Responsible Party Perspective on Site Remediation Process

Presented to:

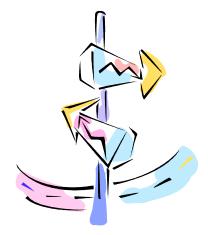
Site Remediation Stakeholder Group

June 29, 2007

We All Share Common Goals

- Protect Human Health and the Environment
- Safely redevelop sites for beneficial use
- Efficiently use the resources of the public and private sector

Question: How do we get there?



How Do We Get There?

- Optimize use of NJDEP resources
- Establish clear metrics of success
- Design program to achieve metrics
- Measure progress against metrics
- Report on progress, opportunities for improvement

This is a *performance based program*

What could be the Metrics?

- Number of sites/cases closed?
- Average time for closure?
- Acres available for reuse?
- Acres reused?
 - Industrial
 - Commercial
 - Open Space
 - Residential





Current Obstacles

- All sites are treated the same worst case scenarios
- Process does not focus on end use (continued industrial, reuse)
- Process does not encourage use of risk and exposure analysis for soils or groundwater

Other Issues to Address

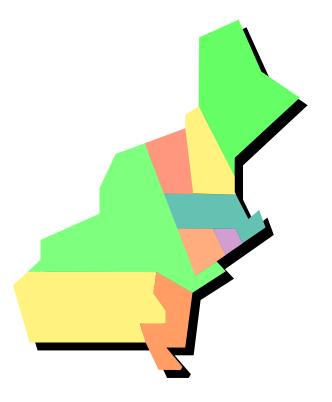
- Role of risk and standards
- Remedy selection
- Long term protectiveness of remedies
- Changes in land use
- Public participation

Resources are not the Sole Issue

- Benchmark data show that it is not just a matter of resources
- Need not only to address certain sites differently (homeowner USTs, LSP program), but also to address the process
- At program level, focus on goals & metrics
- At site level, focus on "vision" or use

Other States Have Addressed these Issues

- Pennsylvania
- Massachusetts



The Pennsylvania Land Recycling and Environmental Remediation Standards Act aka - "Act 2"

Manko, Gold, Katcher & Fox, LLP Bala Cynwyd, PA Cherry Hill, NJ June 29, 2007

Genesis of PA Program

- Contaminated sites languished why?
 - Cleanup required to pristine conditions
 - No clear path forward to cleanup or site reuse
- Response Act 2
 - "Cleanup plans should be based on the actual risk that contamination on the site may pose to public health and the environment, taking into account its current and future use . . . not on cleanup policies requiring every site . . . to be returned to pristine condition." Section 102(6)
 - Streamline process, leverage DEP resources to focus on results

PA – Standards and Remedy Selection Keyed to End Use

- Choice of 3 remediation standards / approaches for soil and groundwater
- Choice made by made by remediator, guided by end use goals:
 - (1) Background standard
 - (2) State wide health standard (SWHS)
 - Look-up tables, with many more options keyed to end use

PA – Standards and Remedy Selection Keyed to End Use (cont.)

- (3) Site specific standard (SSS)
 - Pathway elimination engineering and institutional controls
 - Risk assessment, if necessary to develop numeric SSS
 - Deed acknowledgement always required
 - Post remediation care plan
 - Required where engineering and institutional controls used

Additional Groundwater Risk-Based Concepts In PA Program

- Non-use aquifer designation process
 - Remediator may petition DEP
 - Public notice, participation in designation process
 - Non-use aquifer standards groundwater, soil-to groundwater
- "Non-aquifer" groundwater subject to exposure based evaluation, not remediation standards
- Groundwater point of compliance at property boundary

PA – Changes in Land Use

- DEP may require additional remediation in the event of a change in land use
- Person who changes land use is responsible for the remediation
- DEP must demonstrate that level of risk with new use is beyond acceptable range
- Act 2 requirements apply to additional remediation

Act 2 Procedures Conserve Agency Resources

- Initial notice to open case followed by limited reports (often only one or two) to close out site
- Informal pre-review meeting with agency useful to identify/avoid potential issues
- Report details left to consultant's professional judgment within broad objectives/guidelines to protect human health and the environment
- Agency review deadlines (60 or 90 days) and deemed approval if missed

PA – Public Participation

- Initial Notice of Intent to Remediate (NIR)
 - Published in local newspaper and PA Bulletin
 - Sent to municipality
- Background and SWHS cleanups notice of final report sent to municipality
- Most rigorous public process for SSS cleanups
 - Municipality may request public involvement plan upon receipt of NIR
- Non-use aquifer request notice and comment period (municipality and water purveyor)

Massachusetts Contingency Plan (MCP)

Buddy Bealer June 29, 2007

Genesis of MA Program

"Soon after the waste site cleanup program started, it became clear that **DEP could not oversee cleanup of thousands of sites** and do it **at an expeditious pace** ... 1992 amendments privatized the program, meaning that those responsible ... hire licensed site professionals to oversee most cleanups (with limited DEP oversight) to ensure compliance with the MCP. This allows DEP to focus its resources on key stages of assessment and cleanup at specific sites..."

MADEP Fact Sheet

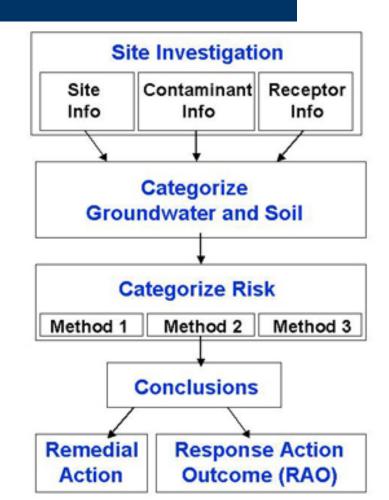
Role of Risk In MA Program

"The risk of harm to health, public welfare and the environment shall ... evaluate each current and reasonably foreseeable Site Activity and Use ..." (40.0973)

"In the event that Immediate Response Actions or Release Abatement Measures are completed at the disposal site ... concentrations, and Exposure Pathways present after such action(s) shall serve as the basis for the NRS score..."

MA – Standards Based on Use

- 3 risk based methods for soil and groundwater
- Method 1
 - Look up tables (3 GW and 9 Soils) based on current and future use, exposure
- Method 2
 - Site specific modification
- Method 3
 - Site specific risk assessment



MA – Remedy Selection

- Interim actions allowed
 - Immediate Response Actions (IRAs)
 - Remedial Abatement Measures (RAMs)
- Remedy selection based on look up table goals
- Natural attenuation allowed
- Activity Use Limitations (AULs) for engineering and institutional controls

MA – Changes in Land Use

- Activity and Use Limitation (AUL)
- Registered
- Generates public involvement
- MCP holds person violating Environmental Restriction responsible for costs and damages

MCP Conserves Agency Resources

- Initial notice to open case followed by LSP evaluation and (Tier) priority ranking
- Based on rank, DEP involvement varies
- DEP reserves right to directly oversee
- At key phases, reports sent to DEP
- Schedule preset by MCP

MA – Public Participation

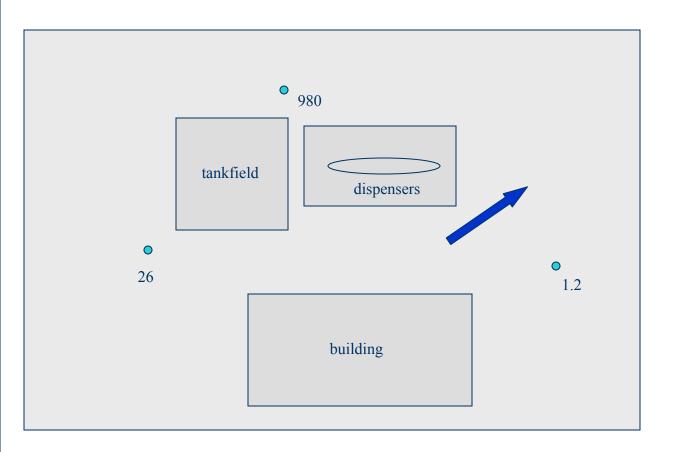
- How to get information
 - PRP informs public of the risks posed by the site:
 - DEP maintains files that can be reviewed
 - Key information in public available DEP databases
 - PRP sends copies of key reports to local officials
 - PRP publishes legal notices in paper

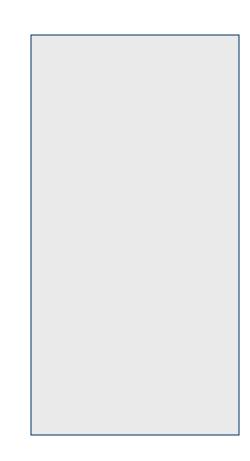
MA – Public Participation (cont.)

How to get involved

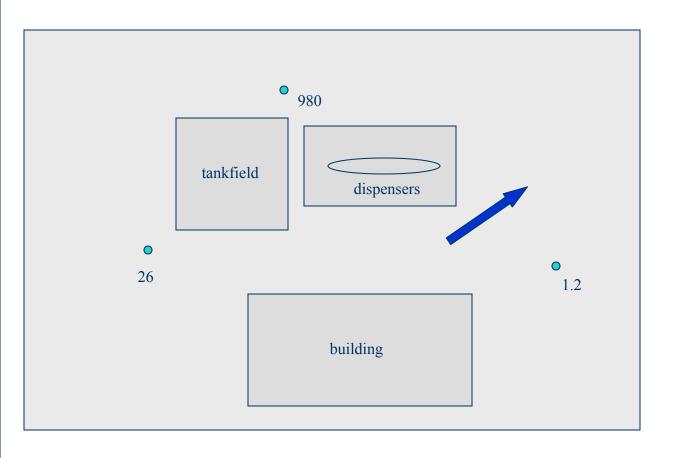
- In many cases, the PRP and the community are already communicating comfortably, and a formal public involvement process (PIP) is not necessary
- Citizens may petition for a PIP
 - Potentially affected residents (10) or public officials
 - PRP responds with PIP (min. local repository, mailing list, public comment opportunities, responses to public comment)

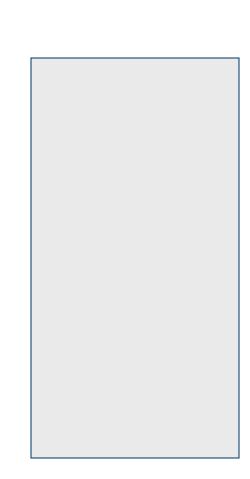
Sample Site: Typical UST Case
No Potable Wells within 1000'
Benzene only





MA GW-2
MCP Case Closed: Method 1 use based table





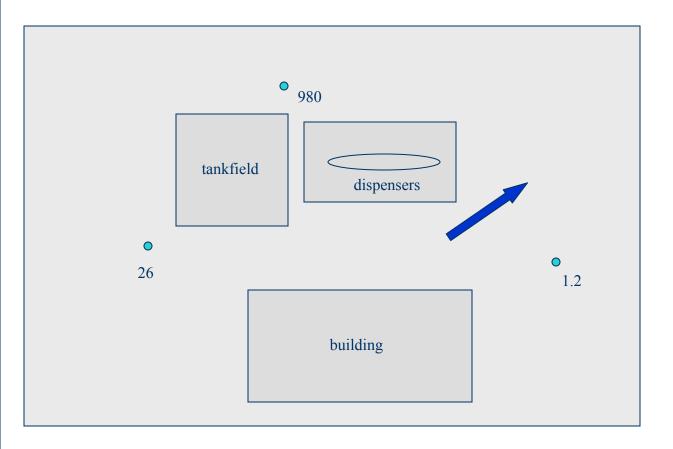
Massachusetts

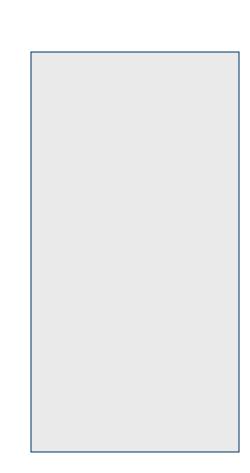
New Jersey

GROUNDWATER			
	GW-1	GW-2	GW-3
Benzene	5	2000	10000
EthylBenzene	700	30000	4000
MTBE	70	50000	50000
Toluene	1000	8000	4000
Xylene	10000	9000	500

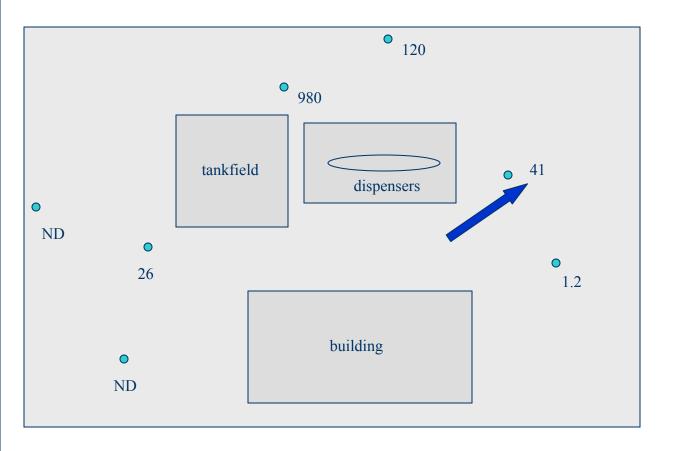
GROUNDWATER			
	NJ		
Benzene	1		
EthylBenzene	700		
MTBE	70		
Toluene	1000		
Xylene	1000		

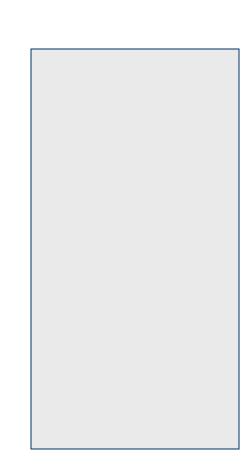
NJ Class II-A Additional Delineation Required +1



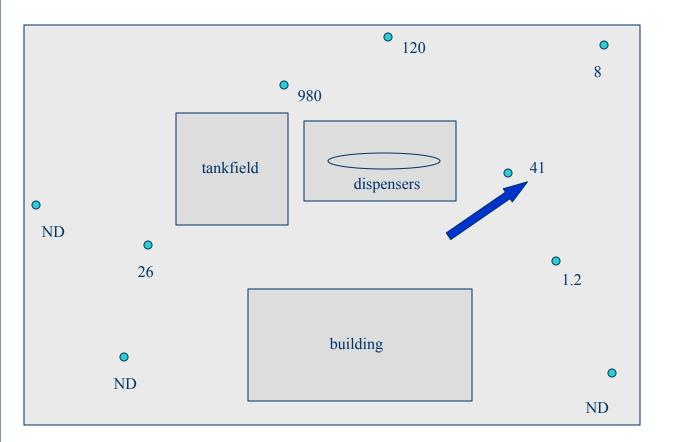


NJ Class II-A Additional Delineation Required +2

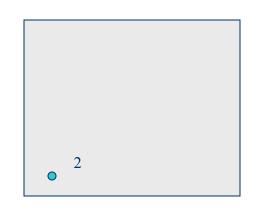


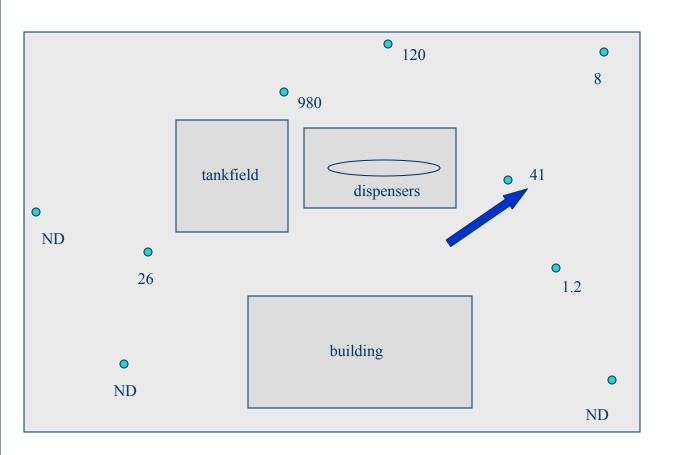


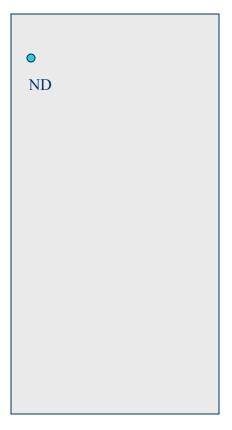
NJ Class II-A Additional Delineation Required +3 • 1.5



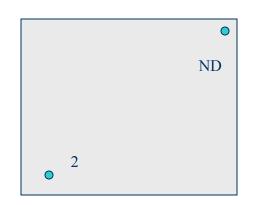
NJ Class II-A Additional Delineation Required +4 ND 1.5

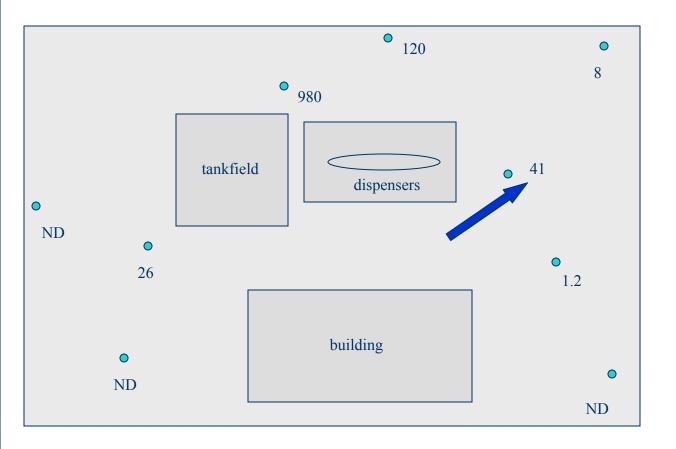


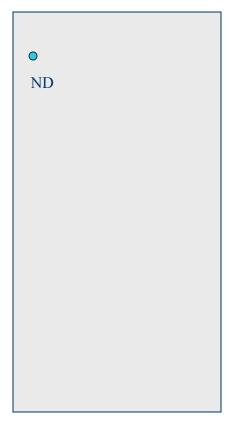




NJ Class II-A Delineated Round +5, RAW Required ND 1.5



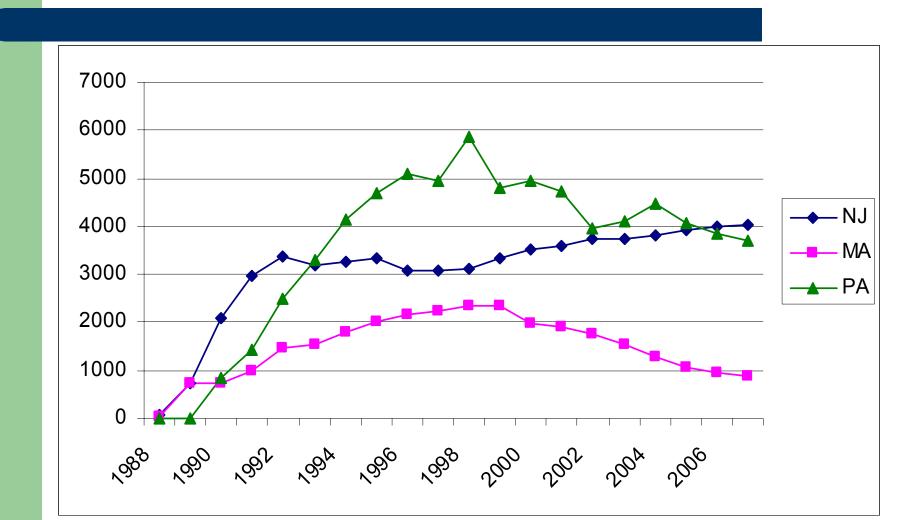




UST Case Load

State	Cases	Mgrs	C/M
MI	9069	48	189
FL	14900	80	186
CA	14102	100	141
NJ	4000	73	73
TX	3518	63	56

UST Case Load



Recommended Legislative Changes

- Provide more options for groundwater remediation
- Mandate a "permit" program for sites with engineering and institutional controls
- Require that future purchasers are responsible for any additional remediation
- Require notice to NJDEP upon change in use of a remediated site

Recommended Regulatory/Policy Changes

- Streamline process
- Implement the options to address risk that exist in statute
- Focus on end use and vision not process
- Outsource homeowner tanks
- Provide opportunity for public comment on sensitive sites

Discussion