



**Environmental  
Management  
Services**

## **GE Power Flapstopper Case Study**

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### **Summary**

We were commissioned by GE Power in MPTF, Whetstone, Leicester to design a solution to prevent any oil spills escaping site. We explored the options of installing a class I interceptor or a bespoke flapstopper system.

We designed and installed a bespoke flapstopper system which could detect and capture oil spills and be installed into a pre-existing manhole chamber without causing operational problems on site.

As well as offering an effective solution to the problem the flapstopper offered the additional benefit of being a significantly less expensive option with the project cost coming to roughly one third the cost of installing an interceptor.

## Design

We were asked to design a system to prevent oil pollution escaping site via the storm drainage system.

A class I oil interceptor is typically used for this purpose but the site's drainage layout meant that the interceptor or flapstopper install location needed to be in the site's main entrance.

Installing an interceptor would have been a major civils project and would have prevented all vehicle access to the site for 3-4 weeks.



We proposed installing a bespoke flapstopper system with automatic activation via an oil probe. The bespoke design was a valve in a reverse housing with an integrated baffle system.

This allowed the flapstopper to be installed on the outlet of the manhole and promote laminar flow allowing oil to float to the surface of the water triggering the oil alarm.



## Install

The install of the valve was confined to a small area just after the site entrance and did not impede traffic entering or leaving site. The whole install and reinstatement works were completed in 5 days and consisted of:

- Conducting civil alterations to the manhole base
- Installing ducting to run air lines to the valve
- Installing the system into the manhole
- Installing and commissioning the oil probe
- Connecting to the mains power supply
- Installing the control panel on a plinth
- Reinstating the area following the install



***“We were impressed with the service received from GPT Environmental, from initial survey through install to final handover. The installation team persevered through inclement weather to complete the install. The final installed system is neat and easy to operate”.***

John Edwards, G.E. Power Mechanical Engineer

