

## Portable Weather Protection Enclosure (PWPE)

The Alaska Drilling & Completion's PWPE is a 142' long, 110' wide, 37' high, custom-built inflatable structure used to protect the Delorean 1 crew and equipment from extreme arctic winter conditions. The structure is ultra-mobile and can fit on 1-1/2 40' trailer loads in addition to being easily transported via cargo aircraft. The PWPE can be rapidly deployed and erected in remote locations making it ideal for temporary industrial applications in remote areas. On average the PWPE can be erected in approximately 72 hours with 8-man crews working 12 hour shifts.

The PWPE is made of fire-retardant materials meeting the NFPA codes and is rated to withstand 100 mph winds with a maximum snow loading of 10.5 lbs/square feet. The framework of the PWPE is comprised of 14 independent crescent shaped and 12 inflatable vertical columns. The independent nature of each column eliminates the risk of a complete structure collapse if one column is compromised. Furthermore, damages to the PWPE fabric can be easily repaired on site in a matter of minutes.

The PWPE has a total of four 36" and two 72" emergency egress doors in addition to a 15' wide x 15' tall and a 20' wide by 20' tall equipment access doors. The total floor area under the structure is 12,486 square feet and an interior volume of 475,017 square feet.

The structure is illuminated with fifty intrinsically safe overhead lights suspended from the inflatable columns of the structure. Emergency lighting and exit signs are installed at each egress door and equipment access doors. A total of six air column inflation blowers are installed with manifolding allowing for 100 % redundancy, in addition to independent power sources and backup power.

The ballasting for the structure can be achieved via a variety of methods depending on the logistic involved including but not limited to; jersey barriers, frozen water bags, super sacks filled with weighting material or industrial rig mats with D-ring hold downs.

Four 750,000 BTU/Hr diesel fired heaters located outside of the structure will be used to heat the interior of the structure in addition to providing two complete air exchanges per hour.



