



INSTALLATION REPORT

What: Hydrocarbon Flow Filter Secondary Containment
Where: Jet Propulsion Laboratory - Altadena, California
When: August 2011

C.I.Agent Solutions' Hydrocarbon Flow Filters provide Secondary Containment while allowing storm water to infiltrate the ground.

NASA's Jet Propulsion Laboratory has a data center in Altadena, California where data from all over the cosmos is received and processed. Recently, two large backup generators were installed to ensure a continuous power source at this critical facility.

After reviewing options, Jet Propulsion Laboratory engineers decided to utilize Hydrocarbon Flow Filters made by C.I.Agent Solutions® in conjunction with concrete curbing to provide secondary containment beneath the generators. It was recognized that concrete curbing alone would hold the storm water, but would require testing of that water before release. The footprint of the containment area was small enough to allow for infiltration of all the storm water through two C.I.Agent® Hydrocarbon Flow Filters so that water would not need testing, and so no other drainage improvements beyond the containment area would be needed.

Like C.I.Agent® Barrier Booms, Hydrocarbon Flow Filters use the oil solidifier C.I.Agent® embedded between geotextiles to allow water to pass, but seal off in the event of a major hydrocarbon release. Hydrocarbon Flow Filters are made with a rigid, slotted inner core in a round pipe configuration to use for retrofit or new designs like at the Jet Propulsion Laboratory. An outer rigid slotted core was also used to keep water flow rates as high as possible.

Installation Process



C.I.Agent® Hydrocarbon Flow Filters, white pre-filter and outer cores next to installation holes (covered by plywood).



Containment area hole ready for Hydrocarbon Flow Filter installation.



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Gravel poured to support outer core and Hydrocarbon Flow Filter.



The Hydrocarbon Flow Filter is slid into the outer core.



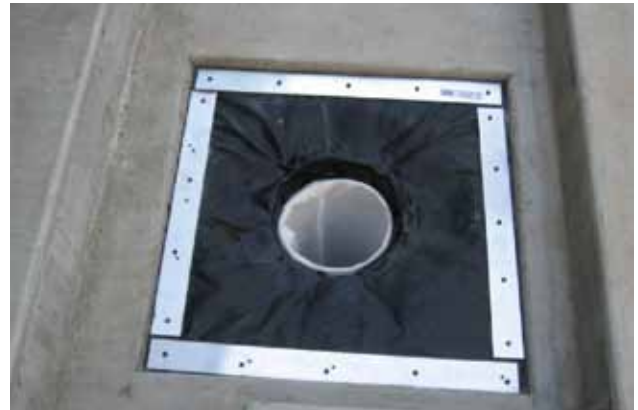
Vinyl flange is put into place and checked for fit.



Sealant is applied to concrete to secure the flange.



Aluminium strips screwed into the concrete ensures the seal.



Installation finished. Notice the white pre-filter to keep out debris.



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Job Complete –

Two Hydrocarbon Flow Filters will pass the stormwater, but will seal off in the event of a major hydrocarbon release.

The white pre-filters will capture sediment and nuisance drips of hydrocarbons.

Changing the pre-filter is the only maintenance required. This sump is clean after installation.