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 Initial Subsequ		quent
	EMPLOYEE FULL NAME (PRII	NT)	Last four of SS#	
Job Titl	e	Area Work Location		
Subtas	NameTransmission Line Repair	Procedures by Welding	Subtask #:10-01.00	
	SK OBJECTIVE: Using one or more of owing these qualification criteria.	the below "Evaluation Methods", demonstrated the ki	nowledge, skill and ability to perf	form this
				Qualified
1. S	afety Requirements:			
<u> </u>	Ability to identify and resolve abnormal			
	ccess, understand and apply the follow			
•	Gas Standards - A-60, A-63, A-64. UC	Standards S4134 and S4131. Weld repairs shall be	done by Qualify Welder -	
3. In	GS&S D-30, D-30.1, D-30.2, D-30.4 spect and Prepare Pipeline:			+
J. "	Identify pipeline material			╁╌┤
:	Identify pipeline material			
•	Clean pipeline			
.	Prepare pipeline			
4. P	peline Repair Method:			
•	Approved repair methods listed in UO	Standard S4134		
.	Replace section of pipeline including T	e-In-Procedures (UO Standard S4131)		
Observa Observa	TION METHODS (Check all that apation On-The-Job Performance □ ation by On-The-Job Training □ ents / Actions:	ply) Observation by Simulation □ Written Base Test □	Oral Test □ OTHER - Field Performance	e Audit 🛚
	VALUATOR'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)

GTR0009806 Material Redacted



Initial/Subsequent Evaluator Instructions

Subtask Name:	Transmission Line Repair Procedures by Welding	Subtask#:	10-01.00	

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 Transmission Line Repair Procedures by Welding Test.

Performance

_	renonna	ice					
Γ	3. – 4.	Individual must perform checks as required on the Qualification Evaluation for each of these					
1		following method(s):					
		Inspect and Prepare Pipeline					
		Identify Weld Repair Method					
		Note:					
1		Skill must be demonstrated through simulation or actual field performance. Individual must					
		verbalize each action step (bulleted items in Steps 3-4).					

6/23/05 version

2

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)

Material Redacted

GSMTS Operator Qualification Training Requirements

Transmission Line Repairs Task 10-01 Pipeline Repair Welding	Initial Qualification ⁽¹⁾	<u>Initial</u> Qualification ⁽²⁾	Subsequent Qualification ⁽³⁾	
I. Recommended Training Or Equivalent On-The-Job Training	Must follow the Company/Union Program	Required	Optional	
II. Text and Reference Review		Required: Text and References listed in Training Binder FTO that pertain to: Vol. 1 TB 2-6.6 Vol. 2 TB 2-17.1	Required: Review of: Gas Std and Spec A-60. Design Stds D-30.2. UO Stds S4131, S4134. All applicable Job Aids listed in FTO.	
III. On-The-Job Training Job Performance Measure JPM		Required: JPM Vol. 1 TB 2-6.6 JPM Vol. 2 TB 2-17.1	Required: JPM Vol. 2 TB 2-17.1	
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.			

Page 3

GTR0009808 Material Redacted

⁽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.

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

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.

Traince'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:
 - A-38, "Procedures for Purging Gas Facilities"
 - A-38.1"Installation and Operation of Air Movers"
 - A-60, A-63, and A-64
 - B-53.2 "High Pressure Clamp"
- Job Aids Vol 2:
 - TB 2-11a Installation of Air Movers
 - TB 2-11b Air Mover Drawing 182877
 - TB 2-11c Preparation of Lamb Air Mover
- Maps and Drawings
- Work Area Protection Guide

• 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
- S4710, "Production Fluid/Pipeline Liquid Procedure"

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)

Major Sub-Tasks:

Vol 2 TB 2-8.1Gas PurgingVol 2 TB 2-8.4Air Purging and Inert PurgingVol 2 TB 2-8.2Air Compressor OperationVol 2 TB 2-8.5Liquid RemovalVol 2 TB 2-8.3Install Air MoverVol 2 TB 2-8.6Pipeline Shutdowns and Tie-ins

Initial-Sub Eval-Inst 10-01.doc March 2006 Page 4

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 perform shutdown and tie-in procedures.

Demonstrate and/or explain:

- the contents of UO 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 UO Standard S4131.
- where the pipeline equipment is stored in the trainee's district.
- and identify 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 the flange from a blow-off stack.
- how to open the small safety valve to remove the pressure in the blow-off line.
- how to remove the flange after all the pressure has been released.
- 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]

Initial-Sub Eval-Inst 10-01.doc March 2006 Page 5

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

Operator Qualificatio	n – Job Performance			
		Corp ID 4 digits	SSN Last 4 digits	Location 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	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								
Demonstrate and/or explain performance of shutdown and tie-in procedures.	Method □P □S □D	Results ☐S ☐U ☐NA	Initials Date					

Standard: The trainee can correctly:

- · explain the contents of UO 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 UO Standard S4131.
- locate where the pipeline equipment is stored in his/her district.
- identify and explain the purposes of strong back clamps, hydraulic jacks, grounding straps, blind flanges, foreman's plugs, sump pumps, flood lights, 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.
 - remove the flange after all the pressure has been released.
- explain how to use care not to:
 - introduce any possible ignition sources into the area during this process
 - stand in the direct line of fire in case the flange does blow off forcefully.
- assist with the installation of an air mover and explain the purpose of using this piece of equipment.
- 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").
- fill out a Form "A" (Form F4110) Leak survey, Repair, Inspection, Etc. Report.

Initial-Sub Eval-Inst 10-01.doc March 2006 Page 6

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

Reviewer's Role – A qualified reviewer (journeyperson or equivalent) will guide 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 perform 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
- GS&S A-60, A-63, A-64, B-53.2, and D-40
- Manufacturer's Manual
- Maps and Drawings

- UO Standard S4131."Hot and Cold Work Methods for Natural Gas Pipeline Shutdown and Tie-in"
- UO Standard S4134, "Steel Pipeline Repair"
- Work Area Protection Guide

Trainee Materials:

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).

Major Sub-Tasks:

Vol 2 TB 2.17.1 Pipeline Repair - Welding

Vol 2 TB 2.17.3 Pipeline Repair - Mechanical

Vol 2 TB 2.17.2 Weld Inspection

Vol 2 TB 2.17.4 Soap Test

Initial-Sub Eval-Inst 10-01.doc March 2006

Page 7

Sub-Task Vol 1 TB 2-17.1 Pipeline Repair -- Welding

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

Objective: The trainee will be able to demonstrate and/or explain the procedures necessary to repair a pipeline by welding. **Note**: The actual welding shall be done by a qualified welder following the welding program (GS&S D-30, D-30.1, D-30.2, and D-30.4)

Demonstrate and/or explain:

- the contents of UO Standards S4134 and S4131.
- how to inspect and prepare the pipeline including how to:
 - identify the pipeline material
 - identify the pipeline pressure and why this is very important
 - clean the pipeline
 - prepare the pipeline for repair
- · pipeline repair methods:
 - approved repair methods listed in UO Standard S4134
 - replace section of pipeline including tie-in-procedures (Training Binder Vol 1 TB 2.6.6) (UO Standard S4131)
- how to document actions on Form "A" (Form F4110) Leak survey, Repair, Inspection, Etc. Report.

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

Sub-Task Vol 1 TB 2-17.2 Weld Inspection

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

Objective: The trainee will be able to correctly perform a visual inspection and soap test of welds per GS&S D-40

Demonstrate, explain, and then have trainee:

- perform visual inspections of welds.
- · perform soap tests of welds.
- document results on Form "A" (Form F4110) Leak survey, Repair, Inspection, Etc. Report.

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

Initial-Sub Eval-Inst 10-01.doc March 2006

Page 8

Operator Qualification – Job Performance Measure						
CONTRACTOR OF THE CONTRACTOR O		Corp ID 4 digits	SSN Last 4 digits	Location 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 2-17.1 Pipeline Repair - Welding						
Note: This sub-task supports the Tra	ansmission Mechanio	c job duties.				
Task Element	Evaluation Method P = Perform S = Simulate D = Describe	Results S = Satisfactory U = Unsatisfactory NA = Not Applicable	Evaluator Initials Date			
Demonstrate the knowledge necessary for a pipeline repair by welding. Note: The actual welding shall be done by a Qualified Welder following the welding program (GS&S D-30, D-30.1, D-30.2, and D-30.4)	Method □P □S □D	Results □S □U □NA	Initials Date			

Standard: The trainee can correctly:

- explain the contents of UO Standards S4131 and S4134.
- demonstrate and/or explain how to inspect and prepare the pipeline including how to:
 - identify the pipeline material.
 - identify the pipeline pressure and explain why this is very important.
 - clean the pipeline.
 - prepare the pipeline for repair.
- explain pipeline repair methods including:
 - approved repair methods listed in UO Standard S4134.
 - replace section of pipeline including tie-in-procedures (Training Binder Vol. 1 TB 2.6.6; UO Standard S4131).
- perform visual inspection of the welds.
- perform a soap test.
- document results on Form "A" (Form F4110) Leak survey, Repair, Inspection, Etc. Report

Initial-Sub Eval-Inst 10-01.doc March 2006 Page 9

Operator Qualificatio	n – Job Performance			
Trainee Last	e Name First	Corp ID 4 digits	SSN Last 4 digits	Location 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 2-17.2 Weld Inspection							
Note: This sub-task supports the Transmission Mechanic job duties.							
Perform a visual inspection and soap test of welds per GS&S D-40.	Method	Results	Initials				
Document the results.	□P □S □D	□S □U □NA	Date				
Standard: The trainee can correctly:							
perform visual inspection of welds.							
perform soap testing of welds.							
document results on Form "A" (Form F4110) Leak survey, Repair, Inspection, Etc. Report.							

Initial-Sub Eval-Inst 10-01.doc March 2006 Page 10

Vol 1 Training Binder 2 - Operator Mechanic
Vol 2 Training Binder 2 - Pipeline

Purging Pipelines

Pipeline Repairs

Link to Gas Standard and Specification A-60 "Gas Main Welding Sleeves": http://wwwedm3/cgi-

bin/doccontent.dll?LibraryName=dmspge01^dmsedm01&SystemType=2&LogonId=b0b943fdac 665ebfbe3e5936869ac214&DocId=982450071&Page=1

Link to Design Standard D-30.2 "Arc Welder Qualification for Working on Pipelines That Operate at Over 20% of SMYS":

http://wwwedm3/cgi-

 $\frac{bin/doccontent.dll?LibraryName=dmspge01^dmsedm01\&SystemType=2\&LogonId=986207a849}{ce6f3a7b9d905ad8f0a6e5\&DocId=982580034\&Page=1}$

Link to Design Standard D-40 "Weld Inspection":

http://wwwedm3/cgi-

 $\frac{bin/doccontent.dll?LibraryName=dmspge01^dmsedm01\&SystemType=2\&LogonId=2fe0e7634fd}{a5ca52816df46c896a461\&Docld=982580039\&Page=1}$

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=d9663ce5dc 54d8b677fe04dff5b5c08d&DocId=003673762&Page=1

Link to UO Standard S4134 "Selection of Steel Gas Pipeline Repair Methods":

http://wwwedm3/cgi-

bin/doccontent.dll?LibraryName=dmspge01^dmsedm01&SystemType=2&LogonId=76d2485e83 5983f915b6cb3cd2079a2e&DocId=003707066&Page=1

Job Aids:

Air Mover Drawing 182877

Air Mover Installation

Air Mover Preparation

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

Initial-Sub Eval-Inst 10-01.doc March 2006 Page 11