

March 7, 1990

#P10712E

Mr. Charles J. Krohn
Hydrogeologist, Environmental Repair
Wisconsin Department of Natural Resources
P. O. Box 12436
Milwaukee, WI 53212

Subject: Remedial Investigation - Ms. Kris Buettner
Property at 9510 West Greenfield Avenue
West Allis, Wisconsin

Dear Mr. Krohn:

Enclosed is a copy of our proposed technical scope of work for a Remedial Investigation for the property located at 9510 West Greenfield Avenue, West Allis, Wisconsin. We are forwarding this proposal to you in response to your February 22, 1990 letter to Ms. Kris Buettner, requesting that a work scope be submitted to your office within 20 days. Please review the enclosed information and provide your comments.

Please note that our approach is to define the extent of contamination and evaluate feasibility of remediation alternatives prior to initiating clean-up. Actual clean-up activities are planned to begin as soon as the remedial investigation is completed and approved by the WDNR.


Ms. Buettner has indicated to us her intentions to apply to the PECFA Fund for reimbursement of clean-up costs. We understand that your approval of our remedial investigation is a necessary component in the PECFA Fund application process.

We intend to keep WDNR informed on the status of the project through the remediation phase. If you have any comments on the enclosed remedial investigation proposal or any other questions, your call or letter will receive our prompt response.

Sincerely,

MILLER ENGINEERS


Michael J. Kane
Geotechnical Engineer


Roger G. Miller, P.E.
Vice President -
Environmental Engineering

MJK/sj

Enclosures

cc: Ms. Kris Buettner

WDNR712.LTR

MILLER ENGINEERS

5308 South Twelfth Street
Sheboygan, Wisconsin 53081
414-458-6164

March 6, 1990

#P10712E

Ms. Kris Buettner
Route 1, Box 308
Elkhart Lake, WI 53020

Subject: Proposal for Remedial Investigation
Redi Quick Dry Cleaners
9510 West Greenfield Avenue
West Allis, Wisconsin

Dear Ms. Buettner:

Miller Engineers appreciates your invitation to submit this proposal for conducting remedial investigation and planning services at the above-referenced facility. The services described herein were developed in part from information in Midwest's site assessment and comments and guidelines issued by the Wisconsin Department of Natural Resources (WDNR).

BACKGROUND INFORMATION

A site assessment was performed during the removal of the four underground storage tanks on December 1, 1989. The assessment (performed by Midwest Engineering Services, Inc.) concluded that a subsurface fuel release had occurred at the site.

It is our understanding that the site assessment report was submitted to the WDNR in January of 1990. The WDNR responded in a letter to the property owner's agent (Ms. Kris Buettner) on February 22, 1990. Their response included a quote of State Statute 144.76, requiring that clean-up action be taken. The WDNR has also requested a detailed work plan be submitted by March 14, 1990.

SCOPE OF SERVICES

Investigation and planning activities are required before initiating a clean-up effort. The following SCOPE OF SERVICES addresses these tasks:

PHASE I - SUBSURFACE INVESTIGATION

1. Develop a site underground utilities map. This will be used during field activities and for defining potential contamination pathways.
2. Advance eight exploration soil borings at locations illustrated on the attached figure. The depth of each boring will range from 15 to 30 feet depending on conditions. Soil sampling will be performed on a continuous basis with a 2-inch diameter split-spoon sampler. Samples will be monitored in the field for

hydrocarbon vapors (HNU meter) prior to being returned to our soils laboratory for classification and possible analytic testing. The sampling spoon will be rinsed with acetone and water prior to each sampling event.

3. Installation of three to four observation wells in soil borings described in Item 2 above. Wells will consist of 2-inch diameter PVC casing and slotted screen. Each well will have a flush-mounted cover capable of maintaining traffic loads. Soil samples will be collected during borehole drilling as described in Item No. 2 (above). Installation of observation wells will be in accordance with NR 141 of the Wisconsin Administrative Code.
4. Physical soil testing will be performed on selected samples. This will include approximately four grain size analyses (retrieved from well screen depths) and three Atterberg limits tests.
5. All monitoring wells will be developed using a 3-foot long, 1-1/4 inch diameter PVC bailer. The bailer will be submerged below the water level in the well and pulled up and down with short, rapid strokes, causing a surging action, before lowering the bailer to the bottom to remove sediment. This process will continue until the amount of sediment moving into the well becomes insignificant.
6. All borings and wells will be located and elevations will be referenced to a permanent benchmark.
7. Two rounds of ground water samples will be collected from each monitoring well. Well sampling will be performed in accordance with procedures set forth in the Wisconsin Department of Natural Resources' publication WR-153-87, "Ground Water Sampling Procedures and Guidelines". Retrieved samples will be transported in ice packed coolers.
8. All retrieved ground water samples will be analytically tested at a state certified laboratory. The analysis will consist of an EPA Test Method 501/502 scan. This particular method tests for both volatile and semi-volatile organic compounds found on EPA and DNR ground water standards lists. One duplicate sample per testing round will be performed to evaluate the accuracy of the testing program. A detection limit of 1 part per billion is normally used in the 501/502 method.

9. A total of six soil samples will be tested for Total Petroleum Hydrocarbon (TPH) concentrations. An additional two samples will be tested for BTEX (benzene, toluene, ethylbenzene and xylene) concentrations. The California Test Method will be employed during the TPH analysis (detection level of 10 ppm). The BTEX analysis will consist of a purge and trap method capable of detecting concentrations as low as 0.1 parts per million.
10. Provide correspondence with client and DNR during the project. This may include several meetings with client to present and explain information.
11. Gathering of existing pertinent information prior to undertaking field activities. Such information will likely include United States Geological Survey studies (within the area), private water well records and possibly area soil boring information.
12. Summarize and interpret remedial investigation data. This will include discussions on the following:
 - a. Existing Information
 - b. Field Activities
 - c. Soil Stratigraphy
 - d. Hydrogeologic Setting
 - e. Nature of Contaminant(s)
 - f. Extent of Soil and Ground Water Contamination
 - g. Risk Assessment

PHASE II - REMEDIAL ACTION PLAN

Develop a plan to remediate contaminated soils and/or ground water. The plan will include such items as:

- a. Definition of Problem Areas
- b. Clean-up Goals
- c. Brief Review of Available Clean-up Technologies
- d. Recommended Remedial Action
- e. Conceptual Remediation System Design(s)
- f. Discussions with WDNR on Plan Review and Modification to Remedial Action Plan
- g. Discussions on System Operation and Maintenance
- h. Discussions Regarding Clean-up Verification
- i. Discussions on Implementation and Scheduling
- j. Estimate of Probable Construction Cost

Ms. Kris Buettner
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Miller Engineers will notify you in advance if it appears the budget estimates for either Phase I or Phase II will be exceeded.

RESPONSIBILITIES OF CLIENT

1. Location of all private underground utilities, including dispensing lines, venting lines and power lines.
2. All notifications required to public officials and regulatory agencies.
3. Provide access permission (including adjacent property to the north) to perform proposed soil borings and monitoring well installations.
4. Disposal of contaminated soil cuttings, if any.
5. Repair of any damage to surface features, underground structures or private utilities caused by drilling operations.

SERVICES NOT INCLUDED

1. Additional borings and wells if the extent of contamination has progressed off-site.
2. Detailed design drawings or specifications for recommended remedial system(s).
3. Implementation or installation of recommended remediation system (can be developed at a later date under a separate contract).
4. Operation or monitoring of recommended remediation systems.
5. Any analytical testing beyond that described in the SCOPE OF SERVICES section of this proposal.
6. Any other services not specifically listed in the SCOPE OF SERVICES section listed above.

PERFORMANCE SCHEDULE

We anticipate completing field work within 30 days of receiving your notice to proceed. The analytical test results will be available approximately two weeks following field activities. Our report of site conditions (RI report) will be submitted to you and the WDNR within four weeks after receipt of the analytical test results.

