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Response to River Contamination— Oil Spill Containment

By John Gillies, Emergency Response Operations Manager, Splash and Dore Safety Ltd.

n Tuesday, August 1, Splash & Dore's Fort St. John, B.C. office received a request from Pembina Pipelines to respond to a situation that was developing near Chetwynd, B.C.

One of their pipelines had suffered a leak and the product was being released into the surrounding terrain.

As our company already had a working relationship with Pembina, we were called to provide a variety of services. Ultimately we provided medical, safety and fire suppression services for Pembina as the situation progressed. There were two primary sites, namely the leak site and the site where the contamination retrieval was taking place. We established our medical units at these two sites, as well as safety supervision and security.

Because the leak had allowed flammable hydrocarbons to be released onto the surrounding ground it was decided to neutralize the potential for accidental ignition by using a new fire suppressant called F-500. This product has a number of advantages over traditional foams.

F-500 is rated as a Class A and a Class B fire suppressant, so it would work equally well on the surrounding vegetation and on the hydrocarbons. It is also environmentally friendly and biodegradable so the impact on the surrounding area was minimal. A couple of other concerns that we had were that the hydrocarbon was releasing flammable vapors and hydrogen sulphide gas, creating a dangerous environment for working in. Once again the F-500 proved its worth in that it was able to suppress both the LELs and the H2S. Once the terrain was secured



we approached the leak site with earth moving equipment and proceeded to excavate and expose the ruptured pipe. Whenever the LELs and H2S levels would begin to be climb we would suppress them with F-500 and continue with the task.

After approximately six days the pipeline was secured with a replacement section and pressure tested for integrity.

Unfortunately, the clean-up of the hydrocarbon in the river will be a much more protracted process. This was a unique opportunity for our company to be involved in this type of project. Generally our role has been providing fire and safety services for more upstream services such as oil well completions and servicing.

It is the opinion of this writer that Pembina's reaction was timely, appropriate and committed to a satisfactory conclusion of this unfortunate situation.

ABOUT THE AUTHOR.

John Gillies is the Operations Manager, Emergency Response for Splash & Dore, an Oilfield Safety and Fire Suppression company with over 10 years experience and a variety of offices throughout Alberta and British Columbia. Splash & Dore provides fire suppression, safety services, air quality monitoring, safety training, mobile first aid services, bio-remediation and safety program auditing. John is a firefighter and EMT-A with approximately 12 years in the municipal fire services. He instructs in a number of safety disciplines including; first aid, high angle rescue, confined space rescue, fire training and H2S awareness.

