

Micro-Blaze[®] Success in the Middle East
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Micro-Blaze[®] has been an exceptional tool for a successful Environmental Program at a highly active installation located in the Middle East (installation and specific country name withheld for security purposes). Micro-Blaze[®] Emergency Liquid Spill Control and Micro-Blaze[®] F.O.G. are used at various locations throughout the base for on-site and *in situ* remediation of fuel, oil, and other hydrocarbon spills, which comprise 99% of the spills that occur here. The average spill volume is less than 50 gallons with typically smaller quantities actually reaching the soil substrate. The un-named installation is located in a country where summer temperatures normally exceed 40°C (104°F), humidity is in excess of 90%, winters are short, and the entire average annual rainfall is approximately 70 mm (~2¾ inches). The soil is derived from limestone and is dominated by Aeolian-derived landscapes. Topsoil is only a few centimeters in depth and sits on an impermeable layer of limestone ‘bedrock’ about 2 meters or more in thickness. As such, the soil can reach very high temperatures.

The installation Environmental Flight has a team of employees responsible for daily visits to locations where surface spills have occurred, and also to the many dumpsters where food products are emptied. Dumpster locations are checked due to the various liquids containing food based greases and oils which spill out onto the ground during the routine waste collection activities (emptying). Micro-Blaze[®] is stored and used at this installation under extreme weather conditions. When used properly within the parameters of the weather limitations it has proven to be a very versatile and effective remediation tool. In point of fact, the installation Environmental Flight has virtually eliminated physical removal of soil from spill sites, drastically reducing the cost and liability associated with ‘dig-n-haul’.

Micro-Blaze[®] has also proven to be an effective treatment of fuel- or hydrocarbon-contaminated spill response sorbent pads. After excess liquid is removed and they are allowed to dry in the open air, the sorbent pads are treated with Micro-Blaze[®]. When the treatment is complete, the sorbent pads are sent to the local landfill. Historically, this installation generates approximately 100 to 150 drums worth of fuel contaminated pads each year. At a disposal cost of about \$350 per drum, this treatment method clearly provides a significant savings over typical hazardous waste disposal.



Micro-Blaze[®] Case Study:

On 3 April 2007, a 500 gallon cylindrical tank filled to at least 75% capacity was being moved to another location by forklift. Due to improper placement on the fork lift, the tank rolled over, broke a valve, and released approximately 65 gallons of diesel before the hole could be plugged. (See Figure 1 below.)



Figure 1 Diesel Fuel Tank Leak and Spill

The Environmental Response Team arrived at the site along with the POC for the responsible party. After calculations were made to estimate the quantity of fuel spilled, the Environmental Manager met with the POC and recommended that Micro-Blaze[®] be used to remediate the spill. Because there was full time staff at that location and access to water, the proposed strategy was to have an initial spraying of 20% diluted Micro-Blaze[®]. This initial treatment was followed by daily spraying of water in the afternoon before the staff left for the day and after the soil had been turned over using a rake (See Figure 2). Another Micro-Blaze[®] spraying was accomplished at the end of the first week. On 16 April 2007, random soil samples from 7 locations within the spill site were taken to the base Bioenvironmental Engineering Flight where a PID reading was taken of the soil. The readings showed no level higher than 90 PPM. Once the results were returned, the Environmental Manager considered the remediation action to be completed. Figure 4 shows what the sight looked like in July 2007. The slight color variation will bleach out over time.

This is just one of several spills remediated with Micro-Blaze[®] at this Installation. Because of its environmentally-friendly, non-toxic composition, ease of use, and ability to endure in extremes of weather, Micro-Blaze[®] has become the remediation tool of choice for hydrocarbon-based spill cleanup, not only at this base, but at others throughout the Middle East Area of Operations and around the world.



Figure 2 Tilling the soil to expose deeper fuel contaminated soil to Micro-Blaze[®]



Figure 3 Spraying water on the Micro-Blaze[®]-treated soil contamination



Figure 4 Remediated spill site; July 2007

