

Global BioSciences, Inc.

BIO-TECH TALK



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SIoux CITY PROJECT MOVING TO FULL-SCALE REMEDIATION USING *BUTANE BIOSTIMULATION TECHNOLOGIES*TM

A *Butane Biostimulation Technologies*TM pilot study was conducted at a Superfund Site located in Sioux City, Iowa. The primary environmental contractor for the Site is HDR Engineering, Inc. (HDR) located in Omaha, Nebraska. As part of the overall Site investigation program for the facility, a Feasibility Study (FS) was completed which detailed appropriate remedial technologies for Site soils and groundwater that have been adversely impacted by chemicals of concern (chlorinated volatile organic compounds). The objective of the FS was to develop, screen, and evaluate remedial alternatives potentially capable of meeting regulatory requirements imposed by state and federal agencies. The FS was conducted in accordance with United States Environmental Protection Agency (USEPA) guidelines under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The recommended alternative for remediation of soil and groundwater impacted with chlorinated VOCs was enhanced biodegradation using *Butane Biostimulation Technologies*TM; however, the USEPA and Iowa Department of natural Resources (IDNR) requested that a field pilot study be conducted using the technology on Site groundwater before consideration of the technology for a full-scale remedial system. The scope and operational parameters for the pilot-scale system were provided in a *Butane Biostimulation Technologies*TM Pilot Study Work Plan/Quality Assurance Project Plan (QAPP). The QAPP provided a description of the system design and operation, and of the procedures used to evaluate the data collected during the six month operation of the system.

According to the project manager for the Site, Mr. Adam Kessler of HDR (402-399-1389), the Site received regulatory approval to move into full-scale remediation using butane injection. The system upgrade is scheduled for June 2005.

CASE STUDIES:
CHLORINATED SOLVENTS, SIOUX CITY, IOWA