

# SITE REMEDIATION **NEWS**

May 1998

Volume 10 Number 1

# **Analytical Test Method Notes**

By: Greg Toffoli

Bureau of Environmental Measurements & Quality Assurance

In conjunction with the promulgation of Final Update III of "Test Methods for Evaluating Solid Waste Physical/ Chemical (SW-846) Third Edition," methods in some instances were deleted or revised. As a result, the SW-846 methods used to analyze pesticides and PCBs in all matrices AND the methods used to analyze volatiles in soils (with methanol preservation/extraction) have undergone review by the department. The following decisions relating to the use of the methods should be noted.

#### 1. SW-846 Pesticide/PCB Methods

With the adoption of Final Update III of SW-846, Pesticides and PCBs are no longer analyzed by the same SW-846 analytical method. Pesticides are to be analyzed by method 8081A and PCBs by method 8082. It should be noted that method 8082 provides reporting options in that the concentrations of PCBs may be reported either as Aroclors or as individual PCB congeners. For laboratories analyzing pesticides and/or PCBs by SW-846 methods, the following shall apply. The site remediation program is aware that laboratory certifications for the new methods 8081A and 8082 are not yet available. However, this Spring, the NJDEP Office of Quality Assurance is sending out the new certification packets to laboratories. Laboratories wishing to perform pesticide/PCB analyses for the site

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remediation program will be required to apply for certification under the new categories. Laboratories performing pesticide and/or PCB analyses following the old protocols (i.e., 8080 and 8081) will be allowed to do so provided they already are certified for those methods. (It should be noted that laboratories may no longer apply for certification in methods 8080 and 8081.) As of July 1, 1998, the new certifications will take effect and laboratories performing pesticide and/or PCB analyses will be required to have the certification for the new method(s). No laboratory will be permitted to analyze pesticides and/or PCBs by the old methods after July 1, 1998.

## 2. NJDEP Methodology for the Field **Extraction/Preservation of Non-Aqueous** Samples With Methanol for Volatile Organic **Compounds**

In the "Scope and Application" section of the "Methanol preservation method," the listed applicable volatile analytical methods include SW-846 Methods 8010B, 8015A, 8020A, 8021A, 8240B and 8260A. With the adoption of Final Update III of SW-846, these methods have been either revised or deleted. Specifically, methods 8010B, 8020A, and 8240B have been deleted; methods 8015A, 8021A, and 8260A have been revised and are now cited in SW-846 as 8015B; 8021B; and 8260B. The laboratory certification issues discussed in the "SW-846 Pesticide/PCB Methods" section above are also relevant here. Therefore, laboratories analyzing methanol preserved/ extracted samples for volatiles shall be required to observe the following practices. This Spring, the NJDEP Office of Quality Assurance is sending out the new certification packets to laboratories. Laboratories wishing to perform any of the associated volatile analytical methods noted in the "methanol preservation method" for the site remediation program will be required to apply for certification under the new categories. Laboratories performing volatile analyses subsequent to methanol preservation/extraction following the old protocols will be allowed to do so provided they already are certified for those analytical methods. (It should be noted that laboratories no longer may apply for certification in any of the outdated revisions of the methods.) As of July 1, 1998, the new certifications will take effect and laboratories performing volatile analyses (subsequent to methanol preservation/extraction) will be

#### **Analytical Test Method Notes** (continued)

required to have the certification for the new analytical method(s). No laboratory will be permitted to use either the outdated revisions of the methods or the deleted methods for volatiles after **July 1, 1998**.

# **ITRC Update**

By: Frank Camera Bureau of Environmental Evaluation & Risk Assessment

The Department has been participating on the Interstate Technology and Regulatory Cooperation Workgroup (ITRC), which is made up of representatives from 27 state environmental agencies, USEPA, and other non-regulatory stakeholders. The overall goal of the ITRC is to speed the efficient, safe, and effective cleanup of waste sites by accelerating the regulatory acceptance and commercial use of innovative characterization and remediation technologies. The ITRC believes that this goal can be achieved by improving the interstate and intrastate technology regulatory acceptance process.

This year's efforts will focus on state engagement. Just what is state engagement? The ITRC has defined State Engagement as: "solidifying state commitment to interstate collaboration in evaluating technologies and accepting performance data in an individual state." While it is quite evident how the guidance documents produced by the ITRC can be applied at specific sites, the importance of the broader value of the ITRC should also be stressed. This broader value would be as a forum for states and stakeholders to exchange information, learn from each other, and create and an atmosphere that reinforces the use of innovative technologies.

In New Jersey, state engagement is being implemented in the following manner:

- ITRC presentations are currently being given to the Site Remediation Program staff at Bureau staff meetings.
   These presentations include an introduction to the ITRC, as well as a brief description of selected products.
- Through information exchange, site-specific innovative technologies will be matched with ITRC products.

#### **In-Situ Bioremediation Technologies**

During the first two years of the ITRC, one of the ongoing work groups has been the In-Situ Bioremediation (ISB) Team. As a result of their work, much information has been compiled on state regulatory practices in approving the use of in-situ bioremediation technologies/methods. This year the Team has worked on adding several guidance documents to the ITRC collection. They include *Principles and Practices for Natural Attenuation of Chlorinated Solvents*, which is a description of practices to be used to

recognize and evaluate the presence of natural attenuation of chlorinated solvent contamination.

Through their work on these documents, the ISB Team has identified a number of other complementary efforts that are being conducted by other organizations. Foremost is the Remedial Technologies Development Forum (RTDF) work in demonstrating natural attenuation at specific sites. The purpose of the RTDF is to identify what government and industry can do together to develop and improve the environmental technologies needed to address their mutual cleanup problems in the safest, most cost-effective manner. The RTDF fosters public and private sector partnerships to undertake the research, development, demonstration, and evaluation efforts needed to achieve common cleanup goals. Currently, the RTDF is demonstrating three technologies at Dover Air Force Base.

Together, the Industrial members of the RTDF - Beak, DOW, Dupont, GE, ICI, Novartis, and Zeneca - have joined with the ITRC to provide extensive training on natural attenuation to states, stakeholders, and the consulting and engineering community. More specifically, the course provides technical briefing on how to identify if natural attenuation is occurring and if it can continue to occur at a specific site.

National experts in the field of biotreatment present the latest developments in natural degradation processes. The physical, chemical and biological mechanisms for degrading chlorinated solvents in groundwater are discussed, as well as tools for the documentation and evaluation of natural attenuation projects based on case studies. The training combines presentation and discussion with "hands on" problem-solving work sessions.

For more information on the ISB Team, please contact Paul Hadley at (916) 324-3823 or Andrew Marinucci, Ph.D. at (609) 984-9784.

For general ITRC information, a web site is accessible at http://www.westgov.org/itrc. In addition, this web site will shortly be linked to the SRP web page. The following DEP-SRP staff can also 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.

#### **General Information:**

The *Site Remediation News* is published by the Program Support Element. If you want to receive the *Site Remediation News*, it is available on the web page at http://www.state.nj.us/dep/srp. If you want a paper copy, please send a request containing your name and address to:

George H. Klein Program Support Element PO Box 413 Trenton, New Jersey 08625-0413

# New Report Format Promotes Cost Savings

By: David A. Nickerson, CPG
Bureau of Underground Storage Tanks (BUST)

The Responsible Party Site Remediation Program (RPSR) has been conducting a voluntary pilot project with the regulated community in an effort to reduce costs for both the regulated community and the State through the submission of reports (data) in a file folder format.

When the RPSR program receives a report, the assigned case manager dismantles the report(s), punches two holes in the top of the report(s) and places the report(s) into letter size file folders with fasteners.

This procedure is completed for all data which is submitted to the Department. Given the volume of data received each year, this is a very time consuming and costly procedure. This procedure is costly because the Department needs to transfer the reports into the file folder format for preparing the case for file review, file storage, copying, and microfilming. Only specific portions of QA/QC packages are retained in the permanent file after review.

Currently, the majority of the reports are submitted using a plastic binding style format. Plastic binders range in size from 1/2 inch to 2 inches. Depending on the binder size, binders prices range from \$9.25 to \$14.45 per set. Additionally, reports are also submitted in three-ring binders. File folders cost approximately 0.30 cents to 0.45 cents each.

In an effort to reduce costs for the regulated community, consultants and the Department, the Department will now accept report(s) from the private sector in letter size file folders with preapproval of the Case Manager and/or Supervisor. In addition, pursuant to N.J.A.C. 7:26E, the Department still requires submission of the reports in the GIS format. The report(s) shall be two-hole punched in the top of the report and placed on the right side of the file folder(s). The identifying case number and case name must be printed onto each side tab.

For example, reports may be broken down by folder into pertinent divisions of information, i.e. narrative, maps and tables one folder; well search data one folder; QA/QC one or more folders.

When submitting reports to the Department, please include an attached cover letter with pertinent case information addressed to the current case manager for proper routing. Additionally, the State CN mail designation has been replaced with P.O. Box #s. For example, CN 433 is now P.O. Box 433.

Other items that should be included in the report(s) for efficient case review include the following:

Soil and ground water analytical results should be tabulated into a table format. Historical data should be indicated with newly received data so that the case manager can easily look for trends;

The latest ground water, soil results, and soil sampling depths should be plotted onto a site map indicating the sampling location. Analytical results above the most restrictive standards or guidelines should be boxed next to the sampling location;

Where possible, please attempt to plot the maps onto 8.5 x 11 inch paper instead of engineering drawings;

Where possible, it would be helpful to include one extra copy of the latest tabulated soil and ground water data and the latest soil and ground water maps with your standard submittal to the RPSR program.

For further information, please contact your assigned case manager.

# NJDEP Communications Center Announces New and Improved Notification Data Acquisition System

By: Dave Kerr

Bureau of Communication & Support Services

During the past several months, the Bureau of Communications and Support Services (BCSS), along with representatives from the Bureau of Planning and Systems, installed and initiated a test version of the new Dial-in Incident Notification Acquisition System (DINA).

The current version of DINA allows governmental agencies from across the state to dial into the Bureau's server via telephone modem once a week and copy the last seven day's worth of data to a file on the user's computer. This method is very time consuming and each user has to have customized software in order to run the application. Anytime a current user changes a communications port or acquires a new computer, custom software must be made by BCSS for the user to be able to run the old DINA system.

The new version of DINA uploads (via a computer in the Communications Center) data taken from the Bureau's Incident Notification Application (INA) every 15 minutes to the Site Remediation Program's Internet web page. Designated users will be able to access the data as often as

## NJDEP Communications Center Announces New and Improved Notification Data Acquisition System (continued)

they wish by downloading it from the web site. The software to run the application and a printable user manual is included on the web page and can be easily downloaded. The only software requirement for the end user is an Internet browser.

With the new DINA, users can query, view and print data by location, type of chemical, date or responsible party. The software also allows for copying data to a file that can be imported into almost any database program in existence. This will allow for the construction of customized reports and databases to suit the end user's needs.

This new version of DINA is a product of many hours of cooperation between BCSS and the Bureau of Planning and Systems.

Currently, the new DINA is being tested by several outside entities and it is hoped that it will be available to all current users by May 1, 1998.

# **Readopted Oversight Rules**

By: Nate Byrd Bureau of Field Operations

Procedures for Department Oversight of The Remediation of Contaminated Sites (N.J.A.C. 7:26C et seq.) was recently readopted with revisions and appeared in the New Jersey Register on November 17, 1997. Reflecting the legislative intent for enactment of the Brownfields and Contaminated Site Remediation Act (N.J.S.A.58:10B-1 et seq.), the new rules spell out how the Department allows persons to participate in the cleanup of contaminated sites.

The new one-step Memorandum of Agreement (MOA) application and fixed oversight costs are two of the highlights of the recently revised oversight rules, designed to streamline the contaminated site cleanup process.

Previously, parties interested in signing up for the Voluntary Cleanup Program had to submit a completed MOA application to the Department, then wait one to three weeks for the Department to send out the Agreement for signatures before the MOA could be executed.

Under the new rules, MOAs can be processed in one step. Once the Department determines that an MOA application is administratively complete, the applicant would have a MOA automatically, by rule.

Another feature of the new rule is the setting of fixed costs for Departmental review of preliminary assessment (\$250.00) and site investigation reports (\$500.00).

As an alternative to entering into a MOA, a fixed cost of \$500.00 has been established for the review of remedial action reports covering removal of leaking, underground storage tanks not regulated by N.J.A.C. 7:14B. This alternative is available as long as discharges from these tanks have not impacted groundwater. If groundwater has been impacted, interested parties do not have the fixed cost option and must enter into a MOA. Non-regulated tanks include residential underground heating oil tanks and tanks of 2000 gallons or less capacity, used solely for heating commercial buildings, as well as underground tanks of 1100 gallon capacity or less for storage of motor fuel at a farm or residence and used non-commercially.

Other features of the revised oversight rule include the following provisions:

- Description of the application process for obtaining financial assistance and grants from the Hazardous Discharge Site Remediation Fund.
- Requirement for establishing and maintaining remediation funding sources.
- 3. Guidance on obtaining access to sites not owned by the persons conducting site cleanups.
- Rules setting forth the civil administrative penalties for violations of administrative orders, administrative consent orders and declarations of environmental restrictions.
- 5. New rules on the process to resolve any disputed issues that can not be resolved at the case manager level.

Please note that the aforementioned summary is only an overview of the readopted and revised "Procedures for Department Oversight of the Remediation of Contaminated Sites," as it appeared in the November 17, 1997 edition of the New Jersey Register (the official journal of state agency rulemaking). Copies of the new rule may be purchased through West Group, an official licensed publisher of the Register and the New Jersey Administrative Code, by calling 1-800-808-9378. The full text is also available on the SRP Website at www.state.nj.us/dep/srp/regs.

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# Revitalizing New Jersey's Brownfields

By: Terri Smith

Office of the Assistant Commissioner

Like many other states, New Jersey is at a policy crossroads in the development and implementation of a strategy to encourage the cleanup and redevelopment of abandoned or underutilized contaminated sites—commonly called "brownfields."

With the January 6, 1998 signing of P.L. 1997, Chapter 278 or the "Brownfield" Act, New Jersey now has the tools necessary to move its brownfields initiatives to the next level.

The Act accomplishes many things. It protects human health and the environment, assists municipalities in redeveloping vacant urban and suburban industrial sites, creates jobs, protects investors and lenders from uncertain liability and promotes economic vitality.

In addition, it establishes a Legislative Underground Storage Tank Remediation Task Force, a Brownfield Site Reimbursement Fund in the Department of Treasury and a Statewide Brownfield Redevelopment Task Force. The Statewide Brownfield Redevelopment Task Force is required to establish and update an inventory of brownfield sites in the state. Some of the other functions of this Task Force include coordination of State policy on brownfield redevelopment, use of the inventory to prioritize the development of sites based on their immediate economic development potential, preparation of a plan of action to return these site to productive economic use on an expedited basis, as well as actively market sites on the inventory to prospective buyers.

One of the incentives, which are outlined in the Act, is the covenant not to sue. This covenant, which will be issued with the no further action letter, is a reciprocal agreement, which releases the person who conducted the remediation from all civil liability to perform any additional remediation. It also requires the person or any subsequent owner/operator to maintain any engineering or institutional controls as well as bars persons from making claims against the Spill Fund or Sanitary Landfill Facility Contingency Fund.

The Act also amends current liability law to exempt lenders from liability for underground storage tanks provided certain actions are undertaken to empty the contents and close the tanks.

Another incentive is the liability protection and finality aspects of this important piece of legislation. This Act provides protection to non-responsible parties who buy contaminated property and clean it up. It extends protection to persons who buy property that was previously

remediated and gives innocent purchasers protection from third party suits.

An additional incentive found in this Act is the continued preference for permanence in site remedial activities. To support this, the Act includes the availability of matching grants, the elimination of the requirement to post a remediation funding source and the allowance of property tax exemptions of up to 15 years in environmental opportunity zones. These incentives are for using either an unrestricted use remedial action or a limited use remedial action in the cleanup of a contaminated site. These same incentives are available to the person conducting the cleanup if they choose to use an innovative technology.

For those person(s) who are conducting cleanups within the State of New Jersey, this Act provides tax incentives for remediation. These tax incentives include the recovery of up to 75% of the cost of remediation, property tax exemptions of up to 15 years in environmental opportunity zones and the designation of the Department of Environmental Protection to issue statements pursuant to the Federal "Taxpayer Relief Act of 1997."

The inclusion of many of these incentives represents the strong commitment of the State of New Jersey in moving forward the cleanup of contaminated sites and putting them back on the tax rolls. The use of the provisions in this Act in concert with the provisions in the newly adopted Technical Rules Requirements for Site Remediation, N.J.A.C. 7:26E, should facilitate the remediation of all contaminated sites within the State.

By remediating abandoned, underutilized contaminated sites in areas where existing infrastructure can assist in their redevelopment, many of our cities can begin the process of rebirth

For additional information contact Terri Smith at (609) 292-1250.

## SITE REMEDIATION NEWS

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# Petroleum Underground Storage Tank Remediation, Upgrade And Closure Fund Created

By: Loretta N. Hardman Bureau of State Case Management

On August 30, 1997, Senate Bill No. 1756 was signed into law. The Act, known as the Underground Storage Tank Finance Act, makes an appropriation for loans and grants for the upgrade, remediation and closure of certain underground storage tanks.

Loans and/or grants are available to owners and operators of a facility who own or operate less than 10 petroleum underground storage tanks in New Jersey, have a net worth of less than \$2 million and can demonstrate the inability to obtain a commercial loan for all or a portion of the eligible costs. Financial assistance is also available to owners of residential buildings which have heating oil tanks and public entities who own or operate underground storage tanks.

Owners and operators may apply for loans up to 100% of the eligible costs. Loans cannot exceed \$1 million per facility. The interest rate will be determined by NJEDA and may range from 2% to the Prime Rate. Public entities will receive interest free loans. Loan terms may not exceed 10 years.

Hardship grants not to exceed \$250,000 are available to owners/operators for 100% of the project costs. Grant amounts are based on the portion of costs NJEDA determines the applicant cannot reasonably expect to repay. To qualify, an applicant must have a taxable income of less than \$100,000 or net worth, exclusive of applicant's primary residence, of less than \$100,000.

"Eligible costs" means the reasonable costs for equipment, work or services required to effectuate a remediation, an upgrade, or a closure and may include the cost of the preliminary assessment (PA) and the site investigation (SI) if conducted after August 30, 1997 and the tank was not removed before December 1, 1996. Eligible costs may include Department oversight costs. In the case of an upgrade or closure of a regulated tank, eligible project costs shall be limited to the cost of the minimal effective system necessary to meet all the regulatory requirements of federal and state law. Financial assistance may combine loan and grant monies.

The law also provides for the imposition of an annual surcharge upon the owner or operator of a regulated facility which is required to maintain evidence of financial responsibility in accordance with either state or federal law and who does not maintain that evidence of financial responsibility. The annual surcharge shall be \$1,500 for facilities

with one or two petroleum underground storage tanks, \$3,500 for facilities with three to six petroleum underground storage tanks and \$6,000 for facilities with seven or more petroleum underground storage tanks. The owner or operator shall pay this surcharge for deposit into the Petroleum Underground Storage Tank Remediation, Upgrade, and Closure Fund.

Therefore, if you are the owner or operator of a regulated underground storage tank containing petroleum, and have not indicated on your Underground Storage Tank Facility Certification Questionnaire that you have a financial responsibility assurance mechanism which meets federal or state requirements, you will be assessed the appropriate surcharge. Acceptable mechanisms for demonstrating financial responsibility include self-insurance, fully-funded trust funds, guarantees, insurance, surety bonds and letters of credit. Requirements for financial responsibility assurance can be found at 40 CFR Part 280.

Assessment of the surcharge will be based on information currently on record with the Underground Storage Tank Registration and Billing Unit. If there have been any changes to a facility that are not on record with the Department of Environmental Protection they should be indicated on an UST Facility Certification Questionnaire and filed with the Department.

Regulations to implement the provisions of the Underground Storage Tank Finance Act became effective April 6, 1998 and can be found at N.J.A.C. 7:26C-11.

For more information contact:

Dominic Picardi, Bureau of State Case Management Department of Environmental Protection (609) 984-4464 email: dpicardi@dep.state.nj.us.

Adam Mukerji, Director of Commercial Lending New Jersey Economic Development Authority (609) 292-0187 email: cld@njeda.com

JoAnn Petrizzo, Investment Banking Division Public Lending

New Jersey Economic Development Authority (609) 292-0350 email: ibd@njeda.com

#### **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

# SITE REMEDIATION NEWS Alphabetical Index

By: Kenneth F. Smith, Industrial Site Evaluation Element

Included with this edition of the *SITE REMEDIATION NEWS (SRN)* is the annual update of the alphabetical index of articles found in the *SRN* (called *ECRA Update* from Oct '89-Oct '91). the index is arranged using a key word or words from the title of the article. In some cases, an article title appears more than once. For example, an article dealing with soil cleanup was included under cleanup and soil. The index is updated once a year and included as an attachment to the edition published after the new year. If you have any suggestions for changes, please send them to Kenneth F. Smith, Industrial Site Evaluation Element, PO Box 028, Trenton, NJ 08625-0028. If you would like to receive one or more back issues of the *SRN* or *ECRA Update*, an order form has been included after the index. Although the most current issue of the *SRN* is distributed gratis, a charge of \$5.00 per back issue is being instituted for this special service. Please send your order form, with a check made payable to "Treasurer, State of New Jersey," to George H. Klein, Assistant Director, Program Support Element, Attn: *Site Remediation News*, PO Box 413, Trenton, NJ 08625-0413.

We regret that we cannot make copies of individual articles.

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