Harding Lawson Associates

July 30, 1999

Mr. Ken Feathers CT Department of Environmental Protection Remediation Div./Bureau of Water Mgt. 79 Elm St Hartford, CT 06106-5127

SUBJECT:

Technical Memorandum - Evaluation of Treatment Technologies and

Bench-scale Testing, Operable Unit (OU) 2,

Stratford Army Engine Plant, Stratford, CT

Dear Mr. Feathers,

This Technical Memorandum documents Foster Wheeler Environmental Corporation's (Foster Wheeler's)/Harding Lawson Associates' (HLA's) screening level evaluation of in-situ treatment technologies and Supplemental Work Plan for bench-scale testing for contaminated groundwater at the Stratford Army Engine Plant (SAEP) in Stratford, CT. The elements of this Technical Memorandum are based on the outline presented in the draft Operable Unit (OU) 2 Non-time Critical Removal Action (NCRA) Draft Work Plan submitted to the Connecticut Department of Environmental Protection (CTDEP) on July 12, 1999.

As part of the OU 2 NCRA, bench-scale testing has been proposed to evaluate the effectiveness of various in-situ groundwater treatment technologies with the contaminants and conditions at the SAEP site. The testing is necessary to evaluate removal action alternatives, and to obtain chemical dosage information for use during pilot-scale testing planned for this fall.

Three in-situ groundwater remediation technologies will be examined using bench-scale testing, including 1) in-situ hexavalent chromium reduction using ferrous sulfate, 2) in-situ chemical oxidation using Fenton's reaction, and 3) in-situ chemical oxidation using potassium permanganate. These technologies were selected as the most promising during a screening process, which is also documented in this Technical Memorandum.

Please call me at (207) 775-5401 with any concerns or questions you have regarding this Technical Memorandum. We can also discuss this further at the BRAC Cleanup Team Meeting on August 5, 1999.

Sincerely,

HARDING LAWSON ASSOCIATES

Nelson Walter, P.E.

Nelson Walter

Project Manager

cc:

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