# 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 <u>not to sign</u> 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 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 processing. Do not send in this form directly to HR Learning Services.
- 8. The original DOT Form (page 1) is forwarded to HRLS by 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	
EMPLOYEE FULL NAME (PRINT)  Last four of SS	<b>#</b>
Job Title Area Work Location	
Subtask Name Air Mover Operations Subtask #: 07-04.0	0
SUBTASK OBJECTIVE: Using one or more of the below "Evaluation Methods", demonstrated the knowledge, skill and ability to putask following these qualification criteria.	erform this
	Qualified
1. Safety Requirements:	
Ability to identify and resolve abnormal operating condition(s)	
2. Access, understand and apply the following Company Standard(s):	
Gas Standard - A-38  Preparation:	<del>                                     </del>
Proper size air mover	+ -
25 feet air hose	
Air compressor rated at 350 or 600 cfm	
Air hose connectors, safety chain	
Clean all liquids      Installation:	
Install air mover at blow off  Install air mover at blow off	+
Use thread sealant	
Install grounding cables	
Attach air streamers over center of air mover	
Connect compressor supply pressure (not to exceed 70psi)	
5. Operation of Air Mover:  • Throttling valve to air mover slowly	
Throttling valve to air mover slowly     Attach streamers to access hole	
If the streamers indicate an imbalance of air movement, increase or decrease the air pressure	
Use the combustible gas indicator	
6. Final Tie In:	
Before the final tie in, the Supervisor in charge will direct the air pressure for the final weld     The low flow rate shall be continued and maintained until the work is completed	
The low flow rate shall be continued and maintained until the work is completed     The air movers shall stay in place until all welds are inspected and accepted	
EVALUTION METHODS (Check all that apply)	
Observation On-The-Job Performance  Observation by Simulation  Oral Test  OTHER - Field Performance  OTHER - Field Performance	ice Audit 🛚
Comments / Actions:	
EVALUATOR'S NAME AND CORP ID EVALUATOR'S SIGNATURE DA'	ГЕ

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)

GTR0009744 Material Redacted



## Initial/Subsequent Evaluator Instructions

Subtask Name:	Air Mover Operations	Subtask#:	07-04.00	

Evaluator must provide the following reference material(s):

- Abnormal Operating Condition (AOC) Job Aid
- Gas Standard
- Installation of Air Mover Job Aid
- Operation of Air Mover Job Aid

#### 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 Air Mover Operations Test.

#### Performance

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3. – 6.	Individual must perform checks as required on the Qualification Evaluation for each of these
	following method(s):
	Preparation
	Installation
	Operation of Air Mover
	Final Tie In
	Note:
	1
	Skill must be demonstrated through simulation or actual field performance. Individual must

verbalize each action step (bulleted items in Steps 3-6).

6/23/05 version OM&C/FSD - Mail completed original Qualification Evaluation form(s) to Room B101 @ 3301 Crow Canyon Rd, San Ramon, CA. @ 375 N. Wiget Lane, Walnut Creek, CA. CGT - Mail completed original Qualification Evaluation form(s) to OM&C/FSD/CGT - Send copy to LGOQPC (Local Gas Operator Qualification Plan Coordinator)

GTR0009745 Material Redacted

## **GSMTS** Operator Qualification Training Requirements

PURGING Task 07-04 Air Movers	Initial Qualification <sup>(1)</sup>	<u>Initial</u> Qualification <sup>(2)</sup>	Subsequent Qualification <sup>(3)</sup>		
I. Recommended Training Or Equivalent On-The-Job Training	Must follow the Company/Unio n Program	Required	Optional		
II. Text and Reference Review		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.		
III. On-The-Job Training  Job Performance Measure JPM		Required: JPM Vol 1, TB 2-6.3 and TB 2-6.6	Required: JPM Vol 1, TB 2-6.3		
IV. Academic Requirements		No further requirement (Testing completed with training)	Subsequent OQ Test		
V. Documentation	Original OQ form kept in WC; Original JPM's kept in District's training file.				

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GTR0009746 Material Redacted

<sup>(1)</sup> 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.

**Purging Pipelines** 

FTO Vol 1 TB 2.6

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

### **Objective**

Trainee Name:

[Click here and enter name]

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.

#### **OJT Instructions**

# OJT Hours Guideline: 80 hours

#### 1.0.

# Reviewer's Role – A qualified reviewer (journeyperson 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.

**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.

#### **OJT Process Steps**

- 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.

#### **Text and References:**

- Code of Safe Practices
- Gas Standards & Specifications (GS&S):
  - 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:
  - 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:
  - 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

#### **Trainee Materials:**

- 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)

#### 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.

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Vol 1 Training Binder 2 - Operator Mechanic Field Training Outline

**Purging Pipelines** 

FTO Vol 1 TB 2.6

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 2-8.2 Air Compressor

Vol 2 TB 2-8.5 Liquid Removal

Operation

Vol 2 TB 2-8.6 Pipeline Shutdowns and Tie-ins

Vol 2 TB 2-8.4 Air Purging and Inert Purging

Vol 2 TB 2-8.3 Install Air Mover

#### Sub-Task Vol 1 TB 2-6.3 Install Air Mover

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

Objective: The trainee will be able to correctly:

- install an air mover on a pipeline facility for performing cold work.
- perform an effective purge.

#### Demonstrate and/or explain:

- the contents of GS&S A-38.1 and air mover job aids.
- the proper connection of an air mover to pipeline facility (flange or valve) using duct seal as needed for an airtight seal.
- · proper grounding of the mover.
- how to monitor for the proper operation of the air mover to purge the pipeline (attach air flow ribbons).
- how to use a CGI to sample for natural gas (including the proper sampling location).
- · the acceptable levels on the CGI to ensure safety.
- how to hook up pressure gauges to monitor mainline pressure.
- proper communications with others involved in the purging process.
- how to size, install, and operate an air mover.
- how to remove all associated purging equipment when job is completed.
- how to maintain appropriate records.

Hours Recommended	OJT Hours Received*	Trainee	Reviewer	Date
8 Hours		[Initials]	[Initials]	[Date]

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FTO Vol 1 TB 2.6

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 methods as defined in Standard S4131.
- where the pipeline equipment is stored in the trainee's 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 assist 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
40 Hours		[Initials]	[Initials]	[Date]

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Operator Qualificatio	n – Job Performance	Measure		
7777	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.

Su	Sub-Task Vol 2 TB 2-6.3 Install Air Mover						
Not	e: This sub-task supports both th	ne Operator Mechani	ic and the Transmissio	n Mechanic job duties.			
	Task Element	Evaluation Method P = Perform S = Simulate D = Describe	Results S = Satisfactory U = Unsatisfactory NA = Not Applicable	Evaluator Initials Date			
	all an air mover on a pipeline	Method	Results	Initials			
fac pur	lity and perform an effective ge.	□P □S □D	□S □U □NA	Date			
Sta	ndard: The trainee can correctly		ah aida				
	explain the contents of GS&S A- demonstrate and explain the pro using duct seal as needed for an	per connection of an		e facility (flange or valve)			
•	demonstrate and explain the pro	per grounding of the	mover.				
•	monitor the air mover for proper operation to purge the pipeline (attach air flow ribbons).						
•	<ul> <li>demonstrate and explain the use of a CGI to monitor for natural gas (including the proper sampling location).</li> </ul>						
•	state the acceptable levels on the CGI to ensure safety.						
•	<ul> <li>demonstrate and explain the hookup of pressure gages to monitor mainline pressure.</li> </ul>						
•	demonstrate and explain proper communications with others involved in the purging process.						
•	size, install, and operate an air mover.						

Operator Qualification – Job Performance Measure

Trainee Name
Corp ID
Last
First
4 digits
Last 4 digits
Last 4 digits
Headquarters or District Name

remove all associated purging equipment when job has been completed.

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maintain appropriate records.

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# Vol 1 Training Binder 2 - Operator Mechanic

## **Purging Pipelines**

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**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.

	Evaluation	Results			
	Method	S = Satisfactory	Evaluator Initials		
Task Element	P = Perform	U = Unsatisfactory			
	S = Simulate	NA = Not	Date		
	D = Describe	Applicable			
Correctly and safely perform	Method	Results	Initials		
shutdown and tie-in procedures.	□P □S □D	□s □u □na	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, floodlights, and canvas fire blankets.
- · isolate the mainline valves first and grease them if necessary.
- explain how to safely remove the 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.
- 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").
- assist 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").
- complete a Form "A" (Form F4110) Leak survey, Repair, Inspection, etc. Report.

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Vol 1 Training Binder 2 - Operator Mechanic

**Purging Pipelines** 

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

http://wwwedm3/cgi-

bin/doccontent.dll?LibraryName=dmspge01^dmsedm01&SystemType=2&LogonId=ce0 e8ffe79e3d6a81d41a708c69904b5&DocId=003673762&Page=1

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

http://wwwedm3/cgi-

 $\frac{bin/doccontent.dll?LibraryName=dmspge01^dmsedm01\&SystemType=2\&LogonId=4e1}{79c0c6adc7c27c6d81de71f79fa04\&DocId=982450058\&Page=1}$ 

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

http://wwwedm3/cgi-

#### Job Aids:

Air Mover -- Drawing 182877

Air Mover -- Preparation

Air Movers -- Installation

Link to Job Aids: http://wwwint02/gsm/training/job\_aids.htm

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