THE DEVELOPMENT OF AN ADVANCED
OIL SPILL CONTROL CHEMICALS USAGE COURSE

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The Texas A&M University Engineering Extension Service’s Oil Spill Control Training School has conducted comprehensive hands-on training at Galveston since 1975. This course resulted in the creation of the Oil and Hazardous Materials Control Training Division, now employing more than 30 people and offering courses in oil spill control, tank truck emergency response, personal protection and safety, hazardous materials response, hazardous waste management, oil spill and hazardous material management emergency response simulations, asbestos abatement and numerous custom-tailored courses combining the above.

The need for an upper-level oil spill course has been apparent for several years, but market size and area of focus have been uncertain.

Several years ago a dispersant application training program was proposed, but the lack of reasonable expectation for regulatory approval of dispersant use, the depressed oil industry and other factors led to its postponement.

The A&M Oil Spill School is now developing and test-marketing an advanced oil spill control chemicals usage course, the goals of which are “to provide personnel to act in a leadership capacity during an oil spill who are trained in the proper uses, application, regulation and documentation of oil spill dispersants.” This presentation will include state-of-the-art application technology, logistical support systems, and regulatory considerations.

ROLLING MILLS COMPLEX,
FORE RIVER, PORTLAND, MAINE

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At 2:30 p.m. EST on January 3, 1988, the Coast Guard Marine Safety Office in Portland, Maine, received a report of an oil spill that had occurred at the Rolling Mills complex on the Fore River, Portland Harbor. The subsequent investigation revealed that during the off-loading of No. 2 home heating oil from the tank barge Ocean 115, the underground transfer pipe transporting the oil to the shoreside tank ruptured. Barge pump pressure forced the oil into the porous earth surrounding the pipe in the vicinity of the break. The oil saturated the surrounding soil and upon reaching the water table followed the path of least resistance. The oil eventually reappeared as it poured out a drain hole located in a metal retaining wall and into the Fore River. The responsible party assumed financial responsibility and hired a contractor to mitigate the spill. The party also contracted with an environmental engineering company to conduct the recovery operation for removing the oil from the groundwater. The responsible party estimated 42,000 to 43,000 gallons were lost after comparing gauging figures from the barge and the shoreside tank. This poster presentation will depict the groundwater remediation system used to effect the oil recovery operation at the Rolling Mills complex.

It will show the following progressional phases (1) the spill, (2) the initial response, and (3) long-term remediation. The presentation will highlight in the remediation phase the use of drilled recovery wells and the insertion of two different pumps into each well: (1) a submersible water table depression pump, and (2) an ejector system pump used for the removal of product only. Phase 3 will also depict the initial use of a tank truck to receive the oil and water recovered from the wells. Recovered oil was pumped to a separate compartment in the truck and the groundwater pumped to another. The groundwater was allowed to settle and any oil that separated out was decanted from the tank and the remaining water discharged directly into the Fore River under a temporary NPDES waiver granted by the on-scene coordinator. The use of a groundwater re-infiltration system was proposed, and conceptually approved, to replace the direct discharge of groundwater into the Fore River.