Improvement of the Fire Suppression Testing Procedure at the Polyols Plant in Cartagena

**Company / implementer**
Dow Chemical

**Sector:** ISIC 2013 Manufacturing of plastics in primary forms

**Location:** Cartagena, Bolívar, Colombia E 10.296.936 N 75.506.645

**Update:** 16 Feb. 2018

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**Results**
- Savings in water use for testing the fire suppression system equivalent to approximately 3,207 m³/year.
- The plant’s water use decreased by 7.48% compared to previous years.

**Other benefits**
- Savings: approximately 2,827.59 USD per year.
- The operations at the plant were optimized based on sustainable development objectives by fostering the culture of saving and protecting non-renewable resources such as water.

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**Supplier References**

**Supplier:** Actions adopted by Dow Chemical, Cartagena

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**Supplier in charge of implementing the solution:** Dow Chemical - Cartagena

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**Description**

The fire suppression system used to be tested on a weekly basis for 30 minutes using monitors at 350 GPM, which implied 1,872 m³ of water used per year approx. Now, weekly tests are conducted during the same time frame, with monitors turned off and pumps in dead head mode, that is, they only use the water they need by design. Furthermore, tests are now only being conducted on a monthly basis. This reduced water use to 487 m³ per year approx.

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**Investment and Operating Costs**

Improvements were based on procedure, due to which they did not imply any sort of monetary investment.

**Recommendations and Limitations**

If should be verified whether the pumps of the fire suppression system have a monitoring panel that makes it possible to operate them in dead head mode. The tests’ timeframe should also be adjusted based on the design characteristics of the equipment to protect their physical integrity.

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**Cases of Application**

N/A

**References**

N/A

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**SDG:** 6.4 Water efficiency