ATTACHMENT IV

MAXIMUM ALLOWABLE COSTS
GAS HEATING SYSTEMS

(DESIGNED AND CONVERSION UNITS)

1. LABOR RATE $_____/hour SERVICE CALL RATE $_____

2. CLEAN & TUNE- Perform combustion test and record results on Inspection Form. Inspect unit, check heat exchanger and combustion chamber for holes, cracks and/or leaks. Check and clean blower, replace blower belt, if necessary. Lubricate blower motor/bearings, ascertain fans and pumps are clean, lubricated and are circulating the heated medium throughout the system. Complete cleaning and sealing of boiler sections. Calibrate thermostat. Adjustment of primary air shutter to minimize yellow tipping. Complete checking of warm air circulating fans and low water cut-offs (steam) must be cleaned and checked. Also, checking of electrical connections for replacement of faulty components, especially on safety devices. Replace existing regular filters with new ones. Replace permanent filters when necessary. Replace the thermocouple when necessary. Checking and cleaning of baffles and cleaning of burners. Recycle 4 or 5 times. Repeat combustion test and record results, attach service sticker/label to the unit.
   - MATERIALS to be listed and priced out separately
   - LABOR 2 hours $_____

3. COMPLETE CLEANING OF CHIMNEY (Base and flue from top to bottom)
   - LABOR 2 hours $_____

4. INSTALLATION OF A NEW SET BACK CLOCK THERMOSTAT (Only where client permits or requests, or existing one needs replaced)
   - MATERIALS not to exceed $_____

5. ELECTRONIC IGNITION
   - MATERIALS not to exceed $_____

6. INSTALLATION OF A NEW TRANSFORMER
   - MATERIALS not to exceed $_____

7. INSTALLATION OF A NEW GAS VALVE
   - MATERIALS not to exceed $_____ (one stage)
   - MATERIALS not to exceed $_____ (two stage)

8. INSTALLATION OF A NEW STANDARD THERMOSTAT
   - MATERIALS not to exceed $_____

9. INSTALLATION OF A NEW BLOWER MOTOR
   - MATERIALS not to exceed $_____

10. INSTALLATION OF A NEW FAN AND LIMIT CONTROL
    - MATERIALS not to exceed $_____

11. COMPLETE/AUTHENTIC HEAT LOSS CALCULATION FOR REPLACEMENTS
    Agency must be contacted for weatherization measures that will be completed and affect the calculations
    - $_____

12. INSTALLATION OF A NEW CIRCULATING PUMP
    - MATERIALS not to exceed $_____

13. INSTALLATION OF A NEW AQUASTAT (COMBINATION, MULT-FUNCTION)
    - MATERIALS not to exceed $_____

14. INSTALLATION OF A NEW BURNER FOR MOBILE HOMES
    - MATERIALS not to exceed $_____

15. INSTALLATION/REPLACEMENT OF A NEW 30# RELIEF VALVE ON HOT WATER SYSTEMS
    - MATERIALS not to exceed $_____

16. INSTALLATION OF AN ELECTRICAL SYSTEM HAVING A DEDICATED CIRCUIT TO THE BOILER/FURNACE-the circuit must be overload protected, have its own switch and connections must be hazard free (If 2 amp service-a minimum of 12-2 W/G wire and if 15 amp service-a minimum of 14-2 W/G wire)
    - MATERIALS not to exceed $_____

17. INSTALLATION OF A NEW BLOWER
    - MATERIALS not to exceed $_____

18. FLUE PIPE (26 GUAGE)-maximum material costs

	PIPE SECTIONS	ELBOWS
• 3"	$_____ per foot section	$_____ per section
• 4"	$_____ per foot section	$_____ per section
• 5"	$_____ per foot section	$_____ per section
• 6"	$_____ per foot section	$_____ per section
• 7"	$_____ per foot section	$_____ per section
• 8"	$_____ per foot section	$_____ per section

19. INSTALLATION OF A NEW SAFETY LIMIT SWITCH
    - MATERIALS not to exceed $_____

20. INSTALLATION/REPLACEMENT OF A NEW ZONE VALVE(S)
    - MATERIALS not to exceed $_____

21. INSTALLATION/REPLACEMENT A NEW SHUTOFF VALVE
    - MATERIALS not to exceed $_____

22. INSTALLATION OF A NEW COMPLETE ROOF JACK ASSEMBLY
    - MATERIALS not to exceed $_____

23. INSTALLATION OF DOUBLE WALL (B VENT) PIPE FOR VENTING OF SPACE HEATERS

AND HOT WATER TANKS-maximum material costs

	PIPE SECTIONS	PIPE ELBOWS
• 3"	$_____ per foot section	$_____ per section
• 4"	$_____ per foot section	$_____ per section
• 5"	$_____ per foot section	$_____ per section
• 6"	$_____ per foot section	$_____ per section
• 7"	$_____ per foot section	$_____ per section
• 8"	$_____ per foot section	$_____ per section

24. INSTALLTION OF NEW FLOOR REGISTERS IN MOBILE HOMES
    - TO BE COMPLETED BY WEATHERIZATION CREW

25. INSTALLATION OF ELECTRONIC FLUE DAMPERS ON HOT WATER AND STEAM BOILERS
    - MATERIALS not to exceed $_____

26. INSTALLATION OF A NEW CHIMNEY LINER
    - MATERIALS not to exceed $_____

27. **INSTALLATION OF NEW FURNACE**

    90+% EFFICIENT FURNACE 42,000 BTU INPUT
    - MATERIALS not to exceed $_____

    90+% EFFICIENT FURNACE 56,000 BTU INPUT
    - MATERIALS not to exceed $_____

    90+% EFFICIENT FURNACE 70,000 BTU INPUT
    - MATERIALS not to exceed $_____

    90+% EFFICIENT FURNACE 84,000 BTU INPUT
    - MATERIALS not to exceed $_____

    90+% EFFICIENT FURNACE 98,000 BTU INPUT
    - MATERIALS not to exceed $_____

    90+% EFFICIENT FURNACE 112,000 BTU INPUT
    - MATERIALS not to exceed $_____

28. **INSTALLATION OF NEW BOILER**

    85% EFFICIENT BOILER 74,000 BTU INPUT
    - MATERIALS not to exceed $_____

    85% EFFICIENT BOILER 103,000 BTU INPUT
    - MATERIALS not to exceed $_____

    85% EFFICIENT BOILER 133,000 BTU INPUT
    - MATERIALS not to exceed $_____

29. WALL FURNACE 40,000 - 65,000 BTU INPUT
    - MATERIALS not to exceed $_____

30. ALL OTHER RETROFIT/MODIFICATION/REPLACEMENT MEASURES to be completed and billed at MATERIALS + LABOR

31. **MANUFACTURED HOUSING FURNACES & MATERIALS**:
    95% EFFICIENT 45,000 BTU INPUT
    - MATERIALS not to exceed $_____

    95% EFFICIENT 60,000 BTU INPUT
    - MATERIALS not to exceed $_____

    95% EFFICIENT 72,000 BUT INPUT
    - MATERIALS not to exceed $_____

32. CB-200A COTTAGE BASE F/CMF
    - MATERIALS not to exceed $_____

33. AUTO BASE DAMPER F/CMF
    - MATERIALS not to exceed $_____

34. COIL CABINET WHITE
    - MATERIALS not to exceed $_____

35. FURN VENT TRANSITION KIT
    - MATERIALS not to exceed $_____

NOTE: CONVERSION BURNERS MAY NOT BE REPLACED-ONLY CLEANED, TUNED AND MINOR REPAIRS IF NECESSARY

MOBILE HOME TESTING: Efficiency testing can be performed on most designs of mobile home heating units. In cases where the stack is of a double-wall construction, the outside shield can usually be raised (by removing 1 or 2 screws) thus exposing the vent. If required, a hole can be drilled through both walls of the double-wall pipe. Upon completion of the test, a 3"x1/4" lag bolt can be screwed through both holes in the stack and sealed with high temp flue tape. All other test holes must be closed using a sheet metal screw, plug or high temp flue tape.

ATTACHMENT V

MAXIMUM ALLOWABLE COSTS
OIL HEATING SYSTEMS

1. LABOR RATE $ _____/hour SERVICE CALL RATE $ _____

2. CLEAN & TUNE- Perform combustion test and record results on Inspection Form. Inspect unit-if evidence of 1/8" soot or more is present, or unit has not been serviced within the past two years, unit must be vacuumed. All fire tube steel boilers should have spinners removed and fire tubes brushed. Check heat exchanger and combustion chamber for holes or cracks. Check and clean blower, replace blower belt, if necessary. Check thrust bearings and belt alignment. Lubricate blower motor/bearings, circulator/bearings. Change air filters, check oil pump pressure, pump cut-off, primary safety lockout and replace nozzle. Check nozzle strainer, if dirty, check pump screen and clean if needed. Clean nozzle adapter and flush gun line. Check electrodes for cracks, electrode settings, end cone, burner fan, clean if necessary and check condition of pump coupling. Lubricate burner motor and change oil filter. Check limit control for safety shutdown, low water cut-off for burner shutdown, for oil leaks and burner operation. Recycle 4 or 5 times. Repeat combustion test and record results, attach service sticker/label to the unit.
   - MATERIALS to be listed and priced out separately
   - LABOR 2 hours $_____

3. COMPLETE CLEANING OF CHIMNEY (Base and flue from top to bottom)
   - LABOR 2 ½ hours $_____

4. INSTALLATION OF A STANDARD THERMOSTAT
   - MATERIALS not to exceed $_____

5. INSTALLATION OF A NEW SET BACK CLOCK THERMOSTAT
   (Only where client permits, requests or existing one needs replaced)
   - MATERIALS not to exceed $_____

6. INSTALLATION OF A NEW COMBUSTION CHAMBER
   - MATERIALS not to exceed _____

7. INSTALLATION OF A FLAME RETENTION BURNER (Flame retention burners should not be installed with dry-base boilers, steam boilers, or anywhere appliance components either are in poor condition, or are suspect, nor should they be installed in conversion units.)
   - MATERIALS not to exceed $_____

8. INSTALLATION OF A NEW FLAME RETENTION HEAD
   - MATERIALS not to exceed $_____

9. INSTALLATION OF A NEW TRANSFORMER
   - MATERIALS not to exceed $_____

10. INSTALLATION /REPLACEMENT OF NEW ELECTRODES
    - MATERIALS not to exceed $_____

11. INSTALLATION OF A NEW FLAME DETECTOR
    - MATERIALS not to exceed $_____

12. INSTALLATION/REPLACEMENT OF A NEW OIL BURNER MOTOR
    - MATERIALS not to exceed $_____

13. INSTALLATION OF A NEW OIL PUMP
    - MATERIALS not to exceed $_____

14. INSTALLATION OF A NEW OIL PUMP GAUGE
    - MATERIALS not to exceed $_____

15. INSTALLATION/REPLACEMENT OF A NEW BAROMETRIC DRAFT CONTROL
    - MATERIALS not to exceed $_____

16. FLUE PIPE (24 GUAGE)-maximum material costs

	PIPE SECTIONS	ELBOWS
3"	$_____ per foot section	$_____ per section
4"	$_____ per foot section	$_____ per section
5"	$_____ per 2 foot section	$_____ per section
6"	$_____ per 2 foot section	$_____ per section
7"	$_____ per 2 foot section	$_____ per section
8"	$_____ per 2 foot section	$_____ per section

17. INSTALLATION OF TEE AND CAP (24 GAUGE)
    - MATERIALS not to exceed $_____

18. INSTALLATION/REPLACEMENT OF A NEW ZONE VALVE(S)
    - MATERIALS not to exceed $_____

19. INSTALLATION OF A NEW BLOWER
    - MATERIALS not to exceed $_____

20. INSTALLATION OF A NEW BLOWER MOTOR
    - MATERIALS not to exceed $_____

21. INSTALLATION/REPLACEMENT OF A NEW OIL PRIMARY CONTROL (FORCED AIR)
    - MATERIALS not to exceed $_____

22. INSTALLATION/REPLACEMENT OF A NEW OIL PRIMARY CONTROL (BOILER)
    - MATERIALS not to exceed $_____

23. INSTALLATION OF A NEW FAN AND LIMIT SWITCH
    - MATERIALS not to exceed $_____

24. INSTALLATION OF A NEW STACK SAFETY CONTROL
    - MATERIALS not to exceed $_____

25. INSTALLATION OF A NEW SAFETY LIMIT SWITCH
    - MATERIALS not to exceed $_____

26. INSTALLATION/REPLACEMENT OF A NEW OIL SHUTOFF VALVE
    - MATERIALS not to exceed $_____

27. INSTALLATION OF A NEW CIRCULATOR PUMP
    - MATERIALS not to exceed $_____

28. INSTALLATION OF A NEW COUPLER (B&G or equivalent)
    - MATERIALS not to exceed $_____

29. INSTALLATION OF A NEW RELIEF VALVE
    - MATERIALS not to exceed $_____

30. INSTALLTION OF A NEW EXPANSION TANK
    - MATERIALS not to exceed $_____

31. INSTALLATION OF A NEW OIL LINE
    - MATERIALS $_____ per foot section

32. INSTALLATION/REPLACEMENT OF A NEW WHISTLE FILL GAUGE COMBINATION
    - MATERIALS not to exceed $_____

33. INSTALLATION OF AN ELECTRICAL SYSTEM HAVING A DEDICATED CIRCUIT TO THE BOILER/FURNACE-the circuit must be overload protected, have its own switch and connections must be hazard free (if 20 amp service-a minimum of 12-2 W/G wire and if 15 amp service-a minimum of 14-2 W/G wire)
    - MATERIALS not to exceed _____

34. INSTALLATION OF A NEW COMPLETE ROOF JACK ASSEMBLY
    - MATERIALS not to exceed $_____

35. COMPLETE/AUTHENTIC HEAT LOSS CALCULATION FOR REPLACEMENTS
    Agency must be contacted for weatherization measures that will be completed and effect the calculations.
    $_____

36. INSTALLATION OF NEW FLOOR REGISTERS IN MOBILE HOME
    - TO BE COMPLETED BY WEATHERIZATION CREW.

37. INSTALLATION OF A NEW ALL FUEL CHIMNEY LINER
    - MATERIALS not to exceed $_____

38. **INSTALLATION OF MOBILE HOME FURNACES**
    MOBILE HOME 66,000 BTU INPUT
    - MATERIALS not to exceed $_____

39. MOBILE HOME 86,000 BTU INPUT
    - MATERIALS not to exceed $_____

40. **INSTALLATION OF OIL FIRED FURNACES**
    OIL FIRED FURNACE Highboy 85% Efficiency 60,000 - 90,000 BTU INPUT
    - MATERIALS not to exceed $_____

41. OIL FIRED FURNACE Highboy 85% Efficiency 101,000 – 132,000 BTU INPUT
    - MATERIALS not to exceed $_____

42. OIL FIRED FURNACE Lowboy 85% Efficiency 70,000 – 114,000 BTU INPUT
    - Front Flue MATERIALS not to exceed $_____
    - Rear Flue MATERIALS not to exceed $_____

43. OIL FIRED FURNACE Lowboy 85% Efficiency 129,000 – 142,000 BTU INPUT
    - Front Flue MATERIALS not to exceed $_____
    - Rear Flue MATERIALS not to exceed $_____

44. OIL BOILER 86+ UP TO 105,000 BTU INPUT
    - MATERIALS not to exceed $_____

45. ALL OTHER RETROFIT/MODIFICATION/REPLACEMENT MEASURES to be completed and billed at ACTUAL MATERIALS + LABOR

NOTE: CONVERSION BURNERS MAY NOT BE REPLACED-ONLY CLEANED, TUNED AND MINOR REPAIRS IF NECESSARY.

MOBILE HOME TESTING: Efficiency testing can be performed on most designs of mobile home heating units. In cases where the stack is of a double-wall construction, the outside shield can usually be raised (by removing 1 or 2 screws) thus exposing the vent. If required, a hole can be drilled through both walls of the double-wall pipe. Upon completion of the test, a 3"x1/4" lag bolt can be screwed through both holes in the stack and sealed with high temp flue tape. All other test holes must be closed using a sheet metal screw, plug or high temp flue tape.