

# NEWS FLASH

Site Remediation | Emergency Response | Industrial Services & Construction

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Mark Ryckman, P.E. BCEE CEO & Founder

Since our founding in 1988, we have completed over 4000 environmental remediation projects. Thanks to our many customers, Remtech's facilities and sales have doubled! We have increased our capabilities to include: industrial cleaning & maintenance and pollution prevention systems construction to compliment our flagship environmental remediation & emergency response services.

#### What's New?

The last three years for Remtech Engineers have been exciting making us one of the largest inland water response firms in the SE! ... becoming an USGS OSRO Response Contractor; Adding two Guzzler Vacuum Trucks with Hi-rail; invented *VacuJet* TM (combined jetting & vacuum) heavy solids sewer/pipeline cleaning system capable of cleaning 300 ft sections; constructed pollution prevention facilities for a major railroad in six states; remediated a major speciality chemical fire; investigated, located, and remediated a leaking fuel line under a large intermodal railyard; completed a large diesel fuel groundwater remediation at a major bus terminal with integrated HC2000 injection and total fluids extraction; and stockpiling 2,000 gallons of Remtech's proprietary HC2000 capable of treating impacted shorelines and soils for 4,000,000 million gallons of petroleum hydrocarbon releases.

#### **Enhanced Spill Response Capabilities**

Remtech is participating in two major facility response deployment drills in Atlanta and Macon, Georgia. Specific deployment resources include a Rapid Boom and Boat Deployment Trailer with 1,400 ft of boom; a Fuel Recovery Trailer equipped with boat, Elastic drum skimmer (97% fuel recovery and 3% water), deep and shallow weir skimmers, oil mop, 900 ft of boom; Pump Transfer Trailer; guzzler vacuum trucks; 3,000-gallon fuel storage pillow tanks; *JetVAC*<sup>TM</sup>explosion proof vacuum pump; and all terrain tankers and vehicles.

#### **Remtech Feature Projects**

HC-2000 Integrated Total Fluids Extraction Diesel Groundwater Cleanup Contract Amount: \$850,000

Remtech remediated a diesel fuel release from a ten-thousand gallon underground storage tank and secured reimbursement from a State's Leaking Underground Trust Fund. Remtech's two-phase vacuum extraction system consisted of a rotary claw blower, dissolved air floatation (DAF), oil/water separator, multimedia and activated carbon filters, and injections of Remtech's proprietary HC-2000 biostimulation bioremediation accelerator. Seventeen (17) recovery wells were drilled in tight clay soils (conductivity of 6.3 x10<sup>-6</sup> cm/sec) and groundwater that contained elevated concentrations of iron bacteria floc. Calcium chloride was added to the DAF system to facilitate fuel separation from floc.

For every gallon of fuel recovered, one-gallon of biosolids had to be removed. 2,000 gallons of fuel were recovered over a four-year period. Seven injections of Remtech's proprietary HC-2000 biostimulation accelerator completed the project and received a *No Further Action Letter from the State*.

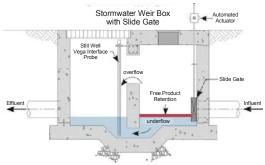


Rapid Deployment Spill Response Trailers (2300 ft boom, boats, skimmers, and spill recovery. (Elastic Drum Skimmer Recovers 97% Fuel)



Integrated Total Fluids Extraction & HC2000 Injection System Remediation at UST Diesel Release Site





Remtech 50,000 lb Precast Stormwater Pollution Prevention Weir Box with Automated Sluice Gate and Hydrocarbon Sensor Prevents Fuel Releases

## Pollution Prevention Structures Installed at Six Railyards Contract Amount: \$1,500,000+

Remtech was authorized to construct pollution prevention and control systems at railyards in six states.

Stormwater diversion and containment facilities consisted of: earth/rock & concrete containment dikes; clean water diversion swales; new stormwater manholes and connecting piping; Remtech 50,000 lb precast inground stormwater underflow weirs with automated sluice gates and hydrocarbon detectors; secondary containment piping; automated fuel control valves with leak detection installed on fuel storage ASTs; and footings and column supports for overhead fuel pipe bridges.

## **VacuJet** (Combined Jetting and Vacuum) Cleaning of Long Pipe Sections Contract Amount: \$50,000

Remtech was engaged to clean heavy oily sand deposits from an engine terminal's 24-inch, 1,000 ft long DIP wastewater sewer that could not be cleaned by conventional jetting techniques. Two additional manholes were installed to reduce cleaning distances to 300 ft. Remtech's proprietary *VacuJet*<sup>TM</sup> is a combination jetter/cutter head attached to a 4-inch vacuum line. A high-tension synthetic rope glide system advances the cleaning head and vacuum line through 90 degree angles and 300 ft pipe sections. 11,750 gallons of heavy sludge were removed.

### Chemical Plant Fire Restoration Contract Amount: \$350,000

Remtech responded to a chemical plant fire containing aromatic chlorinated solvents and propellants. Remtech's fire restoration activities included: cleaning bulk storage tanks, totes, drums, secondary containment structures, overhead pipe racks, processing equipment, pollution control systems, buildings. Hazardous products were transferred to frac tanks and tankers for disposal. A carbon filtration system installed in a detention basin overflow structure removed soluble organics from several million gallons of stormwater runoff.

### Pipeline Fuel Leak Remediation at Intermodal Yard Contract Amount: \$350.000

Remtech determined the leak location, contained, recovered, and supported leak repair operations for a 3,500 foot underground fuel line. A total of four 20 ft deep test pits were excavated to uncover the pipe. The leaking pipe segment was located by installing valves in two test pits and pressure testing each section. 350 ft of new pipe was replaced, welded, x-rayed, and pressure tested.

One million gallons of stormwater and petroleum contact water were pumped from test pits and disposed of at the railyard's onsite treatment plant and an offsite pretreatment facility. Two-phase vacuum extraction operations removed mobile free product.

#### Thank you . . .

. . . to all our friends and clients for extending the opportunity to allow us to earn the right to become your preferred vendor!

Email <u>mryckman@remtech-eng.com</u> to receive our news letters, corporate brochure, or white paper *HC-2000 Bioremediation Accelerator & Surface cleaner - A Green Sustainable Technology.* 



VacuJet<sup>TM</sup> Heavy Solids Sewer Cleaning System



VacuJet <sup>™</sup> Removes Heavy Solids from 1,000 ft Wastewater Sewer



Chemical Plant Fire Response & Restoration



Investigation & Remediation of Major Pipeline Leak at Intermodal Yard

