# The Fox Model FF600/BRT Washdown Diversion System

The Fox Model FF600/BRT system is a demand driven diversion unit that provides additional protection for the environment when no washdown is taking place. It is designed for use in areas where there is no guarantee that the wash bay will be left clean at the completion of a wash activity. Pollutants remaining on exposed areas can be dislodged by rain and carried into the stormwater network. This system is designed to cleanse a site by capturing the initial runoff and diverting to suitable treatment, as it is most likely that this initial runoff will carry with it any residual pollutants that have been left on the site. The FF600/BRT works extremely well in situations where grease and oil have stained areas and constantly leach during rain events. Any residual hydrocarbons that remain on the area after the first flush volume has been diverted will be retained in the baffled secondary chamber (BRT).

The unit consists of two polyethylene chambers. The first unit includes a 600 square medium duty grate. A polyethylene silt basket is fitted below the grate to capture solids and free floating debris. This is removable for disposal of the captured pollutants. A Fox Model DV150 stormwater diversion valve is installed in the bottom of the chamber. The outlet of this chamber is connected to the inlet of a Fox SQID unit (Stormwater Quality Improvement Device – Fox Model BRT600) with a baffled stormwater outlet. A Galvanised Control Panel is supplied containing all electrical control equipment as well as the Fox Demand Valve. All washpoints must come from beyond this Panel Box. A water supply (min. 100 kPa) and 240 v AC power are required for the control panel which should be installed in a convenient location near the system. Plumbing regulations require that an RPZ unit is fitted prior to the washdown point. Fox can supply an RPZ and strainer on request. A ½" copper drive line and a 32mm electrical conduit are required between the control panel and the first chamber. The ½" copper drive line is the signal line that will activate the diversion of the unit when a demand for wash water is detected.

When a wash operation is taking place the diversion valve will be held in an open position. At the end of the wash activity the valve will close. A 'delay drop' function will open the Diversion Valve once more after a 5 minute delay to allow drainage from the area to also be diverted.

At the commencement of rain a float in the chamber will activate at a level just below the stormwater outlet. A signal is sent to the PLC which will cause the diversion valve in the base of the chamber to open, diverting the chamber contents to a treatment tank. This operation will be repeated as necessary until a pre-determined first flush volume has been diverted. The stormwater network will be constantly protected as all runoff must pass through the Baffled Retention Trap (BRT) before leaving the site.

The system must be installed in accordance with the instructions provided by Fox Environmental Systems at the time of delivery. Please refer to our drawing A4-SPEC-1007/2 for the FF60/BRT specification details and drawing A4-INST-1007/2 for typical installation details for the Fox equipment proposed.