SITE REMEDIATION NEWS

November 1997 Volume 9 Number 3

Technical Rule Clarification

In the implementation of N.J.A.C. 7:26E, the Technical Requirements for Site Remediation, the Site Remediation Program has received several inquiries concerning the word "conducted," as used in N.J.A.C. 7:26E-1.3(c)2.

The provision reads as follows: "Any work conducted after July 18, 1997 shall be in full compliance with this chapter, as readopted with amendments operative July 18, 1997, except that work conducted pursuant to workplans which were submitted to the Department prior to July 18, 1997 may be conducted pursuant to N.J.A.C. 7:26E as originally adopted, as long as work is conducted within six months of Department aproval of the workplan."

Does "conducted" mean completed or commenced? In general, "work conducted pursuant to workplans" means field work or activities that are completed with the six month time frame, specified above.

The intent of N.J.A.C. 7:26E-1.3(c)2 was to allow a reasonable "phase in" period for the new rules. Workplan activities can be broadly divided into two main categories, investigation/sampling activities and cleanup activities. If sampling is proposed in a remedial investigation workplan and was submitted before July 18, 1997, any such sampling that is completed within six months of Department approval of the workplan may be conducted using the old rules. Sampling completed after the six-month period must be conducted using the new rules. Note that a new workplan is not required in order to use the new rules.

The same approach applies for cleanup activities. For example, if work proposed in a remedial action workplan was excavation of contaminated soil, followed by post-excavation sampling, any excavation and sampling completed within six months of Department approval of the workplan may be conducted using the old rules, as long as the workplan was submitted before July 18, 1997. Note that a new workplan is not required in order to use the new rules.

Please also note that the six-month period applies only to workplans submitted to the Department prior to the operative date of the re-adopted Technical Requirements (July 18, 1997). Any workplan submitted to the Department after July 18, 1997, must comply with the re-adopted rules.

For your information, the Technical Requirements for Site Remediation, N.J.A.C. 7:26E, appeared in the May 19, 1997 New Jersey Register at 29 NJR 2278(b). Copies may be purchased through West Group an official licensed publisher of the New Jersey Register and the New Jersey Administrative Code by calling 1-800-808-9378.

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States Join Forces to Break Down Barriers to the Use of Innovative Technologies

By: Brian Sogorka
Bureau of Environmental Evaluation & Risk Assessment

Over the past year, environmental regulators from 26 states have been working with industry, stakeholders, and the federal government to reduce interstate barriers to the deployment of innovative hazardous waste management and remediation technologies. This group, known as the Interstate Technology and Regulatory (ITRC) Cooperation Work Group, recently announced the completion of more than 20 guidance documents intended to speed the deployment of innovative technologies.

More specifically, the ITRC has tried to address the problem created by the maze of federal, state, and local requirements which often vary from state to state and region to region. As a result of these differences, technology buyers are reluctant to expose themselves to a lengthy permit process that may result from a lack of appropriate performance data assuring the regulatory agency that the technology will work at the site in question.

(continued on the next page)

States Join Forces to Break Down Barriers to the Use of Innovative Technologies (continued)

The solution proposed by the ITRC is that state environmental regulatory agencies should accept performance data gathered in another state as if the testing had been done in their own state. In order to have confidence that these performance tests are conducted in a manner that is acceptable to all of the states, the ITRC has created protocols (called technical regulatory guidance documents) for technology vendors and regulators to use in conducting and reviewing demonstrations. These protocols help the vendor and regulator prepare a comprehensive test plan and collect performance data that can be used to support regulatory approval at multiple sites. In addition, these protocols help regulators review a remedial action plan (or request for regulatory approval) to determine if the performance data that is submitted is adequate.

To date, the ITRC has developed 11 technical and regulatory guidance documents which are categorized in the chart below:

for the collection of performance data that will likely be requested by regulators when their technology is commercialized. Finally, as more states incorporate these documents into their formal guidance or rules, technologies which are successfully used can gain even more expeditious review and approval for multi-site deployment across the nation.

In addition to these documents, the ITRC has also developed more general guidance and case study reports in the following areas: emerging technologies such as phytoremediation, electrokinetics, plasma technologies, natural remediation, brownfields and voluntary cleanup programs as they relate to innovative technology and performance based contracting.

Copies of these protocols and more information on the ITRC are available on the Internet at: *http://www.westgov.org/itrc*. If you have a site contaminated with the pollutants below and you would like to use one of the listed technologies, or would like additional information, the following New Jersey DEP-SRP staff can be contacted: Brian Sogorka at 609-633-1344, Matt Turner at 609-984-1742, John Prendergast at 609-984-9757 or Frank Camera at 609-633-7840.

ITRC TECHNICAL REGULATORY GUIDANCE DOCUMENTS

TECHNOLOGY	CONTAMINANT				
	Hydrocarbons In Soils	Metals In Soils	Mercury Contaminated Waste	Mixed Waste (Rad Waste)	VOCs (Chlorinated Solvents)
In-Situ Bioremediation	1) guidance for Hydrocarbons in Soil & Ground Water				2) guidance 3) cost & performance
Low Temperature Thermal Desorption	4) guidance		5) guidance*	5) guidance*	6) guidance
Permeable Barrier Walls		anticipated in FY 98		anticipated in FY 98	7) guidance 8) design specification
Site Characterization (SCAPS)	9) certified technology				10) technology evaluations
Soil Washing	11) guidance*	11) guidance*	11) guidance*		11) guidance*

* Documents 5 and 11 are each one document that applies to multiple contaminants

The use of these documents offers a consistent approach to the review and approval of the listed technologies at sites udergoing clean-ups. This saves the state in application review time, training costs, and helps lessen the uncertainty associated with innovative technologies. Industry benefits through a consistent and predictable process for the regulatory review and approval of these technologies. Similarly, technology developers have a guide

How to Get a Copy of Departmental Rules

The New Jersey Office of Administrative Law has licensed the West Group as the official publisher of the New Jersey Register and the New Jersey Administrative Code. The Division of Rules and Publications previously published these documents in the Office of Administrative Law. The Site Remediation Program has the following available from the West Group.

1. Technical Requirements for Site Remediation (N.J.A.C. 7:26E)
2. Proposed Readoption with Amendments Technical Requirements for Site Remediation
3. Department Oversight of the Remediation of Contaminated Sites (N.J.A.C. 7:26C)
4. Ground Water Quality Standards (N.J.A.C. 7:9-6)
5. Regulations Implementing the NJ Underground Storage of Hazardous Substances Act (N.J.A.C. 7:14B-1 to 7:14B-13 and 7:14B-5)
6. Remedial Priority System Regulations (N.J.A.C. 7:26F)

The New Jersey Register is the official journal of state agency rulemaking. Published twice month, the Register contains the full text of agency proposed and adopted rules, notices of public hearings, Gubernatorial Orders, and agency notices of public interest.

The New Jersey Administrative Code is a compilation of all rules adopted by state agencies. Code updates are currently issued once a month in loose-leaf format and are organized by agency subject matter.

For more information about the Register and Code, please contact Customer Services at the Office of Administrative Law at (609) 588-6606. The Register and Code may be purchased by contacting West Group at (800) 808-9378.

General Information:

Please be sure to include the box number on all mail addressed to the Industrial Site Evaluation Element. Some mail has been received by the element many weeks past the date on the correspondence, due to the omission of the box number. The proper way to address mail to the element is:

Section Name or Case Manager's Name
Industrial Site Evaluation Element
PO Box 028
Trenton, New Jersey 08625-0028

The Low-Down on Low Flow

By: Greg Giles and Jeff Story
Bureau of Ground Water Pollution Abatement

In recent years there has been much discussion of alternative purging and sampling methods in the technical literature, particularly where low flow rates are used. These methods have been termed low-flow, low-stress, minimum-drawdown and micropurging, among others. These terms usually refer to the use of very low ground water extraction rates (pumping rates below 1 liter/minute) during well purging and sampling. Since this method is not addressed in the Department's Field Sampling Procedures Manual (1), this article has been written to discuss this procedure so that people who write and review low-flow sampling plans will be better able to assess when the use of this procedure is appropriate.

History and Significance

Regulators and the regulated community have been at odds over the issue of filtering water samples collected for metals analysis. The regulated community has argued that the incorporation of aquifer matrix material (i.e., silt & clay) into ground water samples result in the generation of ground water metals data that are biased high. Metals are naturally occurring and exist in all subsurface geologic material; the required acid preservation of water samples may release metals previously bound to the surface of aquifer material included in the water sample or dissolve some aquifer material altogether (e.g., metal oxides & hydroxides). Therefore, it is reasonable to assume that the incorporation of aquifer matrix material into water samples, which increases turbidity of the water samples, will result in higher metals concentrations.

The cause(s) of turbidity in a given ground water sample may be from any or all of the following:

1. Natural turbidity (i.e., mobile colloids) in the aquifer;
2. The well may have been improperly constructed. Considering the nature of the aquifer material the well is installed in, the screen slot size chosen for the well may be too large or the sandpack placed in the annular space around the well screen may be too coarse;
3. The well may have been improperly or inadequately developed;
4. The well may have been pumped at too high a flow rate during the purging or sampling of the well. Anytime that a well is pumped at a rate that is higher than the well's recharge rate, or higher than the rate at which the well was previously developed at, sediment may be stirred up within the well casing or released from the

The Low-Down on Low Flow (continued)

aquifer into the well, resulting in the water becoming turbid; and,

5. The procedures used during well sampling may result in increased well turbidity. The sounding of wells with probes to determine total well depth may stir up sediment that has accumulated at the bottom of the well. The sediment will be pulled up the water column as the probe is reeled up to the surface. The contact of sampling equipment with the well casing or well screen may release material into the well, and the quick movement of sampling equipment within the well (e.g., bailers) may produce turbidity due to hydrostatic stresses between the well and the surrounding aquifer.

A 0.45-micron filter is the industry standard to filter water samples. Puls and Barcelona (2) concluded that the use of a 0.45-micron filter was not useful, appropriate or reproducible in providing information on metals mobility in ground water systems, nor was it appropriate for the determination of truly dissolved constituents in ground water. The argument that well samples should not be filtered for metals analyses is also supported by the Department's Field Sampling Procedures Manual (1) which states (on page 178) that the Department requires "metals analysis to be performed on **unfiltered** ground water samples pursuant to the requirements of the Safe Drinking Water Act and the Clean Water Act."

With the requirement that water samples analyzed for metals not be filtered, the technique of low-flow purging/sampling appears to have originated as a means of reducing turbidity in ground water samples. As stated in the April 1996 EPA Ground Water Issue (3), "Sampling-induced turbidity problems can often be mitigated by using low-flow purging and sampling techniques."

While the principal goal of the low-flow sampling technique is the collection of representative ground water samples, one of the major benefits of this technique is the potential cost savings due to the generation of less purge water requiring storage, transportation and disposal. The Department has received an increasing number of requests to allow low-flow sampling, and the potential reduction in the amount of purge water generated appears to be largely responsible for the increase in such requests.

Low-Flow Procedures

The underlying principle of the low-flow technique is that at low pumping rates (less than 1 liter/minute with 0.1 to 0.5 liter/minute being typical), the ground water flow in the area of the sampling device intake approaches horizontal linearity (i.e., the ground water that is being drawn into the sampling device should be limited to the sandpack and aquifer in the immediate area of the sampling device intake). According to the EPA document (3) on page 5, low-flow "refers to the velocity with which water enters the pump intake and is imparted to the formation pore water in the immediate vicinity of the well screen....The objective is to pump at a rate that minimizes stress (drawdown) to the extent practical."

Where there is no (or minimal) drawdown during purging and sampling the well is recharged by the aquifer at the same rate the well is being pumped. Under low-flow sampling conditions, suspended solids (e.g., colloids) are considered to be mobile in the aquifer, representative of natural conditions, and not an artifact of sampling or well construction. For this reason, analytical results for metals testing using low-flow sampling are considered to be representative of the total mobile contaminant load in the aquifer (4). Thus, sampling for both "total" and "dissolved" metals is usually not needed.

Using the low-flow sampling technique, wells are purged and sampled at flow rates at or below 1 liter/minute. There is generally no required volume of water to purge from the well before collecting the ground water sample. Instead, the decision on when the ground water sample can be collected is based on the stabilization of ground water-quality parameters (e.g., temperature, pH, Eh, specific conductance, dissolved oxygen (DO) and turbidity). Accordingly, it is important that the stabilization parameters be measured accurately, and that the purging be conducted in such a manner that the sampling procedure does not affect the field parameter values (e.g., some submersible pumps generate a lot of heat when pumping at very low rates; this may cause the temperature reading to drift); sampling devices that operate under negative pressure (e.g., peristaltic pumps) cause degassing of the water which may cause drift in the pH and dissolved oxygen readings.

During conventional purging and sampling the sample can often represent an average of the entire screened interval/bedrock borehole. In contrast, low-flow sampling conceptually results in the collection of a sample drawn from a discrete interval in the well. As such, the collection of a ground water sample using low-flow techniques may be considered somewhat analogous to collecting discrete ground water samples using equipment such as "Geoprobe" and "Hydropunch" samplers and temporary well points which typically have short intakes.

Advantages

1. With respect to metals analysis, low-flow samples are typically considered to be representative of the total mobile contaminant load (i.e., dissolved and colloid-associated). This reduces the need for sample filtration. Samples collected using low-flow methods usually contain less turbidity.

2. Using low-flow procedures, the volume of water purged from the well may be significantly reduced.

The Low-Down on Low Flow (continued)

Costs associated with the storage, transport and disposal of the purge water may be reduced and the amount of time needed to purge the well may be reduced.

3. Because the same equipment is used for well purging and well sampling, less equipment may need to be used in the field.

4. Because the low-flow technique generates water samples obtained from very discrete zones, if the contaminant distribution in the section of the aquifer screened by the well is heterogeneous, the sample collected by low-flow procedures may show significantly higher contaminant concentrations than samples collected at higher flow rates (i.e., using traditional sampling methods).

5. The reduction in the amount of fine-grained material flowing into the well can increase well life and reduce the need for well re-development.

Disadvantages

1. Not all sampling equipment can be used for low-flow sampling. Pumps used for low-flow sampling should be variable in speed and designed to operate at very low pumping rates. Pumps should preferably operate under positive displacement.

2. Because the measurement of DO and Eh must be made before the ground water comes in contact with the atmosphere, a flow-through cell must be used to measure these parameters in the field.

3. The zone sampled within the well by low-flow methods is conceptually limited. If the contaminant distribution in the screened section of the aquifer is heterogeneous, which may be the case in most wells, the sample results obtained by low-flow sampling may be significantly biased low if the sampling device intake is not placed at the same depth as that of the highest contaminant concentration entering the well. Accordingly, for wells contaminated with DNAPL or LNAPL type contamination, the sampling device intake depth could significantly affect the sampling results. For wells constructed with long screens, vertical flow gradients within the well may cause mixing of ground water and the samples will not be depth-discrete.

4. The method requires higher initial capital costs and longer set-up time in the field.

Summary

EPA's issue paper (3) provides a very thorough evaluation of the method and its advantages and disadvantages. This paper is considered recommended reading by anyone involved in low-flow sampling.

At this time the Department does not have a formalized low-flow sampling procedure/policy in place. However, the Department is currently working to develop a formalized low-flow sampling guidance document. Currently, low-flow sampling can be approved only on a case-by-case basis until the Department develops appropriate guidance. A low-flow sampling plan must be provided to the Department for review and approval. Low-flow sampling plans should be as detailed as possible and take into consideration well construction, contaminant type and distribution in the aquifer, and local hydrogeology.

References

1. NJDEP. 1992. Field sampling procedures manual (FSPM).

2. Puls, R.W. and M.J. Barcelona. 1989. Ground water sampling for metals analyses; Superfund ground water issue. EPA/540/4-89/001. Ada, Oklahoma, R.S. Kerr Lab.

3. Puls, R.W. and M.J. Barcelona. April 1996. Ground water issue. Low-flow (minimal drawdown) ground water sampling procedures. EPA/540/S-95/504. Ada, Oklahoma, R.S. Kerr Lab.

4. The Nielsen Environmental Field School. Micropurge low-flow purging and sampling, Edison, New Jersey, May 22, 1997.

Resources Available for Electronic Data Submittals

By: Janine MacGregor
Bureau of Planning and Systems

In the last edition of this newsletter, the Site Remediation Program (SRP) announced availability of the required format for submitting analytical results pursuant to revisions to the recently re-adopted Technical Requirements for Site Remediation (N.J.A.C. 7:26E), herein referred to as the Tech Regs.

The purpose of this article is to provide general information about the SRP focus on electronic data, summarize the available resources regarding electronic data submittal, update the regulated community about recent, related developments, and announce an orientation session to be held at the Department of Environmental Protection (DEP).

(continued on the next page)

Resources Available for Electronic Data Submittals (continued)

SRP Electronic Data Submittal and GIS Compatibility

The Department is focusing on improving internal and external information sharing by requiring that all geographically based data are submitted in an electronic format compatible with the Department's Geographic Information System (GIS). Locations of SRP sites are now entered onto GIS so that other DEP programs can quickly identify the presence of contaminated sites and other important data. This data may be used in the many ongoing projects that are looking at a whole-system approach to environmental management, such as Watershed Planning or the NY/NJ Harbor Estuary Project, as opposed to a solely regulatory-driven approach. The benefits of electronic data submittal to SRP are numerous. Primarily, electronic data submittal will allow the SRP to manage volumes of analytical data in a form that SRP representatives can easily retrieve and evaluate. When fully implemented, the electronic system will allow case and site managers to automate a large portion of the review steps now performed manually. These steps include identification of exceeded standards, analysis of a specific sampling location over time or by contaminant, and generation of contaminant contour maps or verification of maps provided, etc. The electronic system is also intended to automate the development of environmental indicators, the measures chosen to evaluate actual environmental progress achieved at sites and throughout the state.

Available Resources and Recent Developments

The resources listed below, except where noted, are available on the DEP Bulletin Board at (609) 292-2006 and on the DEP Home Page at *http://www.state.nj.us/dep/srp* under the "Regulations and Guidance" topic. (Note: For advanced Web users, the HazSite address is *http://www.state.nj.us/dep/srp/regs/hazsite/hazsite.htm*). Following the list is an explanation of each resource.

The five acceptable formats for electronic data submittal are presented in:

HAZSITE4: Current version of the HazSite Data Submittal System.

SRP-EDI: Data definitions, formats for .wk1 and .dbf files for data submittal in lieu of HazSite.

HZ971014: ZIP file containing the necessary elements to create a .dbf application.

HZASCII: ASCII format for data submittal in lieu of HazSite.

EQuIS: Microsoft Excel (.xls) spreadsheet format.

Guidance and reference programs:

EDSA: A routine for administrative and completeness checking of .wk1 and .dbf files.

TECHGIS2: Map requirements, guidance on collecting and geographically referencing sample locations.

CORPSCON: Program to convert Latitude and Longitude to State Plane Coordinates (NJ State Plane Feet).

EDIMAN.PDF: Contains GIS Mapping and Digital Data Standards.

SPFCXL4.XLS Spreadsheet: State Plane feet calculator.

Below is additional information about the referenced resources.

HAZSITE4: This is a data collection application that contains all the required fields for electronic data submissions to SRP. HazSite contains help screens that provide general information and data definitions. It also contains built-in checks so that data will meet the required formats. Using HazSite to submit electronic data requires a great deal of data entry; therefore, its use is recommended when neither the laboratory nor consultant have their own systems of automated data management and/or the other options listed below are unacceptable.

SRP-EDI: This is the Site Remediation Program Electronic Data Interchange Manual (SRP-EDI). This document contains the required formats for parties submitting their electronic data in either a Lotus-compatible spreadsheet (.wk1) or in a .dbf format in lieu of HazSite. SRP-EDI provides file definitions, field lengths and field orders. For laboratories or consultants currently processing their data electronically, it may be prudent to use the formats specified in the SRP-EDI Manual instead of HazSite. For example, consultants may create spreadsheets or use another application to create .dbf files of the sample information while in the field, or they may compile spreadsheets or .dbf files from field notes while the samples are being analyzed. Consultants need only to provide a sample identification number to laboratories. The laboratories can then provide analytical results in a spreadsheet or .dbf file to the consultants for submittal to SRP. Once the format is set up, persons submitting information to SRP will use that format for all applicable reports containing analytical data. In discussions with laboratories and consultants involved in this matter, cost has not been raised as a major issue.

HZ971014: This package contains the .dbf file formats, as well as the valid values tables from the HazSite application. It is a ZIP file that contains the necessary elements and basic information to create a .dbf application. The advantage to this option is that the user may import the acceptable entries from the HazSite system without using HazSite itself. There will be a greater likelihood that the electronic data submittals are acceptable if the submitter is using the fields recognized as valid in HazSite.

Resources Available for Electronic Data Submittals (continued)

HZASCII: Data may be submitted to SRP in a comma quote delimited ASCII format. HZASCII provides the file structure and data definitions to be used for this option. All files submitted in this format must have the .txt extension.

EQuIS: This is the fourth acceptable format for electronic data submission. This format does not mirror the HazSite system, nor is it specified in the Technical Requirements for Site Remediation (Tech Regs), however it is compatible with SRP's internal data management system. By selecting this item, the user will be directed to *http://www.earthsoft.com*, and to a Microsoft Excel (.xls) spreadsheet that can be downloaded for free and used for the submission of data to SRP. This package also contains definitions and explanatory comments. NJDEP and the SRP make no representations or warranties regarding the information provided at this Website, do not make a specific endorsement of the product, and cannot assist or support the user in any way. However, assistance is available on-line from the EarthSoft Website.

EDSA: The EDSA routine is an administrative and completeness check which will be run on all electronic data submitted to SRP prior to that data being reviewed, evaluated or used by SRP personnel. It is suggested that parties submitting electronic data in the .wk1 or .dbf format run this check to determine if the basic required information is included and correct. This routine is intended to decrease the occurrence of SRP rejecting data for administrative errors or omissions. (This check is inherent in the HazSite data submittal system.)

TECHGIS2: The Tech Regs require maps of Classification Exception Areas (CEA) and Environmentally Sensitive Areas (ESA) to be submitted in a format compatible with the DEP Geographic Information System (GIS). The TECHGIS2 document bridges the gap between requirements for CEAs and ESAs in the SRP Tech Regs and the DEP GIS requirements outlined in "Mapping and Digital Data Standards" (available in EDIMAN.PDF, see below). TECHGIS2 also provides guidance for determining coordinates for each sample point. According to the Tech Regs and HazSite, every sample point must have either State Plane Coordinates or Latitude and Longitude reported with the analytical results. TECHGIS2 states three acceptable means of obtaining this information: by surveying each sample point, by using Global Positioning System equipment, and by developing a grid using one surveyed point as a control for establishing sampling coordinates throughout the site. It is important to note that as long as there is one surveyed point at the site, such as the property boundary or a surveyed well, this grid option should cost relatively nothing. The consultant can construct a grid or calculate locations from that point using resources such as CORPSCON and SPFCXL4.XLS as discussed below.

EDIMAN.PDF: This is the DEP Electronic Data Interchange Manual. The EDI Manual contains a copy of the GIS requirements defined in GIS Mapping and Digital Data Standards (MDDS). The GIS MDDS guidance provides the requirements for GIS compatibility, and should be used in concert with the TECHGIS2 document. (Note: SRP-EDI is also a chapter in EDIMAN.PDF.)

CORPSCON: This is a program from the U.S. Army Corps of Engineers which can be used to convert between several formats, including Latitude and Longitude values, to New Jersey State Plane Coordinates in feet. The TECHGIS2 document discussed above provides guidance on use of a grid to determine sample coordinates. This method of calculating coordinates may be easier when using State Plane feet; therefore, SRP is making CORPSCON available to the user in case conversion to State Plan feet is desired. Please note that there are several versions of CORPSCON available from the Internet. DEP SRP is providing a link from the SRP HazSite Web Page to the U.S. Army Corps' own Web Site that contains CORPSCON. DEP makes no specific warranty for the U.S. Army Corps resources.

SPFCXL4.XLS *Spreadsheet*: This Microsoft Excel (.xls) spreadsheet is an aid in calculating State Plane feet. The program calculates State Plane feet from a georeferenced point, such as a surveyed well location, and in consideration of the distance and angle of a sample point from that known location. Use of this spreadsheet requires a program that can handle Excel v. 4 files.

Applicability and Exemptions

As stated in the Tech Regs, electronic submission of data is required for all analytical results submitted as part of a Site Investigation, Remedial Investigation or Remedial Action, except for certain specific discharge events. ***Requirements for electronic data submittal and providing geographically referenced sample locations for each sample point may also be waived in certain instances where homeowners (single family) are completing a remedial activity of Number 2 fuel oil, if residential standards are being met and no ground water investigation was warranted.*** Interested parties should talk to their SRP representative about the possibility of exemptions in these types of cases.

Comments and Questions

You may email questions or comments regarding electronic data submittals to *hazsites@dep.state.nj.us* at anytime. SRP staff will provide direct assistance at 609-292-9418.

Orientation Session: Announcement and Registration

In January and February 1998 the SRP will conduct a practical overview for parties electronically submitting data via HazSite, the .wk1 format and the .dbf format.

The session will consist of an overview of the HazSite file structures, input screens, files required for a valid submission, lookup files, using ZIP file utilities to create the final product, and the printed resources discussed above. SRP staff will explain use of the .wk1 and .dbf files, the applicability to field sampling and laboratory analysis, and ways to optimize the effort between the two related files. There will also be an overview of various tools available to assist in field/laboratory data preparation.

The orientation will be held in three half-day sessions at DEP's Public Hearing Room, 401 East State Street in Trenton. Interested parties only need to attend one half-day session. Please fill out the registration form below or visit the SRP Home Page. Please provide your telephone number and Internet email address so that we are able to confirm your registration.

Name: _____
(first) (last)

Company Name: _____

Address: _____ P.O. Box: _____

City: _____ State: _____ Zip: _____

Internet Email Address: _____

Phone No.: ( ) _____ Fax No.: ( ) _____

Session to attend: Please indicate 1st choice with 1. Please indicate other acceptable slots with 2 and 3.

_____**Wed., Jan. 7, 1998**	_____**Thurs., Jan. 15, 1998**	_____**Wed., Feb. 4, 1998**
8:00 – 12:00	12:30 – 4:00	8:00 – 12:00

Please return this registration to:

New Jersey Department of Environmental Protection
Site Remediation Program
Bureau of Planning and Systems
Attention: Barbara Yuill
P.O. Box 413
Trenton, NJ 08625-0413

General Information: Last Issue With Old Mailing List

This is the last issue of *Site Remediation News* to be mailed out using our old mailing list. It is now available on the DEP's Site Remediation Program site on the World-Wide Web. SRP's address on the web is *http://www.state.nj.us/dep/srp*. The SRP web site can also be accessed through the New Jersey State Home Page (*http://www.state.nj.us*) and the Department's Home Page (*http://www.state.nj.us/dep*). We are encouraging you to use our web page to access the newsletter.

If you would still like to receive a paper copy of the newsletter, please fill out the form below and mail back to the address also listed below. This will help us to keep our mailing list database up to date and cut down on printing and postage costs. Thank you for helping us to be more efficient and cut down on waste.

Name: _____
(first) (last)

Company Name: _____

Address: _____ P.O. Box: _____

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SITE REMEDIATION NEWS

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Homeowner's Guide to Cleaning Up Heating Oil Discharges

SRP has just released a revised *Homeowner's Guide to Cleaning Up Heating Oil Discharges* to help answer questions concerning discharges of #2 fuel oil at residential properties that require remediation. It is available on the SRP Website at www.state.nju.us/dep/srp/dl/homeownr.htm or by calling 609-292-2943 to obtain a hard copy.

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