

### PROTECTION SYSTEM AGAINST WATER INFILTRATION ON GAS DETECTOR

«THE GERRY»

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# S Domtar





#### PART OF **150 YEARS** of Windsor's history

## S Domtar



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### **WHO WE ARE**



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## THE CONTEXT

- After lockout procedures, the first step to delivery the confined space for maintenance works is to wash up the work environment.
- The cleaning activities are performed during the night shift, by the contractors (lack of knowledge), with minimal supervision and with the clear goal of delivering the equipment the next morning (time pressure).
- The gas detector is installed in a dry environment but the conditions change ...cleaning generates a lot of water mist which is sucked in by the gas detector and forces the gas detector to stop.
- The workers, frustrated by multiple alarms, end up removing the gas detector which is creating an unsafe working environment (lack of alternative indication).

#### Red = Error precursors



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To drift is human

## THE CONTEXT



Time

#### A behavior may have become the new norm across an entire operation or organization

Illustration from: The Field Guide to Human Error Investigations



## THE PROBLEM

## Working inside a confined space without a gas detector





## Is like putting your head inside a gator mouth



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## THE INNOVATION «THE NEED»

- There is no system currently on the market that could resolve this issue effectively. It was necessary to innovate.
- In the spring of 2014, a device to prevent water from getting sucked in by the gas detector was developed by an employee.
- Since then, we have started using this new device and employees have named it "The Gerry" (created by Gérard Sergerie).



Protection system against water infiltration on gas detector - PPSA - June 9th, 2015

## THE INNOVATION «HOW IT WORKS»



## THE INNOVATION «HOW TO MAKE IT»



Cover of internal container "A" Cover of internal container "A"

Filter of gas detector





Internal container « A »





External container « B »



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## THE RESULTS AND LEARNINGS

- Increased the work safety environment by having a reliable gas detector.
- Solve the issue with the LEL (Lower Explosive Limit) when workers wear a self contained breathing apparatus «scba» to perform work.
- Improved worker working conditions.
- Always look at the context.





AGILE | CARING | INNOVATIVE



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