Testing 1711 Arlingate Lane Columbus, OH 43228	<b>AGA</b> American Gas Association 1515 Wilson Blvd. Arlington, VA 22209

The three most popular codes which address welding for the natural gas industry, are as follows:

- \* API 1104 (API) for pipelines
- \* Section IX (ASME) for pressure vessels
- \* D1.1 (AWS) for bridges and buildings



**Welding & Fabricating, Inc.**

<b>BROCATO CONSTRUCTION, INC. COVERED TASK LIST</b>	
<b>03</b>	<i>Purging of Natural Gas 192.629</i>
<b>05</b>	<i>Abandonment/Deactivation of Gas Facilities 192.727</i>
<b>06</b>	<i>Maintaining and Repairing of Steel Piping 192.309</i>
<b>08</b>	<i>Maintaining and Repairing of PE Pipe 192.281, 287</i>
<b>09</b>	<i>Plastic Pipe Fusion and Inspection of Joints 192.281, 287</i>
<b>09a</b>	<i>PE Plastic Butt Fusion Joint 192.281, 287</i>
<b>09c</b>	<i>PE Plastic Saddle Fusion Joint 192.281, 287</i>
<b>13</b>	<i>Tapping and Stopping 192.627</i>
<b>17</b>	<i>Pressure Testing to Establish Gas Service 192.707, 725</i>
<b>29</b>	<i>Field Repair Pipe Coating 192.455, 457, 459, 461, 463, 479, 483</i>
<b>30</b>	<i>Tamping and Backfilling 192.319, 361</i>
<b>31</b>	<i>Excavating and Shoring 192.319, 361</i>

## OPERATOR QUALIFICATION COVERED TASK PERFORMANCE EVALUATION

**Task#: 03**

**Task Name: Purging of Natural Gas**

**Covered Task Evaluation Advisory Committee Members:**

1.		2.	
3.		4.	
5.		6.	

**Sections of the D.O.T. 192 that apply:**

192.629									

**Sections of the Operations and Maintenance Manual that apply:**


**Duties that may be required to perform this task:**

1	<i>Operating valves</i>	10	<i>Investigation of gas equipment</i>
2	<i>Notify the public</i>	11	<i>Observation of weather conditions</i>
3	<i>Operate gas CGI</i>	12	<i>Observation of environment</i>
4	<i>Use of PPE/proper clothing</i>	13	<i>Principals of Base Pressure/Factors</i>
5	<i>Operate fire extinguisher</i>	14	<i>Code compliance/SBCCI/IFGC/NFPA</i>
6	<i>Secure area</i>	15	
7	<i>Initiation of Emergency Procedures</i>	16	
8	<i>Bar Hole migration areas</i>	17	
9	<i>Proper testing procedures</i>	18	

**Abnormal Operating Conditions Associated with this Task:**

1	<i>Ignition of natural gas</i>	4	
2	<i>Fire/Explosion</i>	5	
3	<i>Failure to follow procedures</i>	6	

# OPERATOR QUALIFICATION COVERED TASK PERFORMANCE EVALUATION

**Task#: 05**

**Task Name: Abandonment/Deactivation of Gas Facilities**

**Covered Task Evaluation Advisory Committee Members:**

1.		2.	
3.		4.	
5.		6.	

**Sections of the D.O.T. 192 that apply:**

192.727									

**Sections of the Operations and Maintenance Manual that apply:**


**Duties that may be required to perform this task:**

1	<i>Traffic control</i>	10	
2	<i>Operate valves</i>	11	
3	<i>Proper mapping/location of feeding valves</i>	12	
4	<i>Purge lines</i>	13	
5	<i>Secure open ends/sealing</i>	14	
6	<i>Removal of associated equipment/material</i>	15	
7	<i>Follow procedures</i>	16	
8	<i>Proper backfilling/tamping</i>	17	
9		18	

**Abnormal Operating Conditions Associated with this Task:**

1	<i>Ignition of natural gas</i>	4	<i>Excavation cave-in</i>
2	<i>Fire</i>	5	<i>Traffic mishaps</i>
3	<i>Migration of odorant</i>	6	

## OPERATOR QUALIFICATION COVERED TASK PERFORMANCE EVALUATION

**Task#: 06**

**Task Name: Maintaining and Repairing of Steel Piping**

**Covered Task Evaluation Advisory Committee Members:**

1.		2.	
3.		4.	
5.		6.	

**Sections of the D.O.T. 192 that apply:**

192.309									

**Sections of the Operations and Maintenance Manual that apply:**


**Duties that may be required to perform this task:**

<b>1</b>	<b>Visual inspection</b>	<b>10</b>	<b>Pipe coating</b>
<b>2</b>	<b>Measure "Dent" depression</b>	<b>11</b>	<b>Purge</b>
<b>3</b>	<b>Calculate SMYS</b>	<b>12</b>	<b>Re-establish service</b>
<b>4</b>	<b>Check cathodic protection</b>	<b>13</b>	
<b>5</b>	<b>Ground cover removal/shoring</b>	<b>14</b>	
<b>6</b>	<b>Monitor area for hazardous environment</b>	<b>15</b>	
<b>7</b>	<b>Repair method (mechanical/welded)</b>	<b>16</b>	
<b>8</b>	<b>Repair cathodic protection</b>	<b>17</b>	
<b>9</b>	<b>Ammonium persulfate treatment</b>	<b>18</b>	

**Abnormal Operating Conditions Associated with this Task:**

<b>1</b>	<b>Burn through</b>	<b>4</b>	<b>Excavation cave-in</b>
<b>2</b>	<b>Fire</b>	<b>5</b>	
<b>3</b>	<b>Hazardous environment</b>	<b>6</b>	

## OPERATOR QUALIFICATION COVERED TASK PERFORMANCE EVALUATION

**Task#: 08**

**Task Name: Maintaining and Repairing of PE Pipe**

**Covered Task Evaluation Advisory Committee Members:**

1.		2.	
3.		4.	
5.		6.	

**Sections of the D.O.T. 192 that apply:**

192.281	192.287								

**Sections of the Operations and Maintenance Manual that apply:**


**Duties that may be required to perform this task:**

1	Discharge static charge	10	
2	Squeeze off damage pipe	11	
3	Clean and prepare the repair area	12	
4	Purge	13	
5	Test for leakage	14	
6	Coat pipe	15	
7	Monitor area for hazardous environment	16	
8	Install mechanical repair fitting	17	
9		18	

**Abnormal Operating Conditions Associated with this Task:**

1	Ignition of natural gas/Fire	4	Hazardous environment
2	Faulty equipment operation	5	Failure to follow procedure
3	Excavation cave-in	6	Weather conditions (wind, rain, cold)

## OPERATOR QUALIFICATION COVERED TASK PERFORMANCE EVALUATION

<b>Task#:</b> 09	<b>Task Name:</b> Plastic Pipe Fusion and Inspection of Joints
------------------	--

**Covered Task Evaluation Advisory Committee Members:**

1.	2.
3.	4.
5.	6.

**Sections of the D.O.T. 192 that apply:**

192.281	192.287								

**Sections of the Operations and Maintenance Manual that apply:**


**Duties that may be required to perform this task:**

1	Ensure equipment operates properly	10	
2	Ensure heating temperature	11	
3	Correct applied pressure	12	
4	Purge	13	
5	Test for leakage	14	
6	Correct alignment of pipe	15	
7	Monitor area for hazardous environment	16	
8	Clean repair area	17	
9	Proper static discharge procedures	18	

**Abnormal Operating Conditions Associated with this Task:**

1	Ignition of natural gas/Fire	4	Hazardous environment
2	Equipment operating improperly	5	Failure to follow procedure
3	Excavation cave-in	6	Weather conditions (wind, rain, cold)

## OPERATOR QUALIFICATION COVERED TASK PERFORMANCE EVALUATION

**Task#: 09a**

**Task Name: PE Plastic Pipe Butt Fusion**

**Covered Task Evaluation Advisory Committee Members:**

1.		2.	
3.		4.	
5.		6.	

**Sections of the D.O.T. 192 that apply:**

192.281	192.287								

**Sections of the Operations and Maintenance Manual that apply:**


**Duties that may be required to perform this task:**

1	Ensure equipment operates properly	10	
2	Ensure heating temperature	11	
3	Correct applied pressure	12	
4	Purge	13	
5	Test for leakage	14	
6	Clean repair area	15	
7	Monitor are for hazardous environment	16	
8	Coat pipe repair	17	
9		18	

**Abnormal Operating Conditions Associated with this Task:**

1	Ignition of natural gas	4	Hazardous environment
2	Fire	5	Failure to follow procedues
3	Excavation cave-in	6	Weather conditions (wind, rain,cold)

## OPERATOR QUALIFICATION COVERED TASK PERFORMANCE EVALUATION

**Task#: 09c**

**Task Name: PE Plastic Saddle Fusion Joint**

**Covered Task Evaluation Advisory Committee Members:**

<b>1.</b>		<b>2.</b>	
<b>3.</b>		<b>4.</b>	
<b>5.</b>		<b>6.</b>	

**Sections of the D.O.T. 192 that apply:**

192.281	192.287								

**Sections of the Operations and Maintenance Manual that apply:**


**Duties that may be required to perform this task:**

<b>1</b>	<i>Ensure equipment operates properly</i>	<b>10</b>	
<b>2</b>	<i>Ensure heating temperature</i>	<b>11</b>	
<b>3</b>	<i>Correct applied pressure</i>	<b>12</b>	
<b>4</b>	<i>Purge</i>	<b>13</b>	
<b>5</b>	<i>Test for leakage</i>	<b>14</b>	
<b>6</b>	<i>Correct alignment of pipe</i>	<b>15</b>	
<b>7</b>	<i>Monitor area for hazardous environment</i>	<b>16</b>	
<b>8</b>	<i>Clean repair area</i>	<b>17</b>	
<b>9</b>		<b>18</b>	

**Abnormal Operating Conditions Associated with this Task:**

<b>1</b>	<i>Ignition of natural gas/Fire</i>	<b>4</b>	<i>Failure to follow procedures</i>
<b>2</b>	<i>Excavation cave-in</i>	<b>5</b>	<i>Weather conditions (wind, rain, cold)</i>
<b>3</b>	<i>Hazardous environment</i>	<b>6</b>	<i>Equipment operating improperly</i>