INDUSTRIAL RELATIONS
741.5

Review Committee File No. 1224
San Joaquin Division Grievance No. D.Gr/C 25-72-13
Use of Fieldman and Apprentice Fitters for Lighting Pilots in Merced

October 9, 1973

MR. A. O. CLARK, Chairman
San Joaquin Division
Joint Grievance Committee

The Review Committee has discussed the above-subject grievance and is returning it to the Division Joint Grievance Committee for settlement in accordance with the following:

If operating conditions indicate the need for additional help, the Division should train Helpers to replace or augment the use of trained or experienced Fieldmen, Apprentice Fitters, and other classifications for this purpose.

This case is considered closed and should be so noted in the minutes of your next Joint Grievance Committee meeting.

L. V. BROWN, Chairman
Review Committee

DJBergman:mt

cc: EEFoley
IWBonbright
JAFairchild
HJStefanetti
DSSolberg
LNFoss, IBEW ✓ - enc.

ATTACHED FOR BUSINESS REPRESENTATIVE'S

INFORMATION ONLY...NOT FOR DISTRIBUTION

62-6218 (REV. 8-70)

PG and E

FOR INTRA-COMPANY USES

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DIVISION OR DEPARTMENT: GAS UTILIZATION

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FILE NO. 850

RE LETTER OF

SUBJECT: Restoration of Service and Lighting Pilots
Supplemental Instructions for
Street Department Crew Personnel

October 10, 1973

DIVISION GAS SUPERINTENDENTS:

This refers to Messrs. Drew's and Fairchild's letter of August 27, 1971, on the above subject, to Gas Superintendents in all Divisions except Humboldt and San Francisco. The letter transmitted the outline: "Pilot Lighting Instruction for Temporary Pilot Lighting Personnel." Using this outline, it was intended that Divisions give several days of training to Street Department Helpers and others who were to be upgraded to light seasonal pilots.

It is not uncommon around the system to use General Construction and Division Helpers for restoring service following a planned shutdown. We have learned, however, some of these Helpers have not received the necessary light-up training before being assigned this work.

Normally Apprentice Fitters, Fitters, Reserve Gas Servicemen and Light Crew Foremen should be utilized for restoring services. In any event, men used for such work should be trained in the basics of restoring service and lighting pilots.

Attached is the outline sent to most Divisions in August 1971. I ask that it be used at training sessions for inexperienced workmen prior to their assignment to the work of lighting pilots or restoring gas service.

C. E. Lanthier

CEL:ja

cc: EFSibley
JAFairchild
JPirtz

Attachment

PILOT LIGHTING INSTRUCTIONS

FOR TEMPORARY PILOT LIGHTING PERSONNEL

I. INTRODUCTION

A. Seasonal lighting of customers' heating appliances imposes a substantial surge in the Gas Service Department work load in the Valley Divisions each year. Because so many requests for this service are received simultaneously, it is important that P. G. and E. employees performing this service, proceed as rapidly as possible. However, customers rely on us to closely observe both the condition and operation of the appliances at the time pilots are lit, and we would like to have the customers observe (and learn) the correct method of lighting his own pilot(s) in the future. Therefore, safe lighting procedures should be demonstrated to the customer and temporary pilot lighting personnel must be alert for unsafe appliances.

1. Observing Burner Flame

All heating equipment lit by P. G. and E. personnel is to be observed with the burner on (and appliance doors and panels closed and in place) for several minutes to make sure the flame does not roll out or float due to recirculation.

(a) If the burner flame characteristics (appearance) change during this observation, and especially if the flame (1) lengthens, (2) turns soft or yellow, or (3) rolls or floats out of the appliance, the appliance must be checked and serviced by an experienced Serviceman before it is used. TURN IT OFF and turn the tag back in for a follow-up call.

2. Turning on "Heat Only" Meters

Some customers have only gas heating in their homes and gas will be off at the meter.

(a) Turning on a meter requires additional knowledge on the part of the workman, plus proper completion of meter-tag information on the tag. Unless specifically trained for this work, temporary pilot lighting personnel should turn such tags back in, clearly marked: "Requires meter turn on," and noting when the customer will be home.

II. GENERAL SAFE LIGHTING INSTRUCTIONS

A. The following important steps apply to most gas heating appliances:

1. Make sure that pilot and burner valves are in the "off" position and that the main shutoff valve (if any) to the appliance is "on".

(a) If pilot valves or pilot and burner valves are found on allowing unburned gas to accumulate within the appliance, allow gas to dissipate for a few minutes before attempting to light. Removal of the unburned gas will be accelerated by blowing into the combustion chamber (use blow tube, if supplied).

2. Wall or built-in thermostats should also be turned off.

3. Locate pilot with flashlight.

4. Insert lighted match to pilot location, using lighter tool, before opening pilot valve.

   (a) Keep face away from firebox opening when inserting match.

5. Open pilot valve.

6. Purge air from pilot line and light pilot.

   (a) If match goes out during purging, close pilot valve and repeat steps from Item (4).

   (b) Most 100% shutoff pilot safety valves require depressing a reset button to allow pilot gas to flow.

7. Reset safety.

   (a) On 100% shutoff pilot safety valves, continue to hold the reset button depressed for one minute after lighting the pilot.
   (Note: Some reset plungers must be pulled out during the one minute warm-up period.)

   (b) On other pilot safety devices, wait at least one minute after lighting the pilot before manipulating the reset device.

   (c) If lighting efforts at this point are unsuccessful, read and follow lighting instructions printed on the appliance.

   (d) If safety will not hold open, blow lint from pilot openings and make one more attempt to light before referring the tag to a more experienced Serviceman.

8. Turn the thermostat (if any) on.

9. Bring main burner on by opening main burner valve.

   (a) Keep your face clear of combustion chamber. Burner ignition should be checked several times; on final check, the main burner should be turned on as quickly as possible. BURNER(S) MUST IGNITE PROMPTLY FROM THE PILOT.

10. Check operation of the controls by cycling the thermostat, if so equipped.

11. Observe the burner flame for at least two minutes (with appliance doors, panels, etc., closed and in place).

   (a) Combustion characteristics will change after the air has been exhausted from within a defective appliance.

(b) If burner flame can be seen impinging within the combustion chamber, or if unusually long flames extend to a point where it is difficult to see if they are impinging or not, or if the pungent odor of aldehydes is noticed during the burner observation, TURN THE APPLIANCE OFF and turn the tag back in for a follow-up call by an experienced Serviceman.

(c) During burner observation on vented appliances, (except for floor furnaces, and wall furnaces with draft-diverters hidden behind grills) hold a lighted match at the draft-diverter relief opening to test venting action.

(1) Flame should indicate air being drawn into the opening. Spillage will snuff out the match. Spillage should cease after a few minutes of burner operation. Continuing spillage indicates an unsatisfactory vent condition which should be called to the customer's attention for correction.

12. Leave burner valve (or thermostat) at setting requested by the customer.

III. SPECIAL INSTRUCTIONS FOR WALL FURNACES

A. Faulty combustion in a wall furnace is almost always caused by lint and dust clogging burners. This faulty combustion with its production of soot is present when you observe any or all of the conditions listed below.

1. Vent Cap Blackened by Soot

Combustion gases from a furnace with a sooting flame may blacken the vent cap. Sometimes the vent cap can be seen clearly from a point outside the building. Although no part of the furnace external venting system will become clogged with soot, a black coating may form in the flue pipe and on the vent cap above the roof. Servicemen, after cleaning the burner, generally advise the occupant to have the cap painted so it will again serve to signal faulty combustion.

2. A Yellow or Candling Flame

A yellow or candling flame, which may produce soot, can readily be seen by holding a mirror beneath the burner or by looking up into the combustion chamber. Sometimes yellow reflections can be seen on the floor in front of the furnace or from sheet metal parts under the burner. Normally, a flame is blue with an occasional flash of orange brilliance. The orange flash is caused by particles of dust and lint being incinerated in the flame. A blue flame will not produce soot.

3. Discoloration Near Top of Furnace and Blackened Walls

Discoloration from soot of the draft hood section near the top of the furnace may be seen through louvers in the outer shell. During operation, there may be occasions when small amounts of combustion

gases spill at the draft hood; this is normal. However, soot-laden gases spilling at the draft hood will blacken this section.

4. A serious situation occurs when the furnace internal flue becomes choked with soot. The flame may roll out at the bottom of the furnace where combustion gases are free to enter the circulating air stream in large quantities. When this happens, even the ceiling and walls in the vicinity of the furnace are blackened. A furnace found in such condition must not be operated until the internal flues and burners are thoroughly cleaned.

   (a) Note: Wall discoloration may be caused by air-borne particles (cigarette smoke, dust, lint, etc.) which are carried in the warm air stream.

B. When combustion is faulty, turn the tag back in for a follow-up call by an experienced Serviceman and advise the customer that a P. G. and E. Serviceman will return to clean and service the burners without charge. If the wall furnace needs further cleaning and repairs, the customer will be advised by the Serviceman at that time.

IV. SPECIAL INSTRUCTIONS FOR FORCED AIR FURNACES

A. In addition to the general lighting instructions, the following items should be checked when lighting forced air furnaces:

1. Air filters should be checked only when readily accessible, and customers advised regarding cleaning and/or replacing them.

2. Manufacturer's instructions regarding oiling of blower and/or fan motor bearings, where applicable should also be called to the customer's attention.

3. WARNING: Blower-compartment doors on forced air furnaces must be in place, or blowers will seriously withdraw needed oxygen from furnace closets.

4. Fan-delay is common on forced air furnaces to allow unit to heat the air in the plenum before the fan comes on. Also, the fan operation continues for a few minutes after the thermostat shuts the burner off. Check the furnace operation at least through one normal fan "on-off" cycle.

5. If burner flame becomes distorted when the fan is on, TURN FURNACE OFF and turn the tag back in for a follow-up call by an experienced Serviceman who will make a thorough check of the furnace condition.

V. OTHER APPLIANCES REQUIRING SPECIAL INSTRUCTIONS

A. Floor Furnaces

1. Accumulated lint in floor furnaces can catch on fire. Do not light if lint and/or other debris is visibly accumulated in the furnace. In any event, advise the customer to clean it regularly.

2. A dislodged vent under the house can be extremely hazardous. Any indication that this has happened requires that we inspect the vent under the house.

   (a) Temporary pilot lighting personnel are not expected to crawl under houses to inspect floor furnaces.

   (b) If vent is suspected to be dislodged or otherwise inoperative, LEAVE FURNACE OFF and turn the tag back in for follow-up call by an experienced Serviceman. Advise the customer that repairs by a qualified plumber or other service agency will undoubtedly be required and that the sooner this is done, the sooner the furnace can be used.

3. It is important that the floor furnace ignition-observation port cover be properly in place to prevent dangerously hot gases from issuing into the living space. A damaged or missing cover may be temporarily replaced with a metal food jar lid to allow safe operation of the furnace. Observation of the burner flame, however, must be made with the cover in place.

4. CAUTION: Rugs or furniture placed over a floor furnace grate constitutes a serious fire hazard. Never light a floor furnace from underneath without first inspecting the grate area to make sure it is clean and free from other restrictions to air circulation.

B. ROOM HEATERS with Isinglass Windows

1. If isinglass is missing, or broken to the extent that clothing could be ignited by the burner flame, LEAVE THE HEATER OFF, and turn the tag back in for a follow-up call by an experienced Serviceman.

C. HOT WATER and Steam Boilers

1. Do not light steam boilers unless operating water level is correct and visible.

2. DO NOT ADD WATER! Unless water is properly added by the customer or an experienced Serviceman, serious damage can occur.

3. In most cases, it will be necessary to turn the tag back in for a follow-up call by an experienced Serviceman.

VI. OVERGASSED APPLIANCES ARE SERIOUS HAZARDS TO LIFE AND PROPERTY

A. However, adjusting the appliances to their rated inputs is a normal service performed by our experienced Servicemen. Temporary pilot lighting personnel should be alert for the symptoms of overgassing:

1. Unusually long flames, the tops of which extend to a point where it is difficult to see if they are impinging or not.

2. Flame roll-out around the bottom of the combustion chamber or through the pilot observation opening.

3. Warping or discoloration of the combustion chamber and/or other surfaces due to OVERHEATING.

4. A burned out combustion chamber (which also could be caused by burner misalignment) is in itself, reason to LEAVE THE APPLIANCE OFF.

5. Overgassing can be suspected when a heating appliance has a newly added thermostat valve and no appliance regulator. When this is found, flames must be closely observed with all burner valves in the full "on" position.

6. Whenever overgassing is suspected, THE APPLIANCE MUST BE LEFT OFF. The customer is to be advised that further servicing is necessary, and the tag is to be turned back in for a follow-up call by an experienced Serviceman.

VII. NORMAL START-UP PHENOMENA

A. Pilot lighting personnel will soon learn to recognize normal start-up phenomena:

1. A thin film of dust is normally present on surfaces that are heated within an appliance when it is first lit. This dust will scorch and produce a distinct odor, usually of brief duration. Customers will frequently comment on this odor and should be reassured of its normalcy.

   (a) A pungent odor of aldehydes, however, indicates a serious malfunction within the appliance.

2. Heating appliance flames should be quite blue, usually with well-defined inner cones.

   (a) Any disturbance near the burners, however, will stir up small particles of dust which enter the flame and are incinerated with flashes of orange brilliance.

VIII. ADVISING THE CUSTOMER

A. Most pilot lighting service calls require that we convey some advice to the customer. It is very important that certain subjects be handled with tact and diplomacy.

1. Cleaning lint, which our employee should do within the burner-pilot area, is a maintenance task each customer should perform regularly.

2. Where follow-up calls are needed, this necessity should be explained to the customer in a manner that will allay any fears that the additional delay will be excessive.

3. The customer should be assured that he may light his own pilot the next time, by following the same safe lighting practices you have just demonstrated in his presence, and thus eliminate some unavoidable delay.