

## Gas Transmission – Maintenance and Construction QUALIFICATION EVALUATION FORMS

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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 Transmission Pipe Coatings - All Subtask #: 03-02.00

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

	Qualified
<b>1. Safety Requirements:</b>	<input type="checkbox"/>
• Ability to identify and resolve abnormal operating condition(s)	
<b>2. Access, understand and apply the following Company Standard(s):</b>	<input type="checkbox"/>
• Gas Standards - E-10, E-25, E-35	
<b>3. Pipe Wrap Handling &amp; Disposal Procedures:</b>	<input type="checkbox"/>
• Observe pipe wrap used and determine appropriate disposal method, CGT Standard 4711	
<b>4. Clean Pipe Procedures:</b>	<input type="checkbox"/>
• Select the proper cleaning tools, solvent, etc to clean the pipe	
• Correctly clean and inspect the pipe prior to installation of coating	
<b>5. Liquid Adhesive Application:</b>	<input type="checkbox"/>
• Select and prepare the appropriate liquid adhesive	
• Correctly apply liquid adhesive onto pipe	
<b>6. Coating Requirement:</b>	<input type="checkbox"/>
• State and/or demonstrate a good understanding of the Gas STD Section E	
• Application of coating to pipe per Gas STD Section E	

**EVALUATION 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:**

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

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



### Initial/Subsequent Evaluator Instructions

Subtask Name: Transmission Pipe Coatings - All Subtask#: 03-02.00

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. – 3.	Provide individual with Transmission Pipe Coatings – All Test.

**Performance**

4. – 6.	<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"> <li>• Clean Pipe Procedures</li> <li>• Liquid Adhesive Application</li> <li>• Coating Requirement</li> </ul> <p><b>Note:</b> Skill must be demonstrated through simulation or actual field performance. Individual must verbalize each action step (bulleted items in Steps 4-6).</p>
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## GSMTS Operator Qualification Training Requirements

<b>CORROSION CONTROL</b>			
<b>Task 03-02</b>	<b>Initial Qualification<sup>(1)</sup></b>	<b>Initial Qualification<sup>(2)</sup></b>	<b>Subsequent Qualification<sup>(3)</sup></b>
<b>Transmission Pipe Coatings</b>			
<b><u>I. Recommended Training or Equivalent</u></b> 1. GSM&TS Coatings Training	Must follow the Company/ Union Program	Required	Optional
<b><u>II. Text and Reference Review</u></b>		Required: Text and References listed in Training Binder FTO that pertain to Vol. 2, TB 2-8.6	Required: Review of Gas Standard and Specifications E-30 & E-35 for Coatings.
<b><u>III. On-The-Job Training</u></b> Job Performance Measure JPM		Required: JPM Vol 2, TB 2-8.6	Required: JPM Vol 2, TB 2-8.6
<b><u>IV. Academic Requirements</u></b>		No further requirement (Testing completed with training)	Subsequent OQ Test
<b><u>V. Documentation</u></b>	Original OQ form kept in WC; Original JPM's kept in District's training file.		

<sup>(1)</sup> New Employee to PG&E (Also pertains to an existing GSMTS Journeyman advancing to the next classification in the training program).  
<sup>(2)</sup> PG&E Journeyman with task in base classification but is not Operator Qualified to do the task.  
<sup>(3)</sup> PG&E Journeyman currently Operator Qualified in the task.

**Supports OQ tasks: 03-02, 03-03, 03-04, 03-05, 03-06, 03-07, 03-08, 03-09, 03-10, 03-11**

<b>Objective</b>	<b>Trainee Name:</b> [Click here and enter name]
<p>The trainee will be able to correctly perform:</p> <ul style="list-style-type: none"> <li>the tasks associated with corrosion cells and external corrosion.</li> <li>basic operations and maintenance procedures for pipeline cathodic protection systems.</li> </ul>	
<b>OJT Instructions</b>	<b>OJT Hours Guideline:</b> 228 hours
<p><b>Reviewer’s Role</b> – A qualified reviewer (journey person 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><b>Trainee’s Role</b> – Under direction of a qualified reviewer, the trainee, will <u>review all text and reference material prior to performing the training sub tasks</u> described below to prepare for completing a Job Performance Measure.</p>	<p><b>OJT Process Steps</b></p> <ol style="list-style-type: none"> <li>GMS reviews FTO requirements with SME.</li> <li>GMS determines Sub tasks &amp; OJT hours.</li> <li>GMS schedules with WMS.</li> <li>SME and Trainee complete OJT hours.</li> <li>Completed –signed FTO is returned to GMS.</li> <li>GMS verifies completed FTO.</li> <li>GMS schedules JPM.</li> </ol>
<p><b>Text and References:</b></p> <ul style="list-style-type: none"> <li>PG&amp;E Approved Schools and On-Site Training</li> <li>UO Standard 4133 – Corrosion control of Gas Transmission Facilities</li> <li>UO Standard S4126 – Cathodic Protection</li> <li>Gas Information Bulletin 176 – Casing Venting and Electrical Isolation Requirements</li> <li>Gas Standard and Specification (GS&amp;S) E-30 and 35 (Protective Coating)</li> <li>GS&amp;S O-10, 10.1, and 10.2 (Electrolysis Test Stations)</li> <li>GS&amp;S O-71- Copper –Copper Sulfate Ref Electrodes</li> <li>GS&amp;S O-72 – Approved Multimeters</li> <li>UO Standard S4711 -Pipe Wrap Removal</li> <li>UO Standard S4112 -Physical Inspection of pipelines</li> <li>GS&amp;S O-11 (Cathodic Protection Rectifiers)</li> </ul>	<p style="text-align: center;"><b>Job Aids</b></p> <ul style="list-style-type: none"> <li>How To Troubleshoot A Goodall Rectifier</li> <li>How To Troubleshoot A Universal Rectifier</li> <li>How To Replace The Battery In the Digital Potential Meter Model DPM</li> <li>How To Prepare the DPM prior to use</li> <li>How To Measure A Structure To Soil Potential With A DPM</li> <li>Ground Resistance Tester</li> <li>How To Replace The Batteries In the VC-1 Calibrator</li> <li>Cathodic Protection</li> <li>Corrosion Control Rectifier Troubleshooting</li> <li>Spanning and Taking Pipe to Soil Readings</li> <li>Calibrate a Copper-Copper Sulfate Ref Electrode</li> <li>Coating Inspection</li> <li>Air-to-Soil Transitions</li> </ul>
<p><b>Trainee Materials:</b></p> <ul style="list-style-type: none"> <li>(Maps to locate an ETS)</li> <li>PPE</li> <li>Cad welder, Volt Ohm Meter, Pipe to soil meter, half cell</li> </ul>	<p><b>Safety Requirements:</b></p> <ul style="list-style-type: none"> <li>In performance of these tasks, be able to identify and resolve any abnormal operating conditions.</li> <li>Provide work protection.</li> </ul>

**Supports OQ tasks: 03-02, 03-03, 03-04, 03-05, 03-06, 03-07, 03-08, 03-09, 03-10, 03-11**

**Major Sub Tasks:**

Vol 2 TB 2-8.1	Corrosion Cell Terminology	Vol 2 TB 2-8.7	Internal Corrosion/Monitor Atmospheric Corrosion/Monitor
Vol 2 TB 2-8.2	Pipe-to-Soil Reads	Vol 2 TB 2-8.8	Physical Inspect of Pipelines
Vol 2 TB 2-8.3	Rectifier Maintenance	Vol 2 TB 2-8.9	Electrical Isolation – Testing/ Inspecting
Vol 2 TB 2-8.4	Rectifier Reads and Basic Inspections	Vol 2 TB 2-8.10	Cathodic Protection System Maintenance
Vol 2 TB 2-8.5	Installation of Anodes		
Vol 2 TB 2-8.6	Transmission Pipe Coatings		

**Sub Task Vol 2 TB 2 – 8.6 Transmission Pipe Coatings**

**Objective:** The trainee will be able to correctly identify and properly apply pipe coatings.

**Demonstrate and/or explain:**

- the importance of pipe coating.
- the different types of coatings acceptable to apply on transmission lines.
- how certain coatings cannot be used under certain conditions (excessive heat, etc.)
- how to properly clean and inspect pipe before installing the coating.
- how to apply the tape and epoxy-type coatings (Wax tape and PowerCrete J or Dev Tar)
- how to determine thickness of pipeline coating.
- documentation procedures.

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"/>			

**Supports OQ tasks: 03-02, 03-03, 03-04, 03-05, 03-06, 03-07, 03-08, 03-09, 03-10, 03-11**

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 2-8.6 Transmission Pipe Coatings**

Task Element	Evaluation Method P = Perform S = Simulate D = Describe	Results S = Satisfactory U = Unsatisfactory NA = Not Applicable	Evaluator Initials  Date
Identification and application of pipe coating.	Method  P S D	Results  S U NA	Initials  Date

**Standard:** The trainee can correctly:

- explain the importance of pipe coating
- explain the different types of coatings acceptable to apply on transmission lines.
- explain how certain coatings cannot be used under certain conditions (excessive heat, etc.)
- demonstrate how to properly clean and inspect pipe before installing the coating.
- demonstrate how to apply the tape and epoxy-type coatings (Wax tape and PowerCrete J or Dev Tar).
- determine thickness of pipeline coating.
- complete required documentation.

Link to Gas Standard and Specification E-30:

<http://www.wedm3/cgi-bin/doccontent.dll?LibraryName=dmspge01^dmsedm01&SystemType=2&LogonId=b64b1abaacb7dad36c9b0497a33c7740&DocId=982580045&Page=1>

Link to Gas Standard and Specification E-35:

<http://www.wedm3/cgi-bin/doccontent.dll?LibraryName=dmspge01^dmsedm01&SystemType=2&LogonId=0db19e6446e197305d613cc23f7650ae&DocId=982580049&Page=1>