CleanaWater®

FAQ: First Flush Systems

What is a first flush system?

A first flush system, commonly referred to as a diversion system or diversion valve diverts water on a contaminated surface such as an unroofed wash down bay to another source of discharge when deemed acceptable. Typically, after 10mm of rainfall falls on a contaminated surface this surface is deemed flushed.

When do I need a first flush system?

When rainfall or stormwater is able to fall on a contaminated surface which typically contains oils, grease and/or other contaminants.

Why don't the systems have separate silt pits and valve pits?

CleanaWater diversion systems are single pit systems, we have combined the operations to be housed in a single small diversion pit. Our systems do not require secondary dry valve pits. With less excavation this will allow you to save costs on installation.

Do I need to install any other pits?

For a typical wash down bay, water requires treatment prior to discharge to sewer or discharge point. A trade waste pit holding the first 10mm of rainwater is generally required to be connected to the diversion pit to enable treatment.

How do diversion systems automatically switch?

In wash-down environments, a flow switch detects wash events. If water flows into storage pits without a wash event, it is identified as rainfall. After a set time, a solenoid opens the diversion valve to direct clean water to stormwater. The valve closes immediately when a wash event is detected. Rain gauge systems are also available.

Are first flush systems allowed to be installed in all states?

No. States and regions have different regulations for rainwater on contaminated pads. Contact CleanaWater to check what system is needed.

My wash down area is on a mining site, do I need a first flush system?

Each mining site has different environmental rules and considerations. Generally, typical rain events falling on contaminated surfaces are built into untreated water storage sumps for treatment.