

Subj: Fwd: Re: Norske Pulp Mill

Date: 2/12/2003 5:13:13 PM Eastern Standard Time

From: stan@mi-cell.com

To: hctgreiner@aol.com

Sent from the Internet (Details)

Hi Mike,

I am forwarding an email I received from Ken Watson of Rocky Mountain Fire & Safety. Andy@Norske is sending us his formal testimonial on company letterhead. I will make sure you get a clean copy as well.

Stan Tarnowski, Chief of Field Operations

MI-CELL Fire Systems

----- Begin Forwarded Message -----

Quoting Ken Watson <ken@rockymountainfire.com>:

Cindy - just a note to let you know about the encapsulation agent product.

I received a call last week from Andy Perkonig at Norske in Powell River. They had a 1000 litre spill of highly flammable fuel. A forklift punctured a 1000 litre IBC in the basement of the paper machine.

They wanted to know if they could apply the encapsulation agent to the fuel. I told them that they could, and it should encapsulate the molecules rendering it safe. Andy went down there with the Powell River Fire Department - and the smell was very strong - with the hot forklift sitting in the middle of the spill.

This was a totally closed off space - with little ventilation. They had a potentially explosive situation, as the IBC was sitting amongst 23 other IBC's (23,000 litres of fuel) - and the mill would have been evacuated if the fuel had ignited. They shut off all ignition sources and proceeded to apply the encapsulation agent mixed at 2.5%.

Within 2 minutes, all of the smell was gone and the LEL reading was zero. I asked him how much encapsulation agent they put on the spill (thinking that they would have used at least 40 litres), and he told me that maybe about 2 litres was used. There is about 4cm off the top of the 20 litre container that is gone.

Needless to say, he is very happy with the product. This is a wonderful testimonial and I felt that you should also hear about this.

Ken Watson

Rocky Mountain Fire & Safety Inc.

Ph:- 604-888-7039

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ken@rockymountainfire.com

----- End forwarded message -----

PM-1000 Cleaning Agent Spill

February 3 2003

On February 03 2003 at 10:45 the Mill Protection Department received an emergency call from the central chemical storage area, reporting a spill of flammable cleaning liquid. An immediate request for chemical information from the mill MSDS database showed that the solution was a hydrocarbon based cleaning agent. One Protection Officer and myself responded to the spill site and found that approximately 950 litres of the flammable liquid had spilled into a containment dike. A forklift, trying to remove the chemical container from the dike, punctured the IBC, spilling its contents. The same containment area also held 21 X 1000 litre IBCs of assorted chemicals. The storage area is located in the basement of a large building, which has natural ventilation only through a large access door. Entering the building, strong fumes from the spilled chemical were apparent and looking at the spill site we noted that the forklift was still sitting in the flammable liquid. The spilled chemical had spread inside the dike and by now surrounded all other IBCs.

10:47 hrs. The area was closed to all traffic and all ignition sources, including radios, were shut off.

10:48 hrs. Informed Paper machine Supervisors of incident

10:50 hrs. 911 call to Municipal Fire Department initiated.

10:55 hrs. The decision was made to apply Mi-Cell ENCAPSULATION AGENT fire suppression agent at a 2.5% concentration, educted into a 1.5" hose at 110 psi, using a Turbojet "selectable flow" fire nozzle.

Immediately upon application of ENCAPSULATION AGENT, we noted a major reduction in fumes and within minutes no fumes could be detected.

11:04 hrs. Municipal Fire Department on scene.

11:05 hrs. Gas detection monitor used and NO flammable fumes detected! (LEL meter held within 2' above spill and moved along entire spill area)

11:10 hrs. The forklift standing in the fuel could now be safely started and driven from the dike. The spill section of the MSDS sheet warned against using combustible absorbent on any PM-1000 spill due to adding fuel to a flammable liquid. In our case it was decided to use readily available hog fuel,

(a wood by-product used for burning), since the hydrocarbons were now encapsulated and the chemical rendered non-combustible.

12:12 hrs. Call to Ken Watson at Rocky Mountain Fire & Safety for discussion.

13:26 hrs. Mill Emergency Response Team protected to level B, with 2 Municipal Fire Fighters as back-up, working on mixing Hog into the spilled liquid.

13:36 hrs. Super Sucker deployed and hog / chemical mixture vacuumed from spill area.

15:38 hrs. All clean-up done and IBCs returned to dike area

The ENCAPSULATION AGENT Fire Suppression Agent was brought onto our site for fire protection on TDF (Tire Derived Fuel) and with the ENCAPSULATION AGENT, the chemical spill was resolved in minutes without endangering the emergency crews. The danger of ignition from the "hot" forklift exhaust or other source was extremely high. ENCAPSULATION AGENT was applied from a relatively safe distance and no personnel had to go within 50 feet of the spill. To completely stop the leak, the forklift first had to be removed from the dike and the IBC placed on its side. With the chemical now non-combustible, Emergency Responders could enter the spill site without fear of ignition. Should a fire have occurred, a complete paper machine evacuation (3 paper machines) would have been initiated, resulting in possible injury to workers and a costly production loss.

Our mill employs approx. 700 people and produces an average of 1300 tons of paper per day.

Andy Perkonig

Fire Protection / ERT

NorskeCanada

Powell River Division

604-483-8829