



# MONITORED NATURAL ATTENUATION

## Gasoline Station Monitoring

### Bennington, VT

New England Environmental, Inc., was hired to monitor the natural attenuation of gasoline contaminants in groundwater at this gasoline station in Bennington, VT.

Replacement of the underground storage tanks and removal of 500 tons of gasoline-impacted soil left residual petroleum-impacted groundwater at the Site. NEE was hired to conduct quarterly sampling of the natural degradation of the petroleum-impacted groundwater at the Site and report this to the Vermont Department of Environmental Conservation (DEC).

After several years data demonstrated that concentrations of gasoline constituents were steadily declining at the Site, NEE was able to convince VT-DEC that **quarterly sampling** could be reduced to two times per year. These sampling events include:

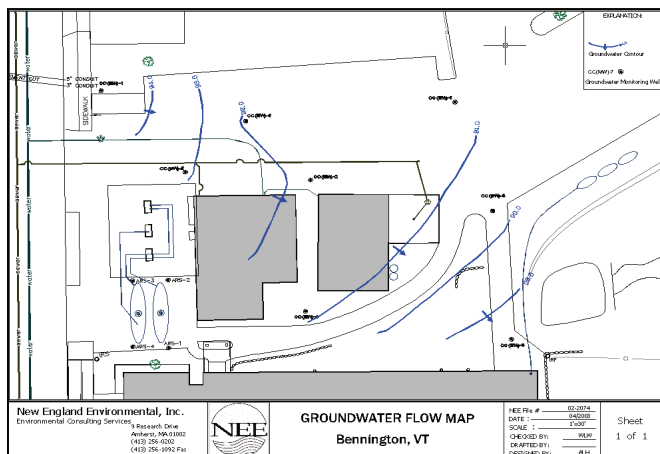
- ◆ Completion of groundwater logs which document: the total depth of the well; the depth to groundwater; the presence of any odors or unusual conditions; the amount of groundwater to be purged; the headspace screening; and the pH and conductivity values.
- ◆ Collection of groundwater samples from each of the wells in accordance with Department of Environmental Conservation and EPA guidelines. Based upon field calculations, an appropriate volume of standing water is purged from the well prior to sampling to ensure that a representative sample of the aquifer has been collected.
- ◆ Submittal of groundwater samples for laboratory analysis, and review of the analytical data. Data is tabulated and information collected is organized and presented in a written report.



Groundwater level measurements.



Monitoring well sampling.



**GROUNDWATER SAMPLING LOG**

NEE  
9 Research Drive  
Amherst, MA 01002  
(413) 256-0202 Phone  
(413) 256-1092 Fax

DATE: 03/20/04  
JOB NO.: 032074  
CLIENT: Hamming Major News  
LOCATION: Bennington, VT  
SAMPLER ID: All  
TOUR:  
SAMPLING EQUIPMENT: 2" PVC, stainless, moist  
PURGING EQUIPMENT: Duper

WELL	DATE	TIME	DEPTH	WATER	TEMP	PH	COND	ODOR	REMARKS
CCMW-1	03/20/04	08:30	6.02	0.02	2.00	X	48.0	200	0.1% water
CCMW-2	03/20/04	08:35	6.01	7.30	1.18	3.40	44.0	190	0.1% water
CCMW-3	03/20/04	08:40	5.95	0.02	2.00	X	48.0	200	0.1% water
CCMW-4	03/20/04	08:45	6.00	1.00	3.00	X	47.0	200	0.1% water
CCMW-5	03/20/04	08:50	6.25	7.45	1.21	3.04	45.0	170	0.1% water
CCMW-6	03/20/04	08:55	6.00	7.70	1.27	3.00	47.0	170	0.1% water
CCMW-7	03/20/04	09:00	7.00	7.10	1.18	3.07	48.0	160	0.1% water
CCMW-8	03/20/04	09:05	7.00	7.00	1.18	3.07	48.0	160	0.1% water

FIELD INSTRUMENTATION: [ ]  
ANALYST: [ ]  
WELL ID: [ ]  
WELL DEPTH: [ ]  
CALCULATION: [ ]

NOTES: (GRAPHIC REDUCTION OF ODOUR, PRODUCTS, ETC.)

ESTIMATED VOLUME PURGED: [ ] gal  
ESTIMATED VOLUME SAMPLED: [ ] gal  
ESTIMATED VOLUME REMAINING: [ ] gal  
ESTIMATED VOLUME REMAINING: [ ] gal

