

EMERGING TRENDS IN MARYLAND'S VOLUNTARY CLEANUP PROGRAM

8:45 – 9:00 Opening Remarks

9:00 – 9:45 Maryland's Uniform Environmental

Covenants Act (UECA) and its role in

VCP Projects

9:45 - 10:00 Break

10:00 – 11:15 Revised VCP Guidance Document

11:15 – 12:15 Cleanup Standards, Field Screening,

and Toxicology



Environmental Restoration and Redevelopment Program

VCP Risk Assessments





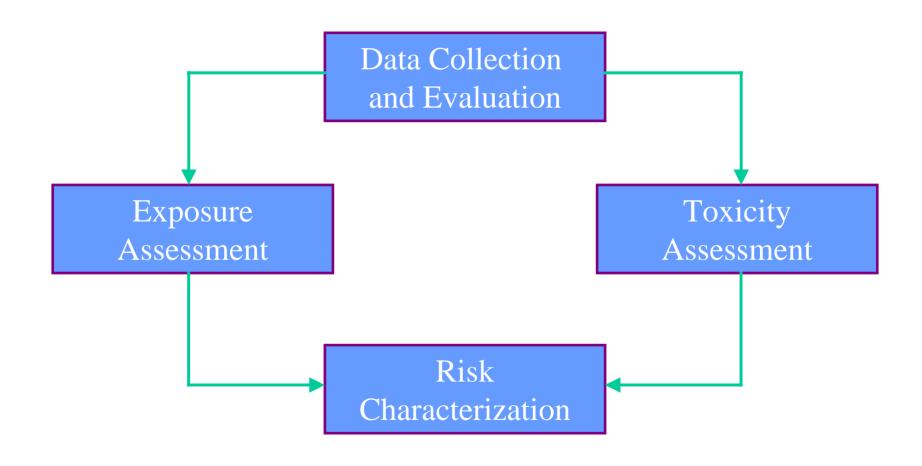
Background

- Applicant performs risk assessment
- Applicant makes standards comparison
- Department performs assessment





Human Health Risk Assessments





Source: USEPA RAGS Part A



Data Collection

- Based on Phase I the applicant and Department select appropriate analytical suites
- Recommend but do not require validated data sets and quality control control measures during site characterization and sample analysis





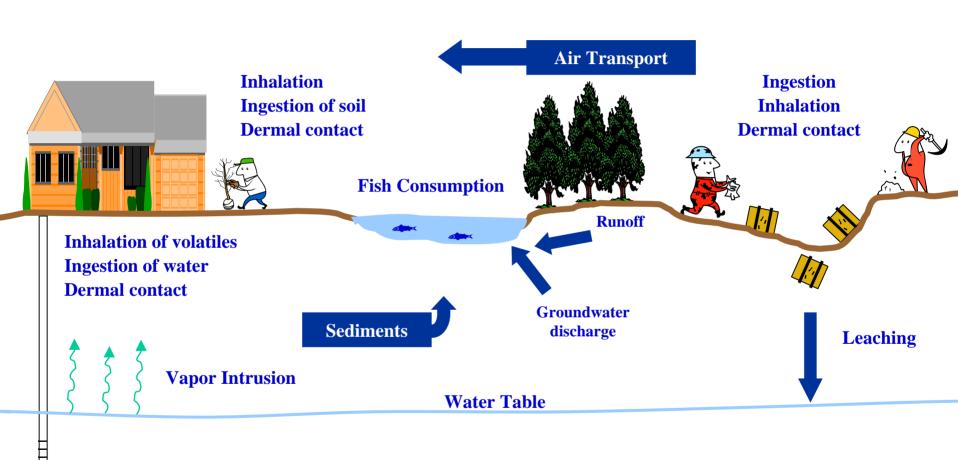
Toxicity Assessment

- Region III RBC table
- Alternate reference doses and cancer slope factors may be considered by the Department when RBC is not available





Exposure Pathways



Groundwater Transport





Exposure Assessment and Risk Characterization

- □ EPA's RAGS forms the basis for Department assessments within all ERRP Divisions
- The risk quantification equations and exposure assumptions are detailed in The Soil and Groundwater Cleanup Standards, August 2001





ERRP Action Thresholds

- MCLs for groundwater, Ambient Water Quality Criteria for surface water
- □ All Other media, including soil, sediment, air, and surface water and groundwater when no AWQC or MCL exist:
- ☐ Hazard Index of 1, cumulative or individual chemical
- □ Cancer risk 1 in 100,000 (1 x 10⁻⁵), cumulative or individual chemical





Exceeding Action Thresholds

- ☐ Many Potential Responses, Applicant's are not limited:
- □ Deed Restrictions
- **☐** Engineering Controls
- ☐ Removal, Remediation





Ecological Risk Assessments

- When habitat is suitable an ecological screening versus ecological criteria is recommended
- When screening criteria are exceeded an ERA following the EPA Superfund's Eight Step ERA Process must be performed





Maryland Department of the Environment

Environmental Restoration and Redevelopment Program



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MDE Uniform Environmental Covenants Act ("UECA") Workshop

September 20, 2005

Amy L. Edwards, Esq. (202) 457-5917

What Are Institutional Controls?

(AKA Land Use Controls (LUCs) or Activity and Use Limitations (AULs))

- Institutional Controls Are an Integral Part of the Remedy Selection Process
- ➤ Four Basic Types of Institutional Controls
 - Proprietary Controls
 - State and Local Government Controls
 - Statutory Enforcement Tools
 - Informational Devices

What Are Institutional Controls?

(AKA Land Use Controls (LUCs) or Activity and Use Limitations (AULs))

- Critical Role of ICs Has Been Implicitly Recognized in the Brownfields Amendments of 2002
 - Affirmative Obligation Not to Impede the Integrity and Effectiveness of ICs and to be in Compliance With Land Use Restrictions
 - State Obligation to Maintain Registries of Brownfields Sites Relying on ICs

Corrective Action and Institutional Controls

- ➤ Deficiencies in Implementation/Enforcement of ICs Have Been Well Documented in Recent Years
 - ELI Study, "Protecting Public Health at Superfund Sites:
 Can ICs Meet the Challenge?" (July 2000)
 - ICMA Study, "Beyond Fences: Brownfields and the Challenge of Land Use Controls" (2000)
 - EPA IC Fact Sheets (October 2000) and Workshops (2001)
 - CPEO Forums (February and June 2000)
 - National Research Council Study (September 2000)
 - EPA Strategy to Ensure IC Implementation at Superfund Sites (September 2004)
 - GAO Report (released March 8, 2005)

Proprietary Controls

- Proprietary Controls Have Their Own Weaknesses.
 State Property Law:
 - Requires horizontal and vertical privity
 - Frowns on "spurious" easements
 - Dislikes affirmative obligations
 - Requires appurtenant property interests
 - Requires covenants to "touch and concern" the land
 - Is limited by Marketable Title Act (generally, 40-60 years)

Uniform Environmental Covenants Act ("UECA")

➤ With the support of DoD, the National Conference of Commissioners on Uniform State Laws ("NCCUSL") began a two-year effort in 2001 to develop a model law that would provide a better foundation for institutional controls.

Uniform Environmental Covenants Act ("UECA")

The final model law required a series of compromises between traditional real property principles and environmental interests

Uniform Environmental Covenants Act ("UECA")

- ➤ The result was the Uniform Environmental Covenant Act ("UECA"), approved by the full Conference in August 2003
- The model law now needs to be adopted in all 50 states
 - UECA has been adopted in ten states to date, including Ohio (H.B. 516); South Dakota (S.B. 143); Kentucky (H.B. 472); Nebraska (L.B. 298); Iowa (SF 375); Maryland (H.B. 679); Maine (L.D. 1559); Delaware (S.B. 112); Nevada (S.B. 263); and W. Va. (S.B. 406)

Uniform Environmental Covenants Act ("UECA") (cont.)

- Legislation has been introduced in 9 other states so far this year
- Ten or more additional introductions are expected next year

- Create a legal infrastructure for creating, modifying, terminating and enforcing AULs ("Super Servitude")
 - Broader universe of "holders"
 - Broader universe of "enforcers"
 - Runs with the land
 - Negates applicability of common law defenses
 - Can be modified/terminated

- Perpetual in duration (unless limited by its terms)
- Cannot be extinguished by
 - Foreclosure of a tax lien
 - Issuance of tax deed
 - Adverse possession
 - Abandonment/waiver/lack of enforcement
 - Eminent domain, unless agency consents and all parties are given notice
 - Marketable Title Act

- Agency will always have the right to enforce
- Agency may be a holder, i.e., grantee of a limited property interest, but doesn't have to be
- Notice as required by the agency to:
 - All who signed
 - All holding a recorded interest
 - All in possession
 - Local government

- Environmental Covenant must be recorded in local land records (optional notice when there is a state registry)
- Environmental Covenant may be enforced by:
 - Any party to the covenant
 - Any person granted the express right to enforce
 - Agency
 - Municipality
 - Any person whose liability may be affected by violations of the covenant

- Environmental Covenant must:
 - State that it's an Environmental Covenant created pursuant to the Act
 - Contain a legally sufficient description of the real property
 - Describe the activity and use limitations (AULs)
 - Identify holder (i.e., grantee of the Environmental Covenant)
 - Be signed by
 - The agency
 - Owner(s)
 - Holder
 - Identify name/location of administrative record

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- Optional Information: The "Roadmap"
 - Environmental Covenant may include
 - Other restrictions and rights agreed to by the parties
 - Notice of
 - Transfer
 - Proposed changes in use
 - Permits/site work

- Optional Information: The "Roadmap"
 - Environmental Covenant may include
 - Periodic reporting
 - Brief narrative description of contamination and remedy
 - Restrictions/limitations on amendment
 - Rights of the holder beyond right to enforce

What UECA Will NOT Do

- Provide this "Super Servitude" tool for purely private transactions
- Bind prior interests in the property unless those interests are subordinated
- Provide standards for remediation or the specific AUL
- Provide independent condemnation authority

Next Steps

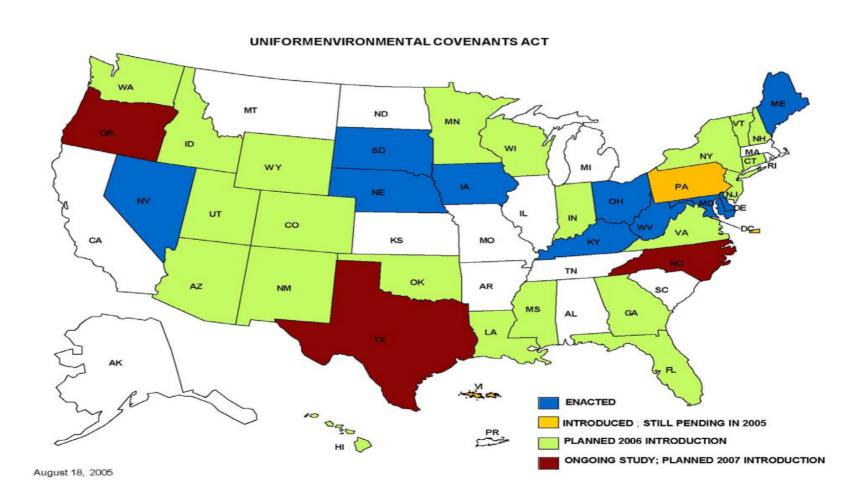
- > Final draft was approved by the full Commission in August 2003
- ➤ The model UECA law must now be introduced in individual state legislatures
 - Enacted in 10 states so far
- Approximately 25 states plan to evaluate and/or introduce this bill in their legislatures in 2005-2006, including:

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- Connecticut H.B. 5612 - Hawaii S.B.1162 (Hee)
(Stone) H.B. 1706 (Morita)
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- Colorado SB05-246 Pennsylvania H.B. 1249 (Grossman) (Rubley)
- Minnesota H.F. 1154 (Emmer) Oregon H.B. 3286 (Scott) S.F. 1426 (Hottinger)
- Washington, D.C. B16-0147 Vermont H. 496 (Keenan, Young)
 (Mendelson)

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Uniform Environmental Covenants Act Status as of September 2005







Department of the Environment















An Environmental Covenant is...

- "...a legal device that restricts activities on sites where some contamination remains in place."
- Use Restrictions/Institutional Controls used to supplement cleanup measures
- Employed to protect human health





VCP Land Use Controls...

- Allow for use restrictions and institutional controls to supplement cleanup measures
- NFRDs and COCs commonly employ land use controls as a way to reach closure



CAUTION



UECA and VCP?

Complementary Brownfield Redevelopment Tools



- Environmental Covenants can supplement NFRDs / COCs issued by VCP
- Provide greater certainty that land use restrictions will be enforced





UECA/VCP Comparison

	Environmental Covenant	NFRD / COC
Describe activity and use restrictions for the property		
Describe holder(s) of Covenant on the property		
Description of use restriction required to be recorded with land records		





UECA/VCP Comparison

	Environmental Covenant	NFRD / COC
Real property legal description as well as the activity/use limitations		
Identify Holder/Recorder of Restriction		
Notification requirements		
Description of contamination and remedy		







Maryland's Brownfields Initiative

Presented by

Jim Carroll

Program Administrator



Maryland Department of the Environment

Environmental Restoration & Redevelopment Program



Started Brownfields' Reform Initiative September 3, 2003

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Brownfields Reform





Administrative Reforms

Goal #1 – Improve Customer Service

Objectives

- 1. Enhance Customer Service
- Improve Efforts to Encourage Economic Development
- 3. Simplify Application Process

Results

- Establish a Brownfields
 Marketing Coordinator
- Coordinator Interacts With DBED and Local Economic Development Agencies
- Revised Application Form and Updated Guidance Document





Administrative Reforms

Goal #1 – Improve Customer Service (cont'd)

Objectives

- 4. Improved Public Access to Information
- Training For Regulated Community
- Public Outreach

Results

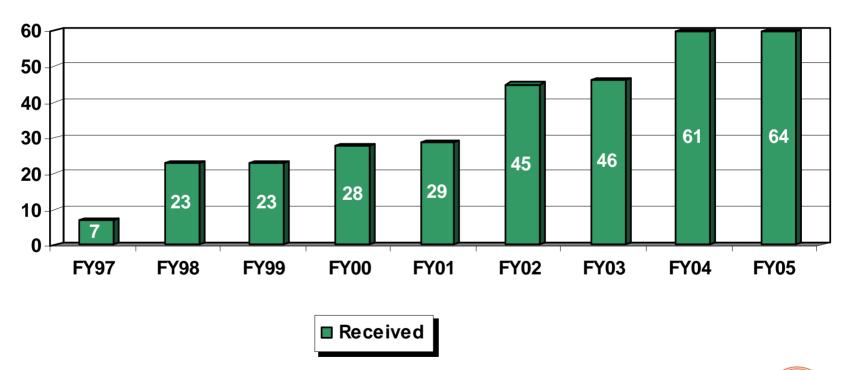
- Internet Access to Public Records Through GIS-Based Website
- VCP Workshops (11/17/03 and 9/20/05)
- Administrative Reforms Kickoff Event with Gov. Ehrlich (11/21/03)





VCP Applications Received

Results of Improving Service



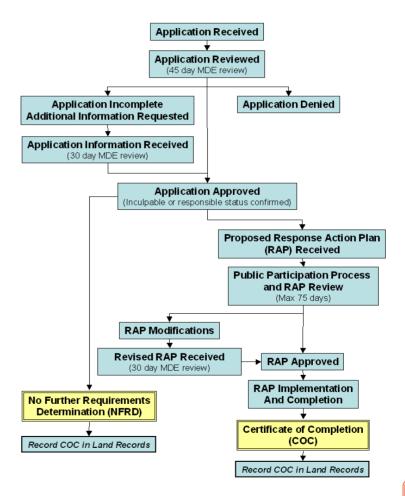




Brownfields Legislation - 2004

Application Process

- Requires Only Phase I Environmental Site Assessment (ESA) to Enter the VCP
- Phase II ESA Required, Unless MDE Determines No "Recognized Environmental Conditions of Concern" at the Site
- Effective October 1, 2004





Brownfields Legislation - 2004 Fees

Activity/Description	Fee Amount
Initial Application Fee: Non-refundable fee for the first VCP	\$6,000
application for the property.	
Subsequent Application Fee: Subsequent application regarding	\$2,000
the same property or contiguous or adjacent properties that are	
part of the same Planned Unit Development (PUD) or similar	
development plan.	
Premier Service: Applicant requesting expedited determination	\$2,000
as Inculpable Person.	
Institutional Controls Fee: Issuance of NFRD or COC	\$2,000
conditioned on certain uses or on the maintenance of certain	
conditions.	
Changes/Revisions: Request by participant to alter the record of	\$2,000
determination in the land records for an eligible property with	
certain conditions.	



Expanded Site Eligibility

Sites Under Active Enforcement



Oil-Contaminated Sites







Liability and Enforcement

ENFORCEMENT

- Allows State to Seek Treble Damages From Recalcitrant Potentially Responsible Parties
- Funds 3 New State
 Superfund Enforcement
 Positions

LIABILITY

 Contribution Protection for Applicants at No Further Requirements Determination Stage





Project Review Times



- Application Review Time Reduced to 45 Days
- Response Action Plans Review Time Reduced to 75 Days





Increased Public Protections

- Notify Miss Utility for Remedies That Include Institutional Controls
- Workgroup to Study
 Uniform Environmental
 Covenants Act (UECA)
- Requires Public Notice of Application and Public Meetings for All Cleanups







Redevelopment Incentives

- Brownfields Revitalization Incentive Program Eligibility Expanded (Dept. of Business and Economic Development (DBED))
 - Properties Acquired by Local Government Under Eminent Domain/Condemnation
 - Allows Funding for Petroleum Investigations
- Local Governments Authorized to Access Private Property for Environmental Testing





Department of the Environment



As of October 1, 2004, The Voluntary Cleanup Program is Accepting Applications for Properties with Known or Perceived Oil Contamination

See Section 8 of the Revised Guidance Document





Properties Ineligible for the VCP Due to Emergency Conditions



- ☐ Petroleum vapors
- Contaminated water supply wells
- ☐ Free product release
- □ Underground utility impacts





MDE VCP and OCP Will Work Together...



- ☐ Tank Removals
- **☐** Compliance Inspections
- ☐ Emergency Response
- ☐ Off-site Impacts

COMAR 26.10 Still Applies to All Sites





Applying to the VCP: Information Needed In the Application Package



☐ Active Tanks

Abandoned Tanks

☐ Future Use of Each Tank

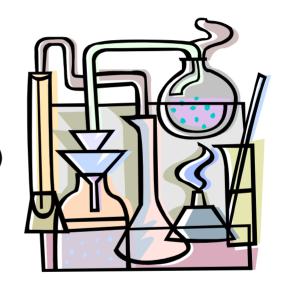






VCP Sampling Requirements

- ☐ TPH-GRO vs VOC (EPA 8260)
- ☐ TPH-DRO vs SVOCs (EPA 8270)
- Metals, PCBs, Pesticides etc.







VCP or OCP?







Voluntary Cleanup Program

September 20, 2005

Application Process

Inculpable Person/Responsible Person Discussion





Inculpable Person/Responsible Person

- □ Inculpable Person No prior or current ownership at time of VCP application and has not caused or contributed to contamination on-site.
- □ Responsible Person Owner or operator of a site contaminated by controlled hazardous substances.





IP Determination Process

- ☐ Entity must match VCP application.
- □ Cannot show up in title search.
- ☐ Title search versus title insurance.
- ☐ Title search done by title company.







IP Determination Process (Continued)

- □ IP affidavit.
- □ Original VCP applicant signature on IP affidavit.
- Notarized IP affidavit.







IP Status Letter

- ☐ Expedited 5 day turnaround.
- Request for IP status letter with application. (3-4 weeks)
- ☐ IP status granted at completion of VCP process.

Day 1 Day 5

Expedited

Day 1 Day 28

Regular with Application

Day 1 Day 45

IP Status Granted





Environmental Restoration and Redevelopment Program

Voluntary Cleanup Program

VCP Application Checklist Public Notice Requirements





VCP Application Checklist

Attachment III Voluntary Cleanup Program

Application

VCP Application Attachment III

VCP Application Checklist

Although not mandatory, applicants are encouraged to complete this checklist to help expedite review of the application package. VCP staff will use the checklist to verify that an application package is complete and will notify the applicant of missing items and any other deficiencies.

111133	ing items and any other deficiences.
Pro	perty Name:
App	olicant:
Dat	e:
I. <u>AI</u>	PPLICATION PPLICATION
	A. Completed Application Form
	Each application question must be completed.
	B. Statement of Certification
	An original, signed Statement of Certification, must be included with the application and with each subsequent submission of information regarding the property.
	D. <u>\$6,000 Application Fee</u>
	Please mail the \$6,000 application fee to the address listed in Attachment I of the application.
	C. Inculpable Person Status Affidavit
	For those applicants seeking inculpable person status (see Section V of the application), please complete and include Attachment II, "Inculpable Person Affidavit," with the application. Applicants requesting an expedited (within five business days) inculpable person determination must submit the \$2,000 fee to the address listed on Application Attachment I.
II. <u>E</u>	NVIRONMENTAL SITE ASSESSMENTS
	For each item, indicate the location of the requested information (e.g., attachment number or document title with date and page numbers).
	A. Current Property Conditions Since Completion of the Phase I Report
	Document the property conditions existing at the time of application and summarize any changes that have occurred at the property since the most recent Phase I site assessment.
	Location:
☐ I	B. Current and Past Uses of the Property
	 Provide a complete listing of the entities that have owned and/or occupied (including tenants) the property from the time of first agricultural, commercial, or industrial use or 1940, whichever is earlier. Identify the name and type of each business, the years of occupancy, and the nature of the on-site operations. Location:
	Describe the controlled hazardous substances and petroleum products each business stored and handled (or was likely to have stored and handled at the property and discuss the potential for any environmental. Location:





VCP Application Checklist

Commonly Omitted or Incorrect Items

I. <u>APPLICATION</u>

- ☐ Property Information Incorrect
- Statement of Certification
- Application Fee
- ☐ Inculpable Person Status Affidavit





VCP Application Checklist

Commonly Omitted or Incorrect Items

II. ENVIRONMENTAL SITE ASSESSMENTS

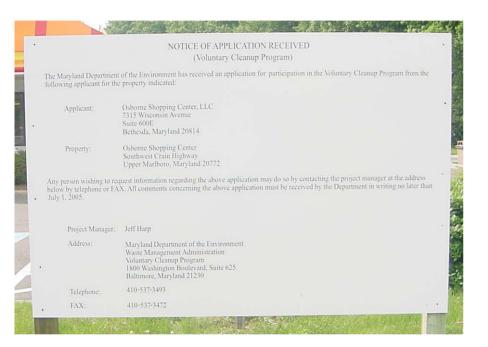
- ☐ Current Property Conditions
- Historic Maps and Aerial Photographs
- □ Scaled Site Plan
- Groundwater Use Investigation
- Groundwater Contour Map

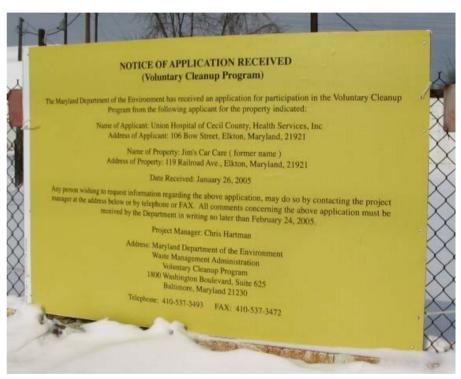




Public Notice Requirements

Sign Examples





□ Upon submission of an application to MDE, the applicant must post a sign at the property indicating application to the program.





Public Notice Requirements

High Visibility Sign Locations





☐ The sign must be located in an area of the property with the highest visibility and volume of traffic and remain standing and legible for the entire 30-day comment period.





Template for Public Notice Sign

Attachment Six

Voluntary

Cleanup

Program

Guidance

Document



Maryland Department Of The Environment Voluntary Cleanup Program

Attachment Six Template for Public Notice of Application to the VCP

On submission of an application to the Department, the applicant must post a notice at the property that includes the information presented in the following template. The posted notice must (a) be located in the area of the property with greatest visibility and highest volume of traffic; (b) be at least six (6) feet wide by four (4) feet high; and (c) remain standing, and its printed message maintained in a legible condition, for the entire 30-day comment period.

The applicant is requested to submit photographs (digital or print) documenting that the sign is located in an area with high visibility and traffic volume and that text is properly printed in accordance with the following template. In addition to the public notice posted at the property, the Department will post a notice of the application on the Department's website: http://www.mde.state.md.us/brownfields.

NOTICE OF APPLICATION RECEIVED

(Voluntary Cleanup Program)

The Maryland Department of the Environment has received an application for participation in the Voluntary Cleanup Program from the following applicant for the property indicated:

(Name of Applicant) (Address of Applicant)

(Name of Property)
(Property Address)

Telephone:

Any person wishing to request information regarding the above application may do so by contacting the project manager at the address below by telephone or FAX. All comments concerning the above application must be received by the Department in writing no later than (30 days after posting of the sign).

Project Manager: (check with Department)

Address: Maryland Department of the Environment

Waste Management Administration Voluntary Cleanup Program 1800 Washington Boulevard, Suite 625

Baltimore, Maryland 21230

410-537-3493

FAX: 410-537-3472





Maryland Department of the Environment

Environmental Restoration and Redevelopment Program

Any questions regarding the application process should be directed to Jim Metz of the Voluntary Cleanup/Brownfields Division at 410-537-3493.





Environmental Restoration and Redevelopment Program

RESPONSE ACTION PLAN (RAP)







Which Way To Go From Here??





- □ Do the NFRD No Unresolved RECs / No Unacceptable Risk, BE HAPPY 'n HAVE A NICE DAY
- □ Do the COC Some Unresolved RECs / Some Unacceptable Risk, BE HAPPY 'n HAVE A NICE DAY (AND INCLUDE A RAP)







WHAT DRIVES THE RAP??

- □ 7-508 "Requirements of the Response Action Plan" Statutory Requirements
- □ VCP Guidance Document: <u>www.mde.state.md.us</u>
- □ Chronology of Events







CHRONOLOGY OF EVENTS

Submission of the proposed RAP / Posting of Public Not Sign / Newspaper Public Notice – Then, the clock is ticking	ice
VCP clock ticks for 30 days to receive public comments	
Mandatory public meeting within 40 days	
VCP accepts / issues comments within 75 days	
Participant re-submits revised RAP within 120 days of receiving VCP comments	
VCP responds within 30 days	NA.





...WAY UP FRONT

- □PLEASE DON'T BEGIN CONSTRUCTION UNTIL THE RAP IS APPROVED!!
- □THIS REQUIRES COORDINATION BETWEEN THE PARTICIPANT, THE CONSULTANT, THE SUB-CONTRACTORS, AND THE VCP IT'S A MATTER OF COMMUNICATION AMONG ALL OF US!









THINGS TO REMEMBER



Imported Top-Soil:

- ☐ You don't want to exacerbate the problem, so VCP needs to know where the soil comes from & whether it meets the appropriate cleanup standards
- □This requires coordination with the subcontractors
- □PLAN AHEAD good idea to pre-qualify the proposed source of imported soil.







THINGS TO REMEMBER



Excavated Soil:

☐ The RAP should include the proposed disposal facility and the required analytical disposal criteria

□ PLAN AHEAD - good idea to pre-qualify the proposed disposal facility.







.....ANOTHER THING

Imported Crushed Concrete

□ <u>Problem</u> – VCP needs representative sample, typically lab analyzed for at least SVOCs & PCBs, maybe TPH – Source usually not capable of dedicating the temporary on-site storage area.









<u>PERFORMANCE BOND</u> IS ONLY FOR SITE STABILIZATION – NOT FOR THE PROJECT COST

"SITE STABILIZATION" MEANS \$\$\$\$
NECESSARY TO <u>SECURE & STABILIZE</u>
THE SITE IF THE RAP IS NOT COMPLETED





SO.....IN CONCLUSION

HAPPY RAPPING......SO A LITTLE BIT OF THIS







.....MAY LEAD TO LOTS OF THIS!







Maryland Department of the Environment

Environmental Restoration and Redevelopment Program





Environmental Restoration and Redevelopment Program

Analytical Laboratory Capabilities





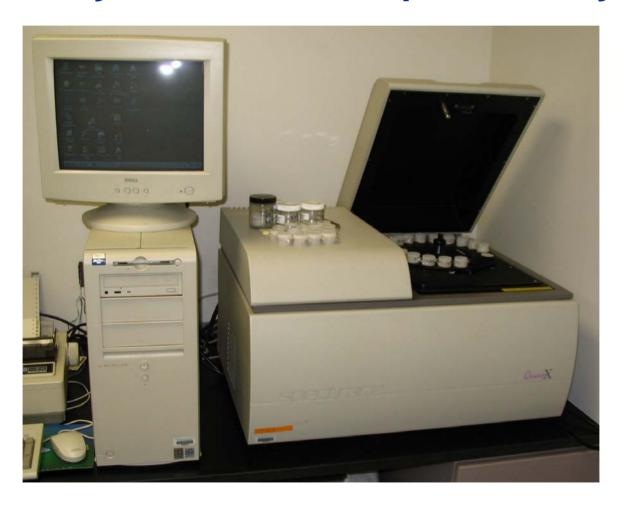
MDE encourages the use of sample-screening technologies to characterize properties

□ In an effort to keep analytical costs down while completing a thorough site characterization, MDE offers to screen site samples using X-ray Fluorescence Spectrometry (XRF), Gas Chromatograph/Mass Spectrometer(GC/MS) and immunoassay. The screening process can greatly reduce analytical costs by reducing the number of samples submitted to a fixed laboratory for certain analytical parameters.





X-ray Fluorescence Spectrometry







X-ray Fluorescence Spectrometry

- □ Analytical Capabilities:
- □ V, TI, Ca, Ti, Cr, Mn, Fe, Ni, Cu, Zn, Se, As, Au, Cd, Sb, Ba, Pb, Hg
- Analysis limited to soil





Gas Chromatograph/Mass Spectrometer







Gas Chromatograph/Mass Spectrometer

- ☐ Analytical capabilities:
- ☐ Purge and Trap, VOCs by Method 8260
- ☐ Soil and groundwater analysis





Immunoassay

- ☐ Analytical capabilities:
- □ PCBs, Carcinogenic PAHS, Select Pesticides and RDX
- Analysis limited to soil





Collection and Handling Procedures

 Guidance Document Attachment 4 – MDE Screening Sample Collection Protocol





Request For MDE Sample Screening Analytical Services Form

Guidance Document Attachment Three



Attachment 3

Maryland Department Of The Environment Voluntary Cleanup Program

Attachment Three Request For MDE Sample Screening Analytical Services

			REQUE	STED BY:_			DAT	ге:			
REVIEWED/A	CLIENT AUTHORIZATION TO BILL (SIGNATURE):										
	INITIALS	DATE	DATE:		ZATION TO DI	LL (SIG	MICK	L)			-
Requestor/PM					-						
Section Head			ESTIM	ATED SAM	PLING DATE:						
			REQUE	STED ANA	LYSIS TURNA	ROUNI	TIME	(CIRCLE	i): 7-day	14-D	AY
			XRF Metals		Immunoassay			GC/MS		Other	
PCA Code			Unit price per		CaPAH unit price per			VOCs at no			
Object Code			sample: \$1.50		sample: \$35.00 (1-19); \$27.00 (20 or more)			charge			
Site Name			PCB unit price per sample: \$35.00 (1-19);								
Circle Program:					\$27.00 (20						
VCP Non-Sit	e-Specific									L.,	
DESCRIPTION OF SERVICES			Unit Price	Total	Unit Price Total		al	Unit Price	Total	Unit Price	Total
	SU	JBTOTALS									
	TOTAL										
Estimated labor and condition of LABOR	charges listed belthe samples:	low will vary	based on t				(to be c	ompleted	l by MDE)		TOTAL
LABOR	HOURS	RATE	TOTAL		1100	K K	L	DATE	,		TOTAL
			-		 	_				-	
							TOTAL				
		TOTAL	_						TOTAL	L	
	ESTIMATED GRAND TOTAL								TOTAL		

MARYLAND

MDE VCP Guidance Document Revision Date: 7/26/05



Sample Disposal

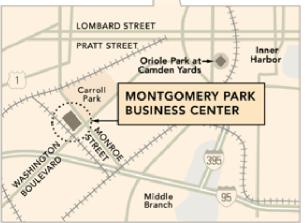
☐ Upon completion of sample analysis the applicant is responsible for sample disposal





DIRECTIONS TO MDE FOR SAMPLE DROP OFF







The applicant's environmental consultant must collect and deliver the samples to MDE with the appropriate chain of custody documentation. Samples may be scheduled for delivery to MDE during business hours (9am to 5pm) Monday through Friday, samples delivered after 10am on Thursdays will not be analyzed until the following week.