

Exhibit B

Portable Chemical Storage Unit Specification

1. General Statement of Work

Provide and deliver three (3) pre-engineered, Portable Chemical Storage Units. These units shall be United States Coast Guard approved and suitable for storage of hazardous materials as identified in 46 CFR 194.05-3(a)(2) through (a)(9). Units shall ~~meet Ingress Protection rating IP66,~~ be sufficiently watertight for use at sea on a vessel's weather decks, and shall not require specific foundations or supports except as specified herein. All materials and components used in construction must be new, unused, and suitable for extended use in an exposed marine environment. Use of wood in construction is unacceptable. Manufacturing quality compliance shall be in accordance with AST, AISI and AWS materials and fabrication standards.

2. Regulatory and Certification Requirements

The unit shall meet all applicable standards of 46 CFR Subchapter U, Subpart 194.20 "Chemical Stores and/or Storerooms" and Subpart 195.11 "Portable Vans and Tanks." Plans shall be submitted to USCG for approval in accordance with 46 CFR Subchapter U, Subpart 189.55 "Plan Approval", and ~~initial~~ construction inspection review and approval by USCG arranged and contracted by the builder. Contractor shall provide "as built" information (including, but not limited to bill of materials, plan and elevation views for both the structure and the interior outfitting, electrical one-line diagram, all certifications and approvals, and vendor-furnished information including operating and maintenance instructions for all installed equipment and outfitting items) to the Owner at completion of the project. "As-built" information shall be provided to the Owner in electronic form (native or PDF format), with two paper copies per unit (total of six) in ring binders.

3. Warranty Requirements

The unit shall include a 10-year structural warranty and a 1-year warranty on all installed components.

4. Dimensions and Load Ratings

The unit shall have nominal exterior dimensions (excluding necessary attachments such as junction boxes, switchboxes etc.) of no greater than 60 inches wide by 42 inches deep by 80 inches high. Nominal interior dimensions shall be 48 inches wide by 24 inches deep by 72 inches high. These dimensions may be increased if necessary to meet other requirements of this specification, but the finished unit shall be as close to the nominal dimensions as is practical.

The unit shall meet the following design load criteria, including the mounting system:

- A. Roof snow load: 40 pounds per square foot minimum.

- B. Wind load: 90 miles per hour minimum.
- C. Live floor load: 250 pounds per square foot minimum.
- D. Wave load: 2.0 pounds per square inch minimum.

5. Wall Construction

The walls and bottom shall be noncombustible, USCG A-60 fire rated, and constructed from ~~16-gage~~ 316 stainless steel to provide maximum durability, weather resistance and rigidity. All penetrations (interior or exterior) shall be fitted with appropriate fire tight seals.

6. Roof Construction

The roof shall be noncombustible, USCG A-60 fire rated, and constructed from 316 stainless steel to provide maximum durability, weather resistance and rigidity. ~~Roof shall be sloped at a ratio of 1:60 minimum to facilitate rainwater runoff.~~ Roof and ceiling must be permanently attached to exterior walls. Lifting eyes shall be provided to allow loading via crane.

7. Base and Mounting

The base ~~shall be of solid design and~~ shall incorporate mounting flanges at all four corners to allow the unit to be mounted on the standard UNOLS deck pattern of 1-inch -8 NC sockets on 24-inch centers. The base shall incorporate forklift channels front-to-back, with dimensions of 4 inches high by 7 inches wide.

8. Door

Provide and install one outward-swinging weathertight door 42 inches wide by 62.5 inches high clear opening for personnel access. The door shall meet the same construction specifics as in (6) above and shall be fitted with automatic closer and a keyed lockset with lever handle, non-locking spring latch and locking deadbolt (VingCard-Elsafe "TrioVing" Model 5312 in stainless steel, or equal.) 8 keys shall be provided.

9. Sump Containment

Provide built-in spill containment sump ~~with chemical resistant coating~~. Sump construction to be weatherproof and noncombustible ~~utilizing continuously welded steel sheets~~. Mechanical fastener penetrations shall not be used on sump wall skins. Sump capacity shall be a minimum of 110 US gallons. Sump pan shall be equipped with two external 1-1/2-inch NPT stainless steel drain stubs located on opposite corners of the pan, one stub at the highest point of the pan and the other at the lowest to allow safe drainage and flushing of the sump. Stubs shall be fitted with stainless steel ball valves.

10. Floor Planking

Floor planking above sump area shall be perforated stainless steel and designed to sustain a minimum uniformly distributed load of 250 pounds per square foot. Floor planking supports shall be removable to facilitate sump cleaning in the event of a spill. Permanent or welded-in floor supports shall not be used.

11. Interior Finish

~~Finish on ceiling, walls, and sump floor shall be two-part chemical-resistant aliphatic polyurethane, with appropriate priming coat.~~ Floor planking shall be coated with two-part, chemical-resistant polyurethane with a suitable non-skid texture.

12. Electrical System

Provide and install a pre-wired electrical system including circuit breaker panel, relays, switches and indicators. All interior electrical components shall be rated for Class I, Division 2 hazardous locations ~~at minimum~~. Breaker panel shall be externally mounted. All exterior electrical equipment and fittings shall meet IP66 ingress protection standards.

13. Lighting

Provide and install 1 interior hazardous-location ceiling-mount sealed LED light fixture with 1300 lumen lamp rated for Class I, Groups C and D, Division 2 (Phoenix Metallic LED VP series or similar.) Light fixture shall have heavy-duty glass with sealed heavy aluminum housing and equipped with protective metal guard. Lights shall be controlled by an exterior light switch meeting IP66 ingress protection standards.

14. Ventilation System

Provide and install ventilation system including one enclosed explosion-proof motor (120VAC, 60Hz, single-phase) rated for Class I, Groups B, C and D, Division 2 hazardous locations ~~with non-sparking and non-static cast aluminum fan blades. Interior fan shall be constructed of heavy-gage steel. Interior exhaust vent shall be located within 12 inches of the floor to facilitate extraction of heavier than air vapors.~~ Ventilation system shall be manually controlled by one exterior switch with indicator light, IP66 ingress protection, with automatic shutdown in the event of fire. System capacity shall be sufficient to effect 1 complete air change within 4 minutes. ~~System shall be UL-Listed.~~ Air vents shall have ~~UL-Listed and labeled~~ fire dampers fitted with 165°F fusible links and shall be fitted with flame screens. Vent grilles and dampers shall be stainless steel.

15. Environmental Systems

Provide and install explosion-proof ~~convection~~ air conditioner rated for Class I, Groups B, C and D, Division 2 hazardous locations. Air conditioner shall be equipped with interior thermostat bulb for the compartment and an exterior temperature controller with user-adjustable temperature

settings. Protective coating shall be applied to finned tube coils (evaporator and condenser), compressor and all other exposed surfaces. ~~System shall be UL Listed.~~

Provide and install explosion-proof ~~convection~~ heater and interior mounted thermostat rated for Class I, Groups B, C and D, Division 2 hazardous locations. ~~The heater shall have a NEC Operating Temperature Code of T2A and be rated for hazardous atmospheres with autoignition temperatures at or above 536°F and shall be UL Listed.~~

Heating and cooling systems may be combined into a single unit.

Environmental systems shall be capable of maintaining an interior temperature range between 50° F and 80°F in an exterior temperature range of -4°F to 110°F.

16. Fire Suppression System

Provide and install one pre-engineered clean agent (~~3M Novec 1230~~Fireaway “Stat-X” or equal aerosol generator) fire suppression system rated for Class A, B and C fires. System shall include fusible links for automatic actuation, audible alarm, and exterior manual activation. System shall include interior nozzle arrays for total flooding application. ~~Clean agent tank and releasing device shall be housed inside an exterior tamperproof enclosure per the requirements of NFPA 17.~~ System shall be equipped with automatic HVAC shutdowns upon system actuation.

17. Shelving

Provide and install 3 tiers of adjustable and removable 18-gage stainless-steel shelving. Shelving shall be 18 inches deep, seamless, pan-type construction, as wide as allowable at each tier (maximum 48 inches) and with a pan depth of no less than 2 inches. Shelving shall be arranged so contents will not block air vents. Lowest shelf in each tier shall be 4 inches above the floor planking. Highest shelf in each tier shall be 60 inches above the floor planking. Shelves shall be fitted with one ½ inch NPT drain hole near each forward edge, with stainless steel plug.

18. Exterior Markings

- A. Door shall be fitted with permanent DOT hazard classification placard set with stainless steel holder.
- B. Door shall be permanently labeled “CHEMICAL STORES” in black lettering no less than two inches in height, followed by “DANGER – VENTILATE BEFORE ENTERING” in red lettering no less than two inches in height.
- C. Air exhaust vents shall be permanently labeled “WARNING: ENSURE MINIMUM 6-FOOT SEPARATION FROM VESSEL AIR INTAKES OR COMBUSTION SOURCES”.

- D. Air intake and exhaust vents shall be permanently labeled “DO NOT BLOCK”.
- E. All external switches, indicators and controls shall be permanently labeled identifying their functions.
- F. A permanent stainless steel label plate shall be affixed to the unit and shall include the following information:
 - i. Light (tare) weight
 - ii. Maximum payload weight
 - iii. Maximum gross weight
 - iv. Power requirements
 - v. Date of initial inspection, inspector’s initials and stamp.
 - vi. Sufficient space for twelve additional inspection dates, initials and stamps.