

RFP Addendum

Addendum No. 1 for HRRSA Replacement of Anaerobic Digester Boilers/Heat Exchangers and Waste Gas Flare RFP No. HRRSA-2015-02, Wiley|Wilson Comm. No. 214168.00.

Date: November 14, 2014

To: All Proposing Contractors

From: Wiley|Wilson
Lynchburg, VA

This Addendum contains 3 pages and listed attachments and forms a part of the bidding documents and modifies the Project Manual and Drawings dated, October 31, 2014, as noted below. Acknowledge receipt of this Addendum in the space provided on the RFP. Failure to do so may subject bidder to disqualification.

RESPONSE TO QUESTIONS

Question 1: Please provide dimensions for the existing roll-up doors in the heat exchange room.

Response: The existing roll-up door dimensions are 10'-0" width by 10'-6" height. Contractor shall be responsible for building modifications required to install new equipment to include restoring any required modifications to the existing condition.

Question 2: Are combination boilers and heat exchangers required to be rated for Class 1 Division 1 Group D electrical classification?

Response: Yes

Question 3: Are fire tubes required to be removable?

Response: HRRSA removes and replaces fire tubes every 5 years as part of scheduled maintenance of the boiler. Fire tubes shall be able to be removed and replaced as part of this scheduled maintenance.

Question 4: Are modulating fire boilers required?

Response: Modulating fire boilers are not required. If a modulating fire boiler is proposed, low fire condition testing shall be per Section 235200 3.7.D. If a high fire only boiler is proposed, it is not subject to testing low fire condition testing.

Question 5: Is the flue stack supported from the boiler?

Response: The existing flue stack is supported from the building roof per the attached record drawings that are provided as Technical Data. The Contractor shall be responsible for providing, field routing and supporting a ¼" 316 stainless steel flue discharge to connect to the existing stack similar to the existing arrangement. The existing flue discharge may be re-used if it conforms to the Contractor provided combination boiler/heat exchanger equipment.

Question 6: Are 4-inch pressure gauges required if the manufacturer's standard is a smaller diameter pressure gauge?

Response: The manufacturer's standard diameter pressure gauge is acceptable.

Question 7: Is a UV flame scanner acceptable for burner safeguard controls (Section 235200 2.13.D.1)

Response: Yes.

Question 8: Is a flame trap assembly required on the Digester Gas assembly?

Response: Yes. Provide a flame trap assembly as required by Section 235200 Combination Boilers and Heat Exchangers 2.10.D and conforming to the requirements of Section 235900 Digester Waste Gas Flare 2.07.

Question 9: What is the limit switch indicated on Drawing D-502 Section 3?

Response: The limit switch provides positive indication that the pressure regulator valve has opened and is allowing gas to flow to the flare.

Question 10: Is an emergency pressure relief and vent valve required as part of the digester waste gas flare?

Response: An emergency pressure relief and vent valve is not required. Please disregard Section 235900 2.11 Emergency Pressure Relief Vent Valve.

Question 11: What are the emissions standards for the combination boilers/heat exchangers?

Response: The boilers are not subject to specific emission standards or air permitting requirements based on the small size (less than 50 MMBtu/hr combusting gaseous fuel).

DRAWINGS (Information provided in "Response to Questions" Section of Addendum also includes additional changes to Drawings)

1. Drawing D-101: Delete note "Demolish exist pipe as required to install blind flange on tee serving exist waste gas flare".
2. Drawing D-101: Revise the scale to indicate the drawing scale is 1-inch to 40-feet (1":40').
3. Drawing D-102: Contractor is responsible for providing sufficient working clearance if new combination boilers/heat exchangers exceed the dimensions of the existing units. Provide minimum 48" working clearance in front of all doors and panels and 30" working clearance for all other components of combination boilers/heat exchangers. Field route piping and extend equipment pads as required to achieve clearance per Notes on Drawing D-102.
4. Existing boiler feed water is potable water; it is not non-potable water. Revise Drawing D-102 Note 9 to reflect providing potable water to new combination boiler and heat exchanger. Revise Drawing D-001, D-102 and D-602 to replace all references to Non-Potable Water (NPW) with Potable Water (PW).
5. Drawing D-502: Provide a 316 SST isolation ball valve for the sense line with unions or compression fittings and a tee with plug at low point of sense line for drainage.

6. Drawing D-502: Provide a pressure regulator on the pilot gas assembly to maintain upstream pressure.

SPECIFICATIONS

(Information provided in “Response to Questions” Section of Addendum also includes additional changes to Specifications)

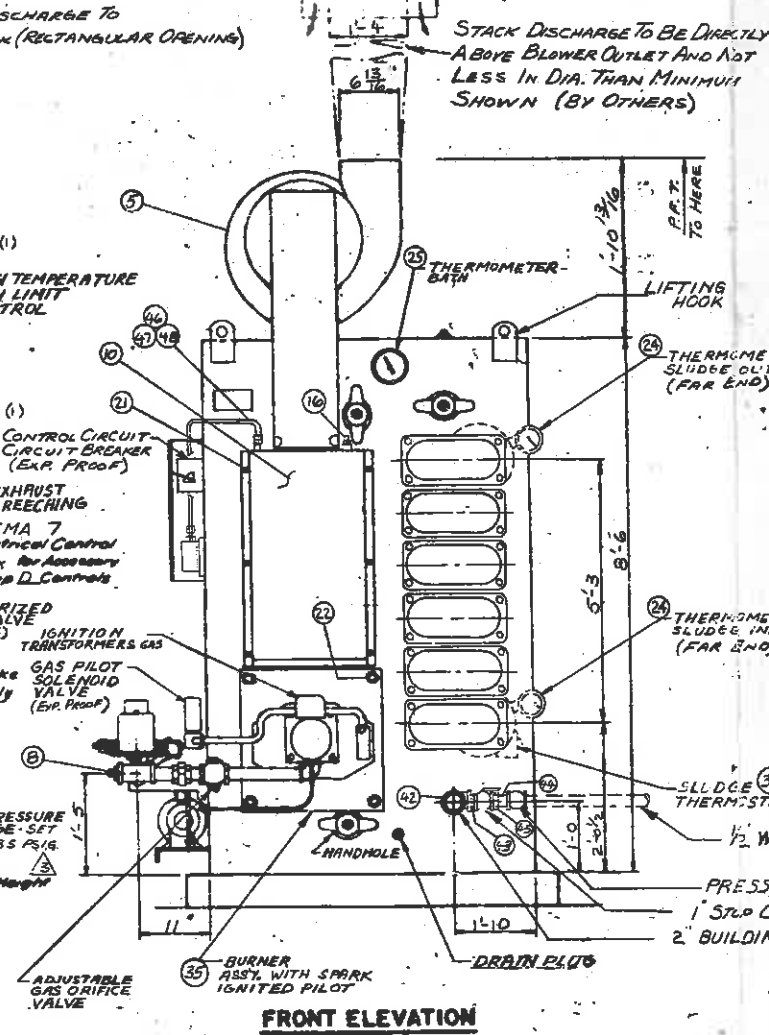
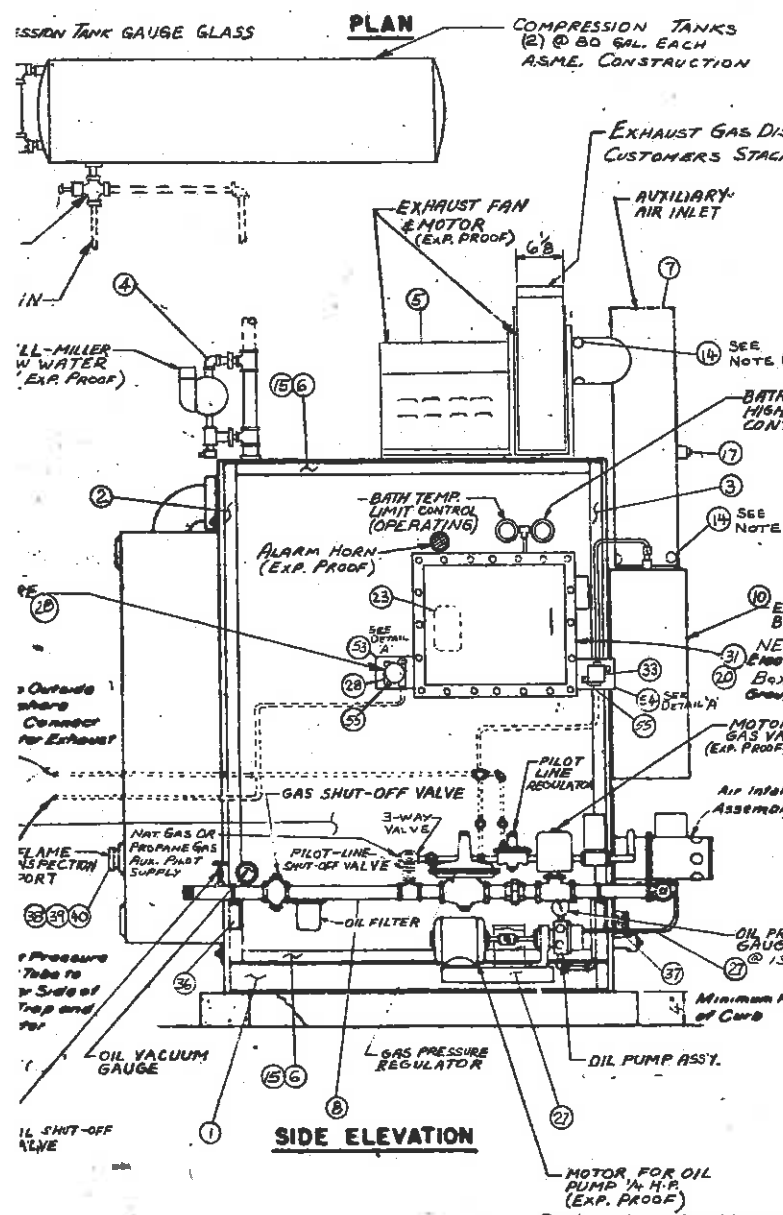
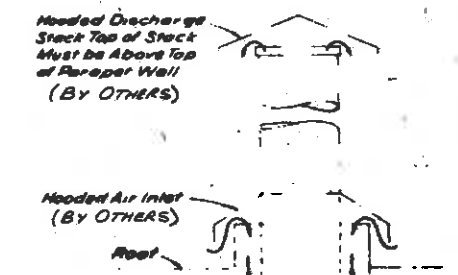
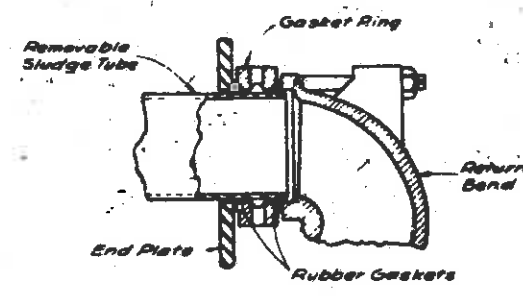
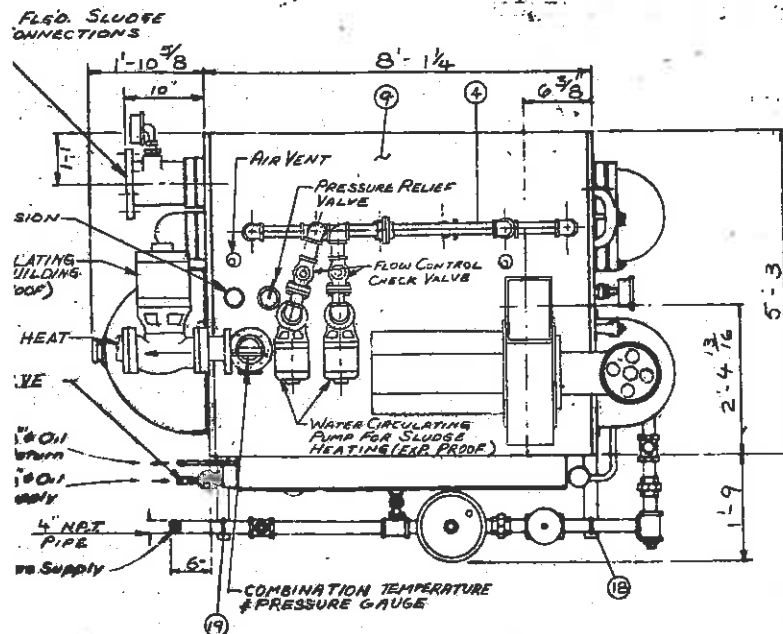
1. Revise Section 235200 2.5.C to reflect a minimum horsepower of 0.5 PSI for the building HVAC pumps. The building HVAC pumps shall be rated for 50 GPM at 10 psi.
2. Revise Section 235200 2.14.1 to delete item “c.”. Enclosure shall be NEMA 7 for Class 1 Division 1 Group D service.
3. Revise Section 235200 2.3.E and 2.16 B to reflect the Manufacturers standard design pressure to achieve the specified sludge heating capacity and meet ASME code requirements. The minimum design and test pressure shall be 30 PSI.

End of Addendum No. 1

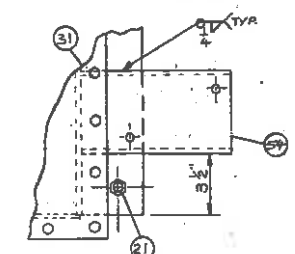
Wiley|Wilson



Aaron Tice P.E.



HEATER NUMBER		1506R	
SLUDGE HEATING CAP	BTU/HR	1,500,000	
SLUDGE RECIRCULATION RATE	GPM	350	
HEAD LOSS FOR SLUDGE	FT	10	
SLUDGE TUBES	NUMBER	12	
	SIZE	6"	
	HEATED SURFACE	SQ FT	166
	FLGD CONNECTION SIZE	6"	
BOILER OUTPUT RATING	BTU/HR	2,180,000	
FIRE TUBES	NUMBER	96	
	SIZE	2"	
FIRED SURFACE	SQ FT	436	
GAS SUPPLY	CFM @ RATED CAP	4360	
OIL SUPPLY	GPM @ RATED CAP	21.2	
COMPRESSION TANK CAP.	GAL.	2 @ 80	
EXHAUST FAN CAP.	CFM @ 70"	972	
EXHAUST FAN MOTOR	HP	2	
VENTILATING OPENING TO ROOM	SQ IN OF FREE OPENING OF LOUVER	330	
SHIPPING WEIGHT CRATED	LB.	15,900	
GROSS OPERATING WEIGHT	LB.	30,200	



ALL ELECTRICAL CONTROLS AND EQUIPMENT ARE FACTORY WIRED AND TESTED WITH NUMBERED TERMINALS ON CONTROL PANEL FOR FIELD WIRING BY OTHERS AS INDICATED IN TABLE BELOW.

ITEMS	
MAIN POWER SUPPLY	460/3/60
3 WIRES TO MAIN DISCONNECT SWITCH	
CONTROL CIRCUIT SUPPLY	120/3/60
2 WIRES TO CIRCUIT BREAKER	
(3) CUSTOMERS DIG. RECIRCULATION PUMPS -	4 WIRES TO TERMINAL BLOCK
(3) RAW SLUDGE PUMP INTERLOCKS	4 WIRES TO TERMINAL BLOCK
BUILDING HEAT THERMOSTAT	2 WIRES TO TERMINAL BLOCK

ALL ELECTRICAL CONTROLS AND EQUIPMENT FURNISHED IN NEMA TYPE 7 (EXPLOSION PROOF) ENCLOSURE. ALL MOTORS FURNISHED WITH EXPLOSION PROOF ENCLOSURES. FOR VARIOUS OPERATING CONTROLS, THE MAXIMUM DEMAND ON SINGLE PHASE CONTROL CIRCUIT FOR ALL SIZES OF HEATERS FOLLOWS:

FOR WIRING SEE:
SCHEMATIC HE 82357-1
CONTROL BOX HE 82357-2

- NOTE 1:
- (1) INSTALL (3) SELF-DRILLING SCREWS EQUALLY SPACED TO SECURE STACK
 - (2) SHIP EXPLOSION PROOF BLDG HEAT THERMOSTAT & COMPRESSION TANKS WITH HEATER.

(2) UNITS THIS ORDER

PAINT NOTE (REL STD.)
ENTIRE CHASSIS EXCEPT OUTSIDE OF END PLATE AND OUTSIDE OF TOP PLATE TO RECEIVE ONE COAT OF INERTOL #62. ALL EXTERIOR SURFACES, STACK & BREECH CLEAN WITH ACID FOLLOWED BY ONE COAT OF TP-2028 GRAY AIR DRY HAMMERFIN FINISH ONEFLY DURE CO.

LIST OF COMPONENTS		HF 82357-3
QTY	DESCRIPTION	QTY
4	750GR SUB ASSY.	HF 82357
MATERIAL FOR ONE MK 100		
1	141-34490-10	TRIM ANGLE
2	141-34490-9	TRIM ANGLE
4	HF 82357-4	TOP PIPING
5	HF 82357-5	BLOWER & MOTOR SUPPORT
6	141-30395-3	TRIM BAR
7	541-22190-85	STACK
8	HF 82357-6	GAS PIPING
9	141-32511-1	TOP PLATE
10	541-32264-20	BREECH
11	141-34495-B	SHEET METAL SIDE
12	141-10056-1	SPLIT PLATE
13	141-10057-1	GASKET
14	841-16960	SELF DRILLING SCREW 7/24x1 1/4
15	841-16970	SELF DRILLING SCREW 7/24x1 1/4
16	841-02890	1/2" PIPE PLUG GALV.
17	841-02960	1/2" PIPE PLUG GALV.
18	841-17560	3/8-16 U-BOLT FOR 3" PIPE
19	841-17630	3/8-16 U-BOLT FOR 4" PIPE
20	HF 82357-9	ELECT. CONTROL MTS. LOCATION
21	841-20210	1/2" NUT 2N. B.
22	841-20290	5/8" NUT 2N. B.

ITEMS		HF 82357-3
23	341-10172	FIREYE TYPE-5020 RELAY & COVER
24	341-10165	THERMOMETER PALMER O'150
25	341-10166	THERMOMETER PALMER O'150
26	341-10171	SCANNER TYPE 48PT2, MODEL 9003
27	HF 82357-8	OIL PIPING & PUMP ASSY
28	60443	GAS PRESSURE SWITCH (EXP. PROOF)
29	61727	PRESSURE REDUCING VALVE
30	61201	SLUDGE THERMOSTAT
31		ELECTRICAL CONTROLS BOX
32	341-20004	NAME PLATE
33		AIR PROVING SWITCH (EXP. PROOF)
34	341-10175	2" INSULATION (CUT TO SUIT)
35	HF 82357-3B	NO. C-240 BURNER ASSY
36	541-33996-B1	GAS LINE SUPPORT
37	541-33996-B0	GAS LINE SUPPORT
38	841-08200	2 1/2" CONDUIT BUSHING
39	341-14961	GLASS INSPECTION PORT
40	341-14962	GLASSKET
41	841-00620	1" PLUG COCK STEAM-CRANE
42	841-03890	2x2x1 TEE REDUCING GALV.
43	841-05790	1" NIPPLE GALV.
44	841-05530	1/2" NIPPLE GALV.
45	841-00270	1 1/2" REDUCING BUSHING GALV.
46		1/4" FLARE NUT
47		1/4" NPT x 1/4" O.D.C. FLARE ELBOW
48		1/4" O.D.C. COPPER TUBING x 7'-0" (S410)
49	10	90 FEMALE COND. ELBOW SHORT & 1/2" APPL. TON
50	10	CONDUIT FEMALE UNION STD. 1/2" LINE 75R
51	10	SEALING UNILET 3/8" APPL. TON EYE 75
52	20 FT	3/4" RIGID CONDUIT (CUT TO SUIT)

ITEMS		HF 82357-3
53	HF 82357-2B	MTS CHANNEL FOR PRESSURE SWITCH
54	HF 82357-29	MTS CHANNEL FOR AIR SWITCH
55	841-08470	3/4" N.H.C.S. 1 1/4 2N. B.
56	35A	1/2" RIGID CONDUIT (CUT TO SUIT)
57	24	SEALING UNILET 3/8" APPL. TON EYE 50
58	40	90 FEMALE COND. ELBOW SHORT & 1/2" APPL. TON
59	24	CONDUIT FEMALE UNION STD. 1/2" LINE 75R
60		

