

Pennsylvania Game Commission Specifications for 75 Gallon Prescribed Fire Skid Units

The following specifications are for eleven (11) self-contained, modular, rear/end mount, slip-on wildland fire units consisting of tank, hose reel with hose, engine and pump, to be mounted on 2020 Can-Am Defender 6x6 UTVs. The skid units must fit in the bed of the UTV with the tailgate up. Cargo box dimensions are 72" L x 54.5" W x 10"H, however the max dimensions of the unit should be 42.5" L x 54" W to allow for use in other UTV models. A low profile design that maximizes stability and visibility for the driver is one of the most important factors to the design of this unit.

Tank

The tank shall have a 75 gallon capacity (no more than 85 gallons), constructed of ½" thick Black, UV resistant, polypropylene material on the sides. It shall be baffled to meet NFPA standards and shall include a lifetime factory warranty. Tank will have reinforced corners and a mounting flanges in the front and rear. The tank will be "L shaped" and the pump will mounted in the void space. The tank shall be flushed and free of plastic debris prior to delivery. The tank and pump shall be mounted on a ¾" thick polypropylene platform.

The tank shall include:

1. One (1) 5" water fill tower with screen and hinged lid with latch
2. One (1) Clear poly level sight gauge visible from the rear of the unit
3. Two (2) Mounting rails on top of the tank at the driver side rear for the hose reel
4. One (1) 1.5" NPT Suction Port, plumbed to the geometric center of the tank, elbowed down to just above the tank floor, maximizing drafting capability
5. One (1) 1" NPT Fill Port for recirculation
6. One (1) access panel for tank suction maintenance
7. 5" high sides around the entire top perimeter of the tank to provide equipment storage. The sides shall have tie down/lashing holes cut out of the plastic.

Pump Engine (Gas Only)

1. 5.5hp – 6hp, Honda GX200
2. Electric start with pull cord back up
3. An oil drain hose with valve shall be installed
4. Integrated fuel tank
5. Exhaust manifold shielded and positioned vertically or horizontally away from the operator. Vertical exhaust shall have a rain cap.
6. The pump must be mounted so the operator can access the electric start, throttle, and choke while standing at the rear of the UTV

Pump

1. Waterax Versax or Davey self-priming pump with two stage impeller capable of 120 psi and 105 gpm
2. Drain petcock at the bottom of the pump housing

Hose Reel

Hose reel is to be mounted at the rear of the skid unit on the driver side, facing rear

1. Aluminum hose reel with manual rewind.
2. The reel must have capacity for 100' of 3/4" booster hose

Booster Hose

1. 100' of 3/4" Boostlite lightweight hose with nozzle

Suction Hose

1. 8' section of 1.5"NPSH Mercedes Draflite suction hose with Mercedes footvalve and strainer

Primer

A hand primer shall be installed to draw water to the discharge side of the pump.

Plumbing

All plumbing and valves shall be stainless steel or otherwise rust and corrosion proof.

Suction Plumbing

1. Suction plumbing shall be 1.5" diameter extending from the tank port to the rear of the skid with a "T" installed for water intake to the pump.
2. A ball valve shall be installed on both sides of this T to allow for drafting
3. The plumbing will terminate at the back of the skid with a 1.5" NPSH male connection, cap and chain
4. A 1.5" NPSH to NH double female adapter should be provided on an adapter mount mounted to the pump platform

Discharge Plumbing

1. 1" plumbed to the hose reel with a valve
2. 1" plumbed back to the tank for tank fill/bypass, with a valve
3. 1.5" NH male connection with valve, cap and chain
4. A pressure gauge must be installed to capture full discharge pressure at the pump

Hardware

All hardware including but not limited to bolts, nuts, washers, screws, u-bolts etc. shall be only 100% stainless steel.

Weight

All bids must include the approximate weight of skid unit including all accessories

Drawing

Design drawing(s) and skid unit specifications must be submitted with bid.

Equivalent Equipment

PGC will determine acceptable equipment substitutions at the request of the vendor.

Inspection and Delivery

1. PGC prefers to inspect the 1st unit built to ensure it meets requirements prior to the vendor completing the remainder of the units. PGC and the winning vendor will discuss details of the inspection after the bid is awarded.
2. Units should be delivered no later than January 31, 2021
3. The vendor will deliver units to the following PGC office locations.

2 Units

PA Game Commission – SW Region Office
ATTN: Scott Tomlinson
4820 Route 711
Bolivar, PA 15923

4 Units

PA Game Commission – NC Region Office
ATTN: Will Dingman
1566 Route 44
Jersey Shore, PA 17740

2 Units

PA Game Commission – SC Region Office
ATTN: Jeff Mock
8627 William Penn Highway
Huntingdon, PA 16652

1 Unit

PA Game Commission – NE Region Office
ATTN: Mike Beahm
3917 Memorial Highway
Dallas, PA 18612

1 Unit

PA Game Commission – SE Region Office
ATTN: Randy Bauman
253 Snyder Road
Reading, PA 19605

1 Unit

PA Game Commission – Headquarters
ATTN: John Wakefield
2001 Elmerton Avenue
Harrisburg, PA 17110