

AMENDMENT 0004. Areas of revision are annotated with a line in the right side margin.

1. Plant Equipment: The MSPT unit shall be configured within the WABASH or EQUAL trailer with the following equipment:

(a) Packaged Boiler room, Apache Model 8-5-400-S150 or equal, 80 HP, 150 PSI with powerflame full modulating propane burners. Boiler will operate at 10 PSI to 125 PSI. 2 or 3 pass boiler will be acceptable. Maximum 80 HP, ASME Section 1 construction, LPG propane gas fired, powerflame forced draft burner, dual motorized gas valves, ASME CSD-1 compliant; full modulation, primary & secondary flame failure, equipped with a float type primary and probe type secondary (Manual reset) low water cutoff (LWCO), Minimum 8" steam pressure gauge, low-fire hold, operating limit control, modulating control, high limit control, minimum 4 inch, 250 lb. flanged steam outlet, 4 inch, 250 lb. OS&Y steam stop valve, 1-1/4 inch feed-stop and check valve assembly, 1-1/4 inch quick and slow blowdown valves. Electrical requirements: 240 volt/60 Hz/3 phase with emergency shutdown disconnect switch outside of trailer as required by ASME CSD-1. Water softener is not required.

(b) Tank, Feedwater System: ATLANTIC packaged feedwater system or equal, minimum 100 gallon duplex feedwater tank, 100 gallon receiver capacity, stainless steel, receiver, 3 inch boxed tube stand, 16 inch manway, 2 inch perforated stainless steel diffuser tube (tank heater assembly), chemical injection quill, solenoid make-up valve assembly, dual GRUNDFOS feedwater pumps, one standby, NEMA-1 Control panel, Motor Starter, Fuses, Control Transformer hand-off-auto selector switch for each pump, running indicator lights for each pump, pump selector switch with pump indication light; 22 gauge stainless steel jacket with 2 inch insulation, SPIRAX-SARCO steam temperature control valve assembly. Electrical requirements: 240 volt/60Hz/3 phase.

(c) Chemical Feed Unit: HELWIG 50 gallon chemical feed system or EQUAL, Poly/steel vertical receiver, 50 USG capacity, plastic hinged lid assembly, agitator assembly, piston pump. Electrical requirements: 120 volt/60Hz/single phase.

(d) Sampling Sink: Stainless steel with drain.

(e) Blowdown Separator: PENN A34B or EQUAL, 4 inch drain, 4 inch vent, 2 inch inlet, STERLCO drain tempering assembly.

(f) Gas Vaporizer: Algas-DF LPG Electric Vaporizer, 80 gph capacity, 7.2 MMBtu, 160 Kg/Hour or equal.

(g) Interior Lighting, Vapor-tight Fixtures: Ceiling, 200w max, 120v.

(h) Associated pressure safety controls as required by ASME CSD-1 AND ANSI specifications.

(i) Associated electrical panels and disconnects: 480/60/3, 240/60/3, 120/60/1

(j) Operators Desk: a writing platform to log in the boiler check and conditions.

(k) Fresh water hose bib

(l) 120V GFCI electrical receptacle

(m) Fresh air exhaust fan

(n) Burner combustion air louvers

(o) Liquefied propane to be fed into the trailer, which will pass through the vaporizer and then to the boiler.

(p) Provide vaporized propane connection to the exterior of the trailer.

(q) Return condensate coming back to the trailer is not required.

(r) Emissions/noise limitations are to be based on factory recommendations.

2. MOBILE TRAILER: The MSPT unit shell consists of a new WABASH Freight Pro Dry Van Trailer or EQUAL; Maximum: length 40', height 12', width 9'; tandem axle; air service brakes; lighting system that meets DOT requirements; road operable; equipped with a 4 foot by 6 foot 8 inch side door with ladder (street side).

3. OPERATING & MAINTENANCE MANUALS: Three (3) sets of manuals with general arrangement, Piping and Instrumentation Diagram (P & ID), and electrical drawings at time of delivery.

4. Contractor to provide operational testing of the boilers at destination.

5. SPARE PARTS: 90 day boiler service kit to support unit operation.