

The Fox Model SCS600IS Intrinsically Safe Spill Control System

The Fox Model SCS600IS system provides continuous protection for the site where there is a risk of minor or major hydrocarbon spills contaminating the stormwater network. The SCS600IS is ideally suited to installations such as bulk liquid storage facilities, Service Stations, refuelling depots or any site where intrinsically safe equipment will be required. The chamber and control panel contain intrinsically safe components, relays and control barriers to provide safe operation where unleaded or other fuels are to be stored in close proximity to the system.

The unit is fitted in a polyethylene chamber with 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. A sensor installed in the chamber detects the presence of any hydrocarbons in the runoff. A stainless steel Control Panel is supplied containing all electrical control equipment as well as the Fox Demand Valve, RPZ, Strainer and sensor controls and is to be installed in a 'safe area' away from the hazardous zone. A water supply and 240 v AC power are required for the control panel. A ½" copper drive line and a 32mm electrical conduit are required between the control panel and the SCS600 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. Electrical protection is rated at IP65.

At the commencement of a rain event the SCS600 chamber fills to a level where the float is activated. As a cleansing procedure the system will divert the first one to four chambers (site specific) contents without activating the probe. After the first volume of runoff has been diverted the sensor probe will be activated each time the float is triggered; the quality of the runoff is checked before being released. If hydrocarbons are detected a strobe alarm will be activated and the pit contents will be diverted to a holding tank. After the contents of the chamber have been diverted the Diversion Valve will close. This process continues until the water quality is suitable to be discharged to the stormwater network. An option is available to totally isolate the site if a spill is detected to ensure that no further runoff can leave the area until the cause of the alarm is addressed.

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.

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-1010 for the SCS600 specification details and drawing A4-INST-1010 for typical installation details.