
**Alabama Natural Gas Association
Gas Worker
Training & Assessment Program**

PLAN B ASSESSMENT

Trainee Name: _____ Date of Assessment: _____

Evaluator Conducting Assessment: _____ Location: _____

Evaluator: *Conduct the assessment for one trainee at a time. Do not give the trainee the answers or lead him/her in any way. The assessment should be conducted in a quiet and un-rushed environment if possible. Do not conduct the assessment prior to the end of the 30-day period, but as close as possible to the 30-day period (not more than 5 days later). Correct the trainee during the evaluation process and demonstrate the correct method (if applicable). Record performance on this evaluation sheet.*

Proper Location of Tools & Materials on the Truck	Trainee Passed	Trainee Failed
<i>Ask the trainee the following questions (include files, procedures, etc. – things that the PSC might request as well)</i>		
1) Go get the _____ off the truck and bring it to me. (Select a tool or material with which he/she has worked in the last 60 days – not something that is obscure.)		
Score: Obtains the tool or material requested in a reasonable amount of time.		
2) Go get the _____ off the truck and bring it to me. (Select a tool or material with which he/she has worked in the last 60 days – not something that is obscure.)		
Score: Obtains the tool or material requested in a reasonable amount of time.		
3) Go get the _____ off the truck and bring it to me. (Select a tool or material with which he/she has worked in the last 60 days – not something that is obscure.)		
Score: Obtains the tool or material requested in a reasonable amount of time.		

Proper Location of Tools & Materials on the Truck	Trainee Passed	Trainee Failed
4) <i>Go get the _____ off the truck and bring it to me. (Select a tool or material with which he/she has worked in the last 60 days – not something that is obscure.)</i> Score: Obtains the tool or material requested in a reasonable amount of time.		
5) <i>Go get the _____ off the truck and bring it to me. (Select a tool or material with which he/she has worked in the last 60 days – not something that is obscure.)</i> Score: Obtains the tool or material requested in a reasonable amount of time.		

Emergency Response Plan	Trainee Passed	Trainee Failed
1) <i>Where is our Emergency Response Plan and what is the purpose of that plan?</i> Score: Responds appropriately		

Proper Excavation & Safety Concerns of Working in Confined Spaces	Trainee Passed	Trainee Failed
Tell the trainee: <i>I'm going to ask you several questions related to excavation and maintaining safe working conditions.</i>		
1) <i>Explain the various soil types you might encounter on the job and why it is important?</i>		
Score: Correctly responds based on location.		
2) <i>Explain what the point of egress or exit is and what the importance of this is when excavating</i>		
Score: It is a planned point of escape from the hole. It is important for planned escape from the hole in the event of unexpected cave-in – when you need to react quickly.		
3) <i>How far away should the spoils be from the hole?</i>		
Score: Response based on company standards		
4) <i>What are the safety precautions you take when shoring and trenching?</i>		
Answer: means of egress, use a trench box over X ft (follow company procedures) deep, proper depth of hole (response based on company standards)		
5) <i>What about when working around heavy equipment like a backhoe or excavator?</i>		
Answer: know the swing radius, maintain eye contact with the operator when spotting, one person gives signals, keep an eye out for other utilities,		

Squeeze Off PE Pipe	Trainee Passed	Trainee Failed
<i>Give the Trainee a piece of 2 inch PE that is not clean. Ask the following questions I want you to Squeeze Off this PE Pipe, but first I am going to ask you a few questions:</i>		
1) <i>How far from a weld or fitting should the squeeze point be?</i> Score: A minimum of 1½ x the diameter of the pipe		
2) <i>What may impact the properties of the pipe and the force it may take to squeeze it off?</i> Score: Weather		
3) <i>We aren't asking you to mark the pipe now because this is an exercise, but why do we always mark the squeeze point?</i> Score: Squeezing off the pipe weakens the pipe. Multiple squeeze offs can cause eventual leaks.		
4) <i>Squeeze it off</i> Score: Trainee does what was requested. The Trainee cleans the pipe, sets it for correct size pipe, uses static spray, grounds the squeeze off, centers it, and squeezes off correctly.		

Abandon/Retire/Kill Services & Mains

Trainee
Passed

Trainee
Failed

Tell the trainee the following: *We are going to retire this service. I want you to walk me through each thing that we are going to do, step by step, explain what we are doing and why as we go.*

- Verify the address matches the work order.
- Make contact with the customer (if appropriate).
- Secure the truck and the work site with cones, signs, strobe lights, and flags as necessary.
- Direct traffic as necessary.
- Put on proper PPE and get fire extinguisher out.
- Verify a locate request of other underground utilities has been made, you have a valid locate number, and the other underground utilities have been located.
- Locate the utilities.
- Spot the other utilities if any are in the way.
- Pull up bonding wires (steel) or tracer wire (plastic) in a valve box to locate main
- Locate the service and verify pressure.
- Dig up the service at or as close to the main as possible
- If the service is bridged (split), kill one at the tee first verifying which section of the tee should be killed.
- Start at the saddle
- Run the tap down until there is no gas. Use grounding procedures per Company procedures (to avoid sparking – potential fire source)
- Purge the service line to be abandoned at the riser
- Make cut and cap per Company procedures
- If no rundown in the tapping tee, do the above without purging. The process must be worked while gas is live. The line will be capped at one end. Once work is completed, soap test the live section to ensure no leaks are present. Make any notifications as appropriate when working on live gas per Company policy.
- If steel, wrap or coat, and brace.

Abandon/Retire/Kill Services & Mains	Trainee Passed	Trainee Failed
- Remove the riser and meter (if present). - Put a plug/slug/cap in the old stub per Company procedures. - Document the meter number and reading. - GPS any exposed lines.		
Score: Follows the appropriate procedure (above):		
State: <i>Suppose that it is a plastic main, not a service that is to be abandoned. Describe how your actions would be different in that situation.</i> - Verify correct section to be retired - Dig up and clean the main at the section to be retired. - Apply static suppressant spray, soapy water, and/or grounding wires (any measures to stop static and avoid sparks). - Squeeze the pipe off in section to be retired - Cut the pipe between the squeeze offs - Make a controlled release of the gas in the retired section per company procedure - Purge using nitrogen, air, or water - Use leak detection equipment to ensure it is 0% gas. - Add end cap to live section - Fill the end of the retired main (e.g., foam, expansion rubber plug, weld or fuse on caps - depending on type or size of pipe) - Conduct soap test to verify no leaks		
Score: Identifies the different steps involved in abandoning a main vs. a service		

Install/Renew a Service Line	Trainee Passed	Trainee Failed
Go to an appropriate location for this activity and then tell the trainee the following: <i>We are going to install (or renew) a service line here. I want you to walk me through each thing that we are going to do, step by step, explain what we are doing and why as we go.</i> • Verify address matches work order. • Secure the truck and the work site with cones, signs, strobe lights, and flags as necessary. • Determine where the riser will be installed based on customer preference, location of stub out, location of fuel lines from house, and based on City and company codes and ordinances. etc. and National Fuel Gas Code. • Make contact with customer, identify yourself, and review the purpose of the visit. • Put on proper PPE and get fire extinguisher out. • Verify a locate request of other underground utilities has been made, you have a valid locate number, and the other underground utilities have been located. • Locate utilities or ensure utilities have been located (check ticket to ensure locate date has not expired). • Spot other underground utilities that may be in conflict with proposed route of service line. • Take picture of locates or anything else that might be relevant (damaged driveways or sidewalks). • Identify location of water meter to determine if you will need to locate the water lines going to the house. • Locate the clean out for sewage to ensure it is not crossed. • Identify if power is to be placed on same side to determine depth at which gas must be placed and ensure riser is at least three feet from power meter, accessible windows, and vents. • Pothole or use vacuum excavation to verify without damaging utilities and to determine how deep utilities are to ensure boring does not disturb other utilities.		

Install/Renew a Service Line	Trainee Passed	Trainee Failed
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- Look for sprinkler systems, sewer, power, invisible dog fences, etc. and anything else that could be disturbed through the installation process.
- Get material needed to do the job off the truck.
- Analyze the situation to determine what measures will be necessary (e.g., plowing, directional boring open trenching) to put the pipe in the ground.

Riser to Main Method:

- Determine the best path for the service.
- Dig hole for the riser.
- Run tracer wire using one of two methods:
 - Connect tracer wire and pipe to the Beckett/Puller/Puller Head/Finger/Sock/Carrot connection on the plow blade if directional boring, install weak link and mud plug/bullet
 - Feed the tracer wire down the shoot of the blade of the tractor and tie to a stationary object.
- Plow/dig/trench or directional bore from riser hole to right-of-way.
- Disconnect the tracer wire and the pipe from the plow equipment.
- Cut, clean, and chamfer (pencil sharpen), prep pipe for butt/electro fusion and clean pipe again, or cut and clean for amp/met fitting.
- Pull the pipe into the hole (along with the tracer wire) using the plow, direction boring rig, or by hand in the trench.
- Stab the riser, perform the fusion, or install amp/met fitting at the riser.
- Set riser and fill the riser hole with dirt and tamp/pack.
- Dig the main up.
- If it is a plastic main:

Install/Renew a Service Line	Trainee Passed	Trainee Failed
○ Clean and scrape/peel/sand the main and clean with alcohol. <i>Note: Do not touch cleaned area with anything (bare hands, gloves, dirt, etc.) Only use lint free rags.</i> ○ Put tee on the main using clamp and electrofusion machine or saddle fusion machine/side winder. ○ Chamfer (pencil sharpen) the end of the EFV on the outlet side of the tee or prepare for butt fusion. Clean it (soap or alcohol) ○ Measure and mark travel distance/stab depth. Stab the coupling to the EFV, connect with butt fusion, or connect with amp/met. ○ <i>Note: Check the flow direction of the EFV to ensure you are installing it in the correct direction.</i> ● If it is a steel main: ○ Check the main for pitting and wall thickness ○ Clean a spot on the main large enough for a tee. It must be cleaned down to the bare steel. ○ Use a Pipe to Soil (P.S.) meter to take a pipe to soil potential reading <i>or</i> get a CP reading using a voltmeter and record it per Company standards. ○ Ensure proper personal protective equipment is on and fire extinguisher is present and personnel have been designated as a dedicated fire watch. ○ Remove the core and O-ring out of tee. ○ Weld the tee to the main. ○ Allow the weld to cool. ○ Connect compression fitting (nut and O-ring) to the EFV or transition to plastic through a transition sleeve or a pre-manufactured steel to plastic Noblo/tapping tee and attach the EFV to the transition sleeve or the plastic end of the transition Noblo/tapping tee. (Ensure EFV is turned in correct direction.) ○ Chamfer (pencil sharpen) the end of the EFV and clean it with alcohol or soap. ○ Measure, mark, and stab the EFV, connect with butt/electro fusion, or connect with amp/met.		

Install/Renew a Service Line	Trainee Passed	Trainee Failed
• Dig out from under the service to ensure the service will lay flat (no pinch points). • Bed the pipe with dirt. • Install supportive device to support plastic to steel transition area to ensure the weight of the backfilled soil doesn't cause the pipe to bend or kink. • Measure the service to the stab fitting or amp/met for the correct length and cut. • Chamfer (pencil sharpen) the end of the service, clean, and connect (stab in) to the stab fitting or clean and connect the amp/met. • For a plastic main: Electrofuse or butt fuse the service line kit tee to the main. • Write name and other required information on the main on every fusion made. • For plastic: Connect tracer wires. • For cast iron or steel: Cad weld or wrap wire to/around pipe. • Conduct pressure test (air test) to 1.5 times of operating pressure on service using pressure chart. • Soap test all fittings and service tee for potential leaks. • Let air test off service. • Put on appropriate fire retardant PPE as required before tapping. • Tap the service with fire extinguisher near-by and designated fire watch. • For steel main, wrap the main and the tee. • Protect main with rock shield/guard if necessary. • Purge air from the riser. • Check service with gas detection equipment. Main to Riser Method: • Dig the main up.		

Install/Renew a Service Line	Trainee Passed	Trainee Failed
• Prepare the riser. • Flow, directional bore, etc. and put the pipe, tracer wire, and tape (if used) in the ground. • Connect the riser to the pipe. • Set riser and fill in trench and tamp. • Clean and prepare the main for the tap. • If the main is steel or cast iron, determine the tee and saddle that should be used and install both to the main. • For plastic: Connect tracer wires. • For cast iron or steel: Cad weld wire to pipe or wrap around NoBlo. • If the main is plastic, install the tapping saddle, NoBlo, or tapping tee to the main. • Install an EFV and tie the service into the tee. • Conduct an air test using pressure chart. • Put on appropriate fire retardant PPE as required before tapping. • Tap the main. • Soap test all fittings for potential leaks and repair any leaks identified. • If steel, wrap exposed pipe. • Place wedges under the saddle to support the main. • Purge the air out of the service line. • Add EFV tag to riser. • Add company identification tag to riser. • Purge line to ensure gas is present or use leak detection equipment (GMI, CGI) to ensure it is 100% gas. • Write name and other pertinent information on the main. • Drop marker ball underneath the tee or GPS the tap and service line. • Take a measurement from the tapping tee to the nearest intersecting street and from the back of the curb to the tapping		

Install/Renew a Service Line	Trainee Passed	Trainee Failed
tee and record on appropriate form. • Take pictures of service for documentation. • Safe-in service line and tracer wire to ensure they remain uniform and together before backfill. • Backfill the trench/hole. • Set the meter/meter bar. • Set appropriate regulator pressure. • Soap test meter loop to check all fittings for leaks. • Record the meter number and ERT. • Place locate flags on new services. • Landscape the construction area as necessary. Score: Follows the appropriate procedure (above):		

Pressure Test Services & Mains		Trainee Passed	Trainee Failed
Ask the Trainee the following			
1) <i>Why do we conduct a pressure test on a service or main?</i>			
Score: To check for leaks and to check the integrity of the pipe and fittings. To ensure the pipe and fittings will not leak at operating pressure.			
2) <i>At what pressure do you conduct the pressure test?</i>			
Score: One and a half times operating pressure.			
3) <i>How long are pressure tests on services and mains?</i>			
Score: Responds correctly based on company			
4) <i>What types of pressure tests are conducted?</i>			
Score: Air, Nitrogen, Hydrostatic			
5) <i>What do you do as a result of a failed test? What does a failed test mean, and what do you do?</i>			
Score: You have a leak. Identify the source of the leak and repair.			

Bar Hole Testing	Trainee Passed	Trainee Failed
Ask the trainee the following questions about Bar Hole Testing:		
1) <i>Why do we bar hole test? What is the purpose?</i>		
Score: To pinpoint a leak by identifying the highest concentration of gas.		
2) <i>What tools do you need to conduct bar hole testing?</i>		
Score: Probe bar/rod, hammer drill, Sensit/gas detection equipment		
3) <i>What precautions must be observed when bar hole testing?</i>		
Score: Caution to avoid striking underground utilities, observe standing water (won't work properly)		
4) <i>Conduct a bar hole test here</i> (send Trainee to an area with a low gas leak)		
Score: Correctly conducts bar hole test		

Using Gas Detection Equipment		Trainee Passed	Trainee Failed
Ask the trainee the following questions about Gas Detection Equipment:			
1) <i>When using gas detection equipment, what setting would you have it on when bar hole testing or trying to pinpoint a leak?</i>			
Score: Correctly responds based on equipment used			
2) <i>What is UEL? What is the importance of that reading?</i>			
Score: Upper explosive limit. This alerts you to danger, particularly when you are in confined spaces.			
3) <i>How often does the gas detection equipment need to be calibrated?</i>			
Score: Correctly responds based on company guidelines			
4) <i>What is PPM? What is the significance of PPM?</i>			
Score: Parts Per Million. It alerts you to how much of a substance is present. Depending on the substance, it alerts you to potential danger and the possible need to evacuate or introduce outside air sources (e.g., open windows).			
5) Use this gas detection equipment and tell me the LEL, UEL, O ₂ , and CO for this space.			
Score: Provides the correct responses			

Cut & Thread Pipe	Trainee Passed	Trainee Failed
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Ask the trainee to do the following

- 1) *Cut and thread a piece of 3/4" steel pipe to _____ length.*
(Choose a reasonable length consistent with (a) what the trainee might be asked to cut and thread in the field and (2) what you would give another trainee in this exam.

Score: Evaluate based on company standards.