

Gas Transmission – Maintenance and Construction QUALIFICATION EVALUATION FORMS

This document contains all the required forms and tools to properly qualify an employee in the given OQ task. The following instructions will guide you in how to complete this process.

This document contains the following documents:

Pages 1 and 2: Official DOT input forms. This document is to be completed by an approved OQ Evaluator for the given task. Field supervisors are not to sign and submit this document unless they are an approved evaluator.

Page 3 : This table contains the required training requirements for either initial or subsequent OQ Evaluation. It specifies the required formal training, OJT (via FTO's) and performance testing (JPM's) that must be completed prior to OQ Evaluation.

Pages 4 – end: These contain the actual Field Training Outlines necessary to complete any required OJT and Job Performance Measurements (JPM's) associated with this task.
These must be completed prior to OQ Evaluation.

To complete the **OQ Process** follow these steps:

1. Go to the T drive and find the desired OQ folder for the given OQ task
T:\TRAINING\OPERATOR QUALIFICATION\ New Initial and Subsequent Forms
2. Determine if the employee requires initial or subsequent evaluation.
3. See page 3 of the document which specifies the required training.
4. Schedule the employee to complete any required formal training.
5. Working with your district MP, schedule the employee to complete any required OJT or testing (see pages 4 to the end)
6. If formal training, Field Training Outlines and JPM's are complete, contact [REDACTED] to schedule an evaluation. The primary role of the Evaluator is to assess knowledge, skills and abilities. They are not there to provide training.
7. Upon completion of OQ Evaluation, page 1 of this document is sent to [REDACTED] for processing. Do not send in this form directly to HR Learning Services.
8. The original DOT Form (page 1) is forwarded to HRLS by [REDACTED]. This notification is then input into Training Server and will appear on the DOT Operator Qualification Report for the employee's district. Maintenance Planning is also notified so that PLM (report 70) can be updated with current information.

The employee can now be properly scheduled to perform OQ associated work.



QUALIFICATION EVALUATION

Initial
 Subsequent

EMPLOYEE FULL NAME (PRINT)		Last four of SS#

Job Title _____ Area _____ Work Location _____
 Subtask Name Inert Purging Subtask #: 07-03.00

SUBTASK OBJECTIVE: Using one or more of the below "Evaluation Methods", demonstrated the knowledge, skill and ability to perform this task following these qualification criteria.

	Qualified
1. Safety Requirements:	<input type="checkbox"/>
• Ability to identify and resolve abnormal operating condition(s)	
2. Access, understand and apply the following Company Standard(s):	<input type="checkbox"/>
• Gas Standard - A-38	
3. Preparation:	<input type="checkbox"/>
• Supply gauges and valves	
• Provide vent stack	
• Nitrogen bottles	
• Leak detection soap	
• Bonding cables	
• Hand tools	
4. Installation:	<input type="checkbox"/>
• Install bonding cables	
• Install vent stack	
• Connect nitrogen bottles	
• Follow purging velocity standard	
5. Purging:	<input type="checkbox"/>
• Down stream blow off valve should always be in the full open position	
• A portable combustible gas indicator must read 100% gas	
6. Back To Line Pressure:	<input type="checkbox"/>
• Leave bonding cable in place	
• Soap test all fittings and welds	
• Take pipe to soil (CPA)	
• Wrap all section of pipe	
7. Remove Purging Equipment:	<input type="checkbox"/>
• Plug blow of valve	
• Remove all nitrogen bottles	
• Remove bonding clamp	

EVALUTION METHODS (Check all that apply)

- Observation On-The-Job Performance Observation by Simulation Oral Test
 Observation by On-The-Job Training Written Base Test OTHER - Field Performance Audit

Comments / Actions:

EVALUATOR'S NAME AND CORP ID
EVALUATOR'S SIGNATURE
DATE

6/23/05 version

OM&C/FSD - Mail completed **original** Qualification Evaluation form(s) to _____ Room B101 @ 3301 Crow Canyon Rd, San Ramon, CA.

CGT - Mail completed **original** Qualification Evaluation form(s) to _____ @ 375 N. Wiget Lane, Walnut Creek, CA.

OM&C/FSD/CGT - Send copy to LGOQPC (Local Gas Operator Qualification Plan Coordinator)



Initial/Subsequent Evaluator Instructions

Subtask Name: Inert Purging Subtask#: 07-03.00

Evaluator must provide the following reference material(s):

- Abnormal Operating Condition (AOC) Job Aid
- Gas Standard

Note:

Using reference material(s) listed above, individuals must answer all questions correctly. If individual cannot provide the correct answer(s) or demonstrate performance after two additional attempts, the Evaluator should refer to the Operator Qualification Basic Plan Manual, Section 1.3.3.3 for further instructions.

Knowledge

Criteria #	Requirement
1.	Review Annual Operator Qualification Job Aid and Abnormal Operating Conditions (AOC) with individual(s).
2.	Provide individual with Inert Purging Test.

Performance

3. – 7.	<p>Individual must perform checks as required on the Qualification Evaluation for each of these following method(s):</p> <ul style="list-style-type: none"> • Preparation • Installation • Purging • Back To Line Pressure • Remove Purging Equipment <p>Note: Skill must be demonstrated through simulation or actual field performance. Individual must verbalize each action step (bulleted items in Steps 3-7).</p>
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6/23/05 version

OM&C/FSD - Mail completed **original** Qualification Evaluation form(s) to [redacted] Room B101 @ 3301 Crow Canyon Rd, San Ramon, CA.

CGT - Mail completed **original** Qualification Evaluation form(s) to [redacted] @ 375 N. Wiget Lane, Walnut Creek, CA.

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GSMTS Operator Qualification Training Requirements

PURGING Task 07-03 Inert Purging	Initial Qualification⁽¹⁾	Initial Qualification⁽²⁾	Subsequent Qualification⁽³⁾
<u>I. Recommended Training Or Equivalent</u> On-The-Job Training	Must follow the Company/Union Program 	Required	Optional
<u>II. Text and Reference Review</u>		Required: Text and References listed in Training Binder FTO that pertain to Vol. 1 TB 2-6	Required: Review of UO Standard S4131, GS&S A-38, A-38.1, and all applicable Job Aids listed in FTO.
<u>III. On-The-Job Training</u> Job Performance Measure JPM		Required: JPM Vol 1, TB 2-6.4 through TB 2-6.6	Required: JPM Vol 1, TB 2-6.4
<u>IV. Academic Requirements</u>		No further requirement (Testing completed with training)	Subsequent OQ Test
<u>V. Documentation</u>	Original OQ form kept in WC; Original JPM's kept in District's training file.		

⁽¹⁾ Employee new to PG&E (also pertains to an existing GSMTS Journeyman advancing to the next classification in the training program).

⁽²⁾ PG&E Journeyman with task in base classification but is not Operator Qualified to do the task.

⁽³⁾ PG&E Journeyman currently Operator Qualified in the task.

Supports OQ tasks: 07-01, 07-02, 07-03, 07-04

Objective	Trainee Name: [Click here and enter name]
<p>The trainee will be able to correctly perform the tasks associated with Pipeline Purging. Performance shall also be consistent with all applicable company procedures and policies.</p>	
OJT Instructions	OJT Hours Guideline: 80 hours
<p>Reviewer's Role – A qualified reviewer (journeyman or equivalent) will <u>guide</u> the trainee in completing the objectives for each Sub-Task in this outline. Work with the trainee by discussing, explaining, or performing as necessary the concepts associated with each Sub-Task.</p> <p>Trainee's Role – Under direction of a qualified reviewer, the trainee will <u>perform</u> the Sub-Tasks described below to prepare for completing a Job Performance Measure.</p>	<p>OJT Process Steps</p> <ol style="list-style-type: none"> 1. GMS reviews FTO requirements with SME. 2. GMS determines Sub tasks & OJT hours. 3. GMS schedules with WMS. 4. SME and Trainee complete OJT hours. 5. Completed –signed FTO is returned to GMS. 6. GMS verifies completed FTO. 7. GMS schedules JPM.
<p>Text and References:</p> <ul style="list-style-type: none"> • Code of Safe Practices • Gas Standards & Specifications (GS&S): <ul style="list-style-type: none"> – A-38 Procedures for Purging Gas Facilities – A-38.1 Installation and Operation of Air Movers – A-60 Gas Main Welding Sleeves – A-63 Gas Main Repair Can – A-64 Gas Line Patches and Half Soles – B-53.2 High Pressure Clamp • Job Aids: <ul style="list-style-type: none"> – Vol 2 TB 2-11a Installation of Air Movers – Vol 2 TB 2-11b Air Mover Drawing 182877 – Vol 2 TB 2-11c Preparation of Lamb Air Mover • Maps and Drawings • Recommended Practice RP4710 Production Fluid/Pipeline Liquid -- Leak Response and Contaminated Soil Handling Procedure • UO Standards: <ul style="list-style-type: none"> – S4131 Hot and Cold Work Methods for Natural Gas Pipeline Shutdown and Tie-in – S4134 Steel Pipeline Repair – S4420 Gas Transmission Clearance Procedure which includes CGT Clearance Procedures Manual, Air Mover Manual • Work Area Protection Guide 	
<p>Trainee Materials:</p> <ul style="list-style-type: none"> • Air mover (w/ground strap) • Air compressor with gauges and hoses • Probe rod or grounding rod • Various hand tools, duct seal • Combustible Gas Indicator (CGI) • Lifting device (to remove certain blow-off stack caps) • Air gauges (to measure Mainline pressure for welding safety) 	
<p>Safety Requirements:</p> <ul style="list-style-type: none"> • In performance of these tasks, be able to identify and resolve any abnormal operating conditions. • Wear the appropriate clothing and use all personal safety equipment (PPE). • Provide work protection. • Code of Safe Practices Section 13. 	

Supports OQ tasks: 07-01, 07-02, 07-03, 07-04

Major Sub-Tasks:

Vol 2 TB 2-8.1	Gas Purging	Vol 2 TB 2-8.4	Air Purging and Inert Purging
Vol 2 TB 2-8.2	Air Compressor Operation	Vol 2 TB 2-8.5	Liquid Removal
Vol 2 TB 2-8.3	Install Air Mover	Vol 2 TB 2-8.6	Pipeline Shutdowns and Tie-ins

Sub-Task Vol 1 TB 2-6.4 Air Purging and Inert Purging

Note: This sub-task supports both the Operator Mechanic and the Transmission Mechanic job duties.

Objective: The trainee will be able to purge a main line of all residual air (back to 100% gas).

Demonstrate and/or explain:

- the contents of GS&S A-38.
- the importance of a complete pipeline purge to displace all air.
- the proper precautions when purging the air out of a main line (hearing protection, opening the MLV slowly, must get 100% gas indication for a minimum of 1 minute to ensure all air purged out, etc.).
- how to use a CGI to monitor for the presence of pure natural gas.
- how nitrogen (inert gas) is used in the purging process.
- how to connect nitrogen bottles.
- how to apply appropriate environmental requirements.
- how to perform nitrogen gas purging (adhere to the required steps associated with preparation, safety, installation, establishing back to line pressure, testing, and removal of purging equipment).
- how to determine the percentage of gas in facilities by using a portable combustible gas indicator.
- how to maintain appropriate records.

Hours Recommended	OJT Hours Received*	Trainee	Reviewer	Date
8 Hours	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	[Initials]	[Initials]	[Date]

Sub-Task Vol 1 TB 2-6.5 Liquid Removal

Note: This sub-task supports both the Operator Mechanic and the Transmission Mechanic job duties.

Objective: The trainee will be able to correctly and safely remove pipeline liquids from gas mains.

Demonstrate and/or explain how to correctly:

- remove liquids from a gas main.
- measure and record the amount of liquids removed.
- label containers for transporting pipeline liquids.
- complete required documentation.

Hours Recommended	OJT Hours Received*	Trainee	Reviewer	Date
4 Hours	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	[Initials]	[Initials]	[Date]

Supports OQ tasks: 07-01, 07-02, 07-03, 07-04

Sub-Task Vol 1 TB 2-6.6 Pipeline Shutdown and Tie-in Procedures

Note: This sub-task supports both the Operator Mechanic and the Transmission Mechanic job duties.

Objective: The trainee will be able to correctly and safely perform shutdown and tie-in procedures.

Demonstrate and/or explain:

- the contents of Standard S4131.
- how to write a clearance to remove a section of pipeline from service (UO Standard 4420).
- the difference between “cold” and “hot” work as method defined in Standard S4131.
- where the pipeline equipment is stored in his/her district.
- the purpose of strong back clamps, hydraulic jacks, grounding straps, blind flanges, foreman’s plugs, sump pumps, floodlights, and canvas fire blankets.
- how to isolate the mainline valves first and grease them if necessary.
- how to safely remove a flange from a blow-off stack:
 - open the small safety valve to release the pressure in the blow-off line.
 - after all the pressure has been released, remove the flange.
- how to be careful not to introduce any possible ignition sources into the area during this process.
- why not to stand in the direct line of fire (in case the flange blows off forcefully).
- the purpose of using an air mover.
- how to help with the installation of an air mover.
- how to monitor and operate an air mover during a tie-in procedure (“cold method”).
- how to assist the welder when cutting into a pipeline main.
- how to monitor fire in the hole and apply canvas to prevent air from being sucked into the main (“hot method”).
- how to properly fill out a Form “A” (Form F4110) Leak survey, Repair, Inspection, Etc. Report.

Hours Recommended	OJT Hours Received*	Trainee	Reviewer	Date																																																
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Supports OQ tasks: 07-01, 07-02, 07-03, 07-04

Operator Qualification – Job Performance Measure					
Trainee Name		Corp ID	SSN	Location	
Last	First	4 digits	Last 4 digits	Headquarters or District Name	

Directions: This form documents the Job Performance Measures of the named trainee. Upon completion, the results will be put into the Operator Qualification database. The Evaluator will:

- observe the tasks as they are performed or described and rate the results.
- stop a task if the participant's actions will endanger life or equipment.

Safety Requirements:

- In performance of these tasks, be able to identify and resolve any abnormal operating conditions.
- Wear the appropriate clothing and use all personal safety equipment (PPE).
- Provide work protection.
- Code of Safe Practices Section 13.

Sub-Task Vol 2 TB 2-6.4 Air Purging and Inert Purging

Note: This sub-task supports both the Operator Mechanic and the Transmission Mechanic job duties.

Task Element	Evaluation Method P = Perform S = Simulate D = Describe	Results S = Satisfactory U = Unsatisfactory NA = Not Applicable	Evaluator Initials Date
Purge a main line of all residual air (bring it back to 100% gas).	Method <input type="checkbox"/> P <input type="checkbox"/> S <input type="checkbox"/> D	Results <input type="checkbox"/> S <input type="checkbox"/> U <input type="checkbox"/> NA	Initials Date

Standard: The trainee can correctly:

- explain the contents of GS&S A-38.
- explain the importance of a complete pipeline purge to displace all air.
- explain the proper precautions when purging the air out of a main line (hearing protection, opening the MLV slowly, must get 100% gas indication for a minimum of 1 minute to ensure all air purged out, etc.).
- demonstrate and explain the use of a CGI to monitor for the presence of pure natural gas.
- explain how nitrogen (inert gas) is used in the purging process.
- demonstrate how to connect nitrogen bottles.
- apply appropriate environmental requirements.
- perform nitrogen gas purging (follow the required steps associated with preparation, safety, installation, establishing back to line pressure, testing and removal of purging equipment).
- determine the percentage of gas in facilities using a portable combustible gas indicator.
- maintain appropriate records.

Supports OQ tasks: 07-01, 07-02, 07-03, 07-04

Operator Qualification – Job Performance Measure					
Trainee Name		Corp ID	SSN	Location	
Last	First	4 digits	Last 4 digits	Headquarters or District Name	

Directions: This form documents the Job Performance Measures of the named trainee. Upon completion, the results will be put into the Operator Qualification database. The Evaluator will:

- observe the tasks as they are performed or described and rate the results.
- stop a task if the participant’s actions will endanger life or equipment.

Safety Requirements:

- In performance of these tasks, be able to identify and resolve any abnormal operating conditions.
- Wear the appropriate clothing and use all personal safety equipment (PPE).
- Provide work protection.
- Code of Safe Practices Section 13.

Sub-Task Vol 2 TB 2-6.5 Liquid Removal

Note: This sub-task supports both the Operator Mechanic and the Transmission Mechanic job duties.

Remove pipeline liquids from gas mains.	Method	Results	Initials
	<input type="checkbox"/> P <input type="checkbox"/> S <input type="checkbox"/> D	<input type="checkbox"/> S <input type="checkbox"/> U <input type="checkbox"/> NA	Date

Standard: The trainee can correctly demonstrate and explain how to properly:

- remove liquids from a gas main.
- measure and record the amount of liquids removed.
- label containers to transport pipeline liquids.
- complete required documentation.

Supports OQ tasks: 07-01, 07-02, 07-03, 07-04

Operator Qualification – Job Performance Measure				
Trainee Name		Corp ID	SSN	Location
Last	First	4 digits	Last 4 digits	Headquarters or District Name

Directions: This form documents the Job Performance Measures of the named trainee. Upon completion, the results will be put into the Operator Qualification database. The Evaluator will:

- observe the tasks as they are performed or described and rate the results.
- stop a task if the participant's actions will endanger life or equipment.

Sub-Task Vol 2 TB 2-6.6 Pipe Shutdowns and Tie-ins

Note: This sub-task supports both the Operator Mechanic and the Transmission Mechanic job duties.

Task Element	Evaluation Method P = Perform S = Simulate D = Describe	Results S = Satisfactory U = Unsatisfactory NA = Not Applicable	Evaluator Initials Date
Explain and/or demonstrate how to correctly perform shutdown and tie-in procedures.	Method <input type="checkbox"/> P <input type="checkbox"/> S <input type="checkbox"/> D	Results <input type="checkbox"/> S <input type="checkbox"/> U <input type="checkbox"/> NA	Initials Date

Standard: The trainee can correctly:

- explain the contents of Standard S4131.
- write a clearance to remove a section of pipeline from service (UO Standard 4420).
- explain the difference between "cold" and "hot" work methods as defined in Standard S4131.
- locate where the pipeline equipment is stored in his/her district.
- identify and explain the purpose of strong back clamps, hydraulic jacks, grounding straps, blind flanges, foreman's plugs, sump pumps, flood lights, and canvas fire blankets.
- properly isolate the mainline valves first and grease them if necessary.
- explain the safe removal of the flange off of a blow-off stack.
- explain how to open the small safety valve to remove the pressure in the blow-off line.
- remove the flange after all the pressure has been released.
- explain how to be careful not to introduce any possible ignition sources into the area during this process.
- explain why not to stand in the direct line of fire in case the flange blows off forcefully.
- explain the purpose of using an air mover.
- assist with the installation of an air mover.
- monitor and operate an air mover during a tie-in procedure ("cold method").
- the welder when cutting into a pipeline main.
- monitor fire in the hole and apply canvas to prevent air from being sucked into the main "hot method".
- fill out a Form "A" (Form F4110) Leak survey, Repair, Inspection, etc. Report.

Link to UO Standard S4131 Hot and Cold Work Methods For Natural Gas Pipeline Shutdown and Tie-In:

<http://www.wedm3/cgi-bin/doccontent.dll?LibraryName=dmspg01^dmsedm01&SystemType=2&LogonId=ce0e8ffe79e3d6a81d41a708c69904b5&DocId=003673762&Page=1>

Link to Gas Standard and Specification A-38 Procedures For Purging Gas Facilities:

<http://www.wedm3/cgi-bin/doccontent.dll?LibraryName=dmspg01^dmsedm01&SystemType=2&LogonId=4e179c0c6adc7c27c6d81de71f79fa04&DocId=982450058&Page=1>

Link to Gas Standard and Specification A-38.1 Installation and Operation of Air Movers:

<http://www.wedm3/cgi-bin/doccontent.dll?LibraryName=dmspg01^dmsedm01&SystemType=2&LogonId=d770a5659cd9ce7750afdd222301ae8c&DocId=982450059&Page=1>

Job Aids:

Air Mover -- Drawing 182877

Air Mover -- Preparation

Air Movers -- Installation

Link to Job Aids: http://www.wint02/gsm/training/job_aids.htm