



## Environmental Management Services

### **Interceptor Suitability Assessment & Install - Case Study**

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#### **Summary**

Following a non-conformity discovered on an ISO 14001 audit our client approached us to undertake an integrity inspection and suitability assessment of their interceptor.

We found that the interceptor was not functioning and not suitable for purpose. We provided a specification and recommended location for a new interceptor in line with the requirements of BS EN 858-2:2003.

We supplied and installed the new interceptor leaving the client with a fully functioning interceptor which was fit for purpose.

## Integrity inspection

Following an ISO 14001 audit a non-conformity was identified and our client, an automotive parts manufacturer, approached us to undertake a suitability assessment of their site interceptor.

An integrity inspection was also conducted to assess its current state and functionality. The manufacturing site consists of several high environmental risk areas and the interceptor covered their highest risk catchment area where oil contaminated waste metal shavings were stored.

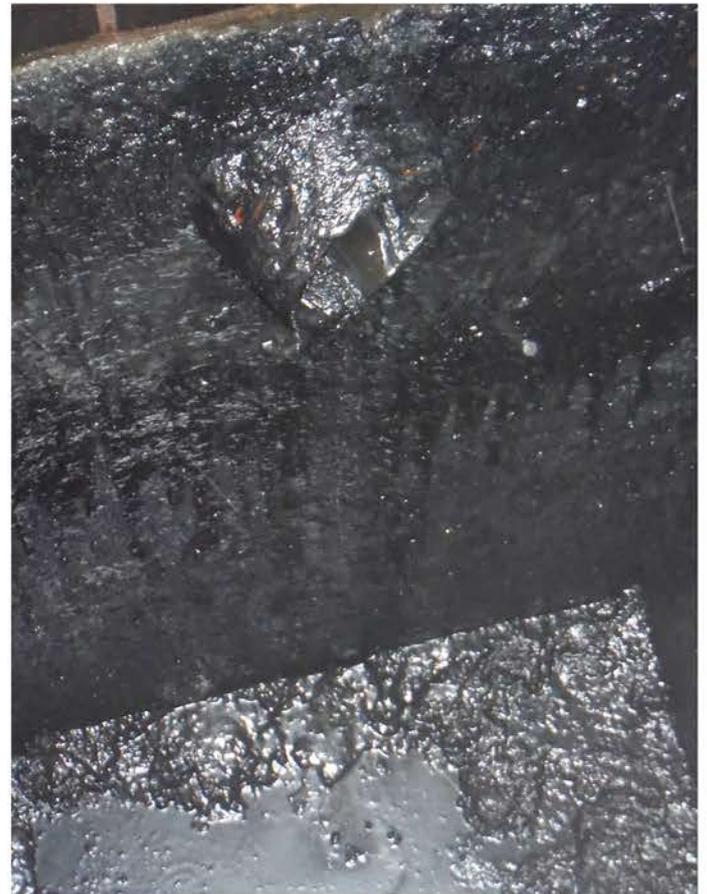
On inspecting the interceptor it was found to be a single-chamber, of un-lined engineering brick construction.



There was very little liquid present, owing to large amounts of suspended solids and silt accumulated in the chamber.

This lack of liquid could have been accounted for by displacement of the water by the high volume of solids but it could also indicate that the system's structural integrity had been compromised and that the chamber was allowing liquid to escape to ground.

The interceptor was emptied using a tanker and jet washed to remove any residual contamination.





## Suitability assessment

As the interceptor's integrity was in question and may not have been watertight the construction of the interceptor could be deemed as non-compliant with the requirements of British Standard EN 858-1:2002. We therefore recommended that it was replaced with a pre-fabricated GRP Class 1 interceptor.

The most cost effective way of doing this was to install a new interceptor downstream of the current installation and to upgrade the current installation so that it was watertight and could act as a silt drop out chamber.

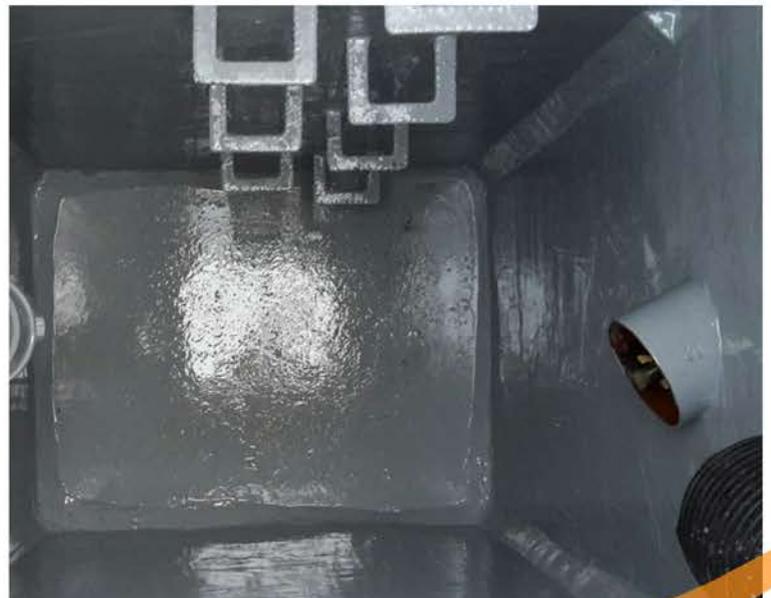
In order to ensure that the new interceptor was fit for purpose we undertook a detailed assessment of the catchment area and were able to provide a specification and recommended location for a new interceptor in line with the requirements of BS EN 858-2:2003.

The interceptor was on a foul line and it was also identified that the site did not currently hold an effluent discharge consent. To gain this consent the local sewage undertaker was contacted and a discharge consent application was made by us on behalf of the client.

## Interceptor Install

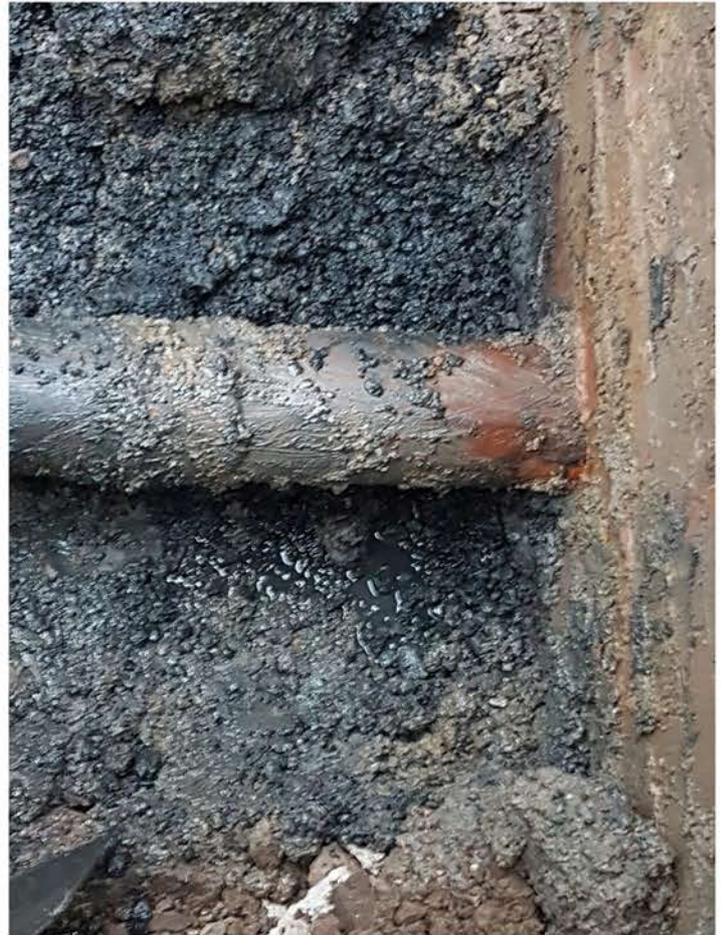
A local topographical survey was conducted of the area by our civil engineering team to ensure that the installation would be compliant with BS EN 858-2:2003.

The original engineering-brick interceptor was made suitable as a solid drop-out chamber upstream of the new Class 1 interceptor by tanking with a waterproof grout render and coating with an oil resistant epoxy resin.



During the excavation for the new interceptor oil contamination was discovered within the ground. This confirmed that the existing interceptor's integrity had been impaired, allowing contaminants to leach out into the surrounding soil and groundwater.

The contaminated soils were removed, stockpiled and sampled to ascertain the level of contamination. This allowed for proper waste classification and ensured the contaminated soil was disposed of in compliance with all regulations and in the most cost effective manner.



The Class 1 interceptor was installed downstream of the newly modified solid drop out chamber prior to the discharge to the foul drainage system.

High oil alarms were installed and commissioned and the interceptor was put on a 6 monthly monitoring cycle.

Since the interceptor was installed the client has had no breaches of their discharge consent.