

# SpillRemed (Industrial)<sup>®</sup> Use Cases at Ronson Aviation

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## SpillRemed (Industrial): Multiple Applications at Ronson Aviation

#### Introduction:

Ronson Aviation, a Fixed Base Operations (FBO) at Trenton Airport, Trenton, NJ, caters to customers and planes offering periodic ground support. They maintain both old and new planes and also offer repair services to other agencies in two hangers and with each hanger having an Oil Water Separator where oily wash water is collected and the oil is allowed to be retained at the top with the water being released into the sewer system through the waste water treatment plant.



Figure 1: The site of application of SpillRemed (Industrial)



Figure 2: Storm water over flow canal.

## **SpillRemed (Industrial) application:**

SpillRemed (Industrial) was proposed as an in situ bioremediation solution to remediation of free oil in oil water separators (OWS) during repairs in the hangars. Use of SpillRemed (Industrial) for in situ remediation of oil in the OWSs and accidental releases of fuel was allowed through a well-known exception mechanism, called "permitby-rule" issued by NJDEP.

## Application in Oil Water Separators (OWS):

The Oil Water Separator installed at each of the two hangars is a gravity based system as shown in figures below. Each OWS receives oily waste water from the maintenance shop and is allowed to accumulate in the OWS and the water free from oil due to gravity is released into the waste stream and since oil is lighter than water, oil remains in the separator for subsequent treatment or collection. However, prior to use of SpillRemed (Industrial) there was a continuous accumulation of oil and this led to release of some oil in the waste stream.





Figure 3&4: Oil water separator with cover removed in Hanger 1 and SpillRemed (Industrial) added.

Initially one quart of SpillRemed (Industrial) was added to each of the OWS and the results were very significant and the entire oil film was remediated in less than 3 weeks time and even the water in the waste stream was also free from any traces of free oil.

After the initial remediation of the accumulated oil using multiple application of SpillRemed (Industrial), currently about one quart is added every month to each OWS as part of the maintenance protocol since 2001. This has prevented any accumulation of oil in the OWS and the discharge water is also clear.

Second OWS is located in Hanger 2 and it was observed that during current maintenance there was a thin film of oil on the surface unlike in the hanger 1 where the water was clear. Additional quart of SpillRemed (Industrial) was sprayed and this will address the situation.



Figure 4&6: Cover of the OWS in Hanger 2 being removed and closer view inside the OWS



Figure 7 & 8: The outlets of the storm water culverts.

#### Accidental Spill of Aviation Fuel:

On one occasion, an aircraft vented a gallon of jet fuel into the storm sewer system. The outlet of the storm sewer was immediately blocked and SpillRemed (Industrial) was introduced into the system after the oily water was pumped out. VaporRemed was also sprayed on the walls of the inlet culvert to remove the smell of jet fuel. This process ensured that there was no residual jet fuel contamination remaining in the storm drain system.

### **Conclusions:**

Application of bioremediation product to the Oil Water Separator is one method for providing routine maintenance of an Oil Water Separator. The introduction of SpillRemed into the oil water separator reduces the residual oily water accumulating in Oil Water Separators. This practice by Ronson Aviation has reduced the need for pumping out the Oil Water Separator from an annual occurrence to once every five years.

All of the above remediation has been accomplished at under USD 300.00 per OWS per year, proving our point that oil contamination remediation need not have a significant impact on the bottom line. As an aside, since SpillRemed (Industrial) has no moving parts, it also happens to be a green solution with a very low carbon footprint!

The company also keeps a stock of VaporRemed and SpillRemed (Industrial) for use after any spills in the facility and keeps VaporRemed along with their spill cleanup kit at selected stations.

#### Acknowledgements:

We are thankful to following individuals from the management of Ronson Aviation for their assistance during our site visit.

- Wolcott Blair, General Manager
- Dave Ricci, Maintenance Officer