

# **VOLUNTARY CLEANUP PROGRAM**



## **GUIDANCE DOCUMENT**

March 17, 2006

**Environmental Restoration & Redevelopment Program**

**MARYLAND DEPARTMENT OF THE ENVIRONMENT**



# Maryland Department Of The Environment Voluntary Cleanup Program

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**Attachments**

A1	VCP Application
A2	MDE Fixed Laboratory Data Deliverables
A3	Request For MDE Sample Screening Analytical Services
A4	MDE Screening Sample Collection Protocol
A5	No Further Requirements Determination Sample Letter
A6	Template for Public Notice of Application to the VCP
A7	Template for Public Notice of a Response Action Plan
A8	Performance Bond Template
A9	Certificate of Completion Sample Letter
A10	Interim Removal Measures



# Maryland Department Of The Environment Voluntary Cleanup Program

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## Guidance Document List of Abbreviations

AST(s)	Aboveground Storage Tank(s)
ASTM	American Society for Testing and Materials
BRIP	Brownfields Revitalization Incentive Program
BCRLF	Brownfield Cleanup Revolving Loan Fund
COC	Certificate of Completion
CFR	Code of Federal Regulations
COMAR	Code of Maryland Regulations
CHS	Controlled Hazardous Substances
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
Cr(III)	trivalent chromium
Cr(VI)	hexavalent chromium
cfm	cubic feet per meter
EDD	Electronic Data Deliverables
DBED	Department of Business and Economic Development
DRO	Diesel Range Organics
GC/MS	Gas Chromatography/Mass Spectrometry
GRO	Gasoline Range Organics
HQ	Hazard Quotient
HEAST	Health Effects Assessment Summary Tables
HVAC	Heating Ventilation Air Conditioning
IRM	Interim Removal Measure
IDM	Investigation-Derived Media
IRIS	Integrated Risk Information System
LUC(s)	Land Use Control(s)
LPH	Liquid Phase Hydrocarbons
MDE	Maryland Department of the Environment
MCL(s)	Maximum Contaminant Level(s)
NCEA	National Center for Environmental Assessment
NFRAP	No Further Remedial Action Planned
NFRD	No Further Requirements Determination
OSHA	Occupational Safety and Health Administration
OCP	Oil Control Program
PEL	Permissible Exposure Limits
PPE	Personal Protective Equipment
PCBs	Polychlorinated Biphenyls
PAHs	Polycyclic Aromatic Hydrocarbons
PIA	Public Information Act
QA/QC	Quality Assurance/Quality Control

RECs	Recognized Environmental Concerns
RAP	Response Action Plan
SVOCs	Semivolatile Organic Compounds
TICs	Tentatively Identified Compounds
TEL	Threshold Exposure Limits
TPH	Total Petroleum Hydrocarbons
TAP	Toxic Air Pollutant
UST(s)	Underground Storage Tank(s)
U.S. EPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds
VCP	Voluntary Cleanup Program
XRF	X-ray Fluorescence



# Maryland Department Of The Environment Voluntary Cleanup Program

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## Section One Voluntary Cleanup Program

The Voluntary Cleanup Program (VCP), administrated by the Maryland Department of the Environment (MDE), was enacted as emergency legislation in February 1997. The purpose of the VCP is to encourage the investigation of eligible properties with known or perceived controlled hazardous substance contamination, protect public health and the environment, accelerate cleanup of properties, and provide liability releases and finality to site cleanup. Effective October 1, 2004, properties also contaminated by oil are eligible to participate in the program.

Persons wishing to enter property into the VCP must submit the following documents:

- Completed application (see Attachment 1);
- A non-refundable \$6,000 application fee, which MDE may reduce upon promulgation of regulations establishing criteria for demonstrating financial hardship;
- An environmental site assessment that includes:
  - Established Phase I site assessment standards based on the principles established by the ASTM; and
  - A Phase II site assessment unless MDE concludes, after review of the Phase I, that there is sufficient information to determine that there are no recognized environmental conditions as defined by ASTM. In some cases, a work plan for the Phase II may be submitted for review and approval by MDE prior to implementation and completion of the Phase II site assessment.

Persons requesting expedited inculpable person approval within five business days (see Section 1.4.2) must submit an additional \$2,000 fee.

After review of an application package, MDE may:

- Determine that the application is incomplete and request additional information;
- Approve the application and issue a NFRD stating that there are no further requirements related to the investigation of CHS or oil at the eligible property; or
- Approve the application and advise the applicant that a RAP must be developed to address contaminants of concern at the property. At the time of approval of an application, MDE will also confirm the participant's status as an inculpable or responsible person.

Upon approval of the application, MDE may issue an NFRD conditioned on future land use controls and containing specific land use requirements. Issuance of the NFRD does not prevent MDE from taking action against inculpable or responsible persons for new or exacerbation of existing contamination at the property. In addition, for responsible persons, the NFRD does not prevent MDE from taking action for previously undiscovered contamination at the property or for imminent and substantial threats to public

health or the environment. If a NFRD is conditioned on certain uses of the property or on the maintenance of certain conditions, the participant shall pay \$2,000 upon issuance of the NFRD.

If MDE determines that development of a RAP is necessary, the participant shall submit a proposed RAP, including a schedule for implementation and completion of the plan. Upon submittal of the plan to MDE for review and approval, the public is given the opportunity to attend a public informational meeting and submit comments on the proposed RAP. The COC is issued upon completion of the requirements of the approved RAP to the satisfaction of MDE. The COC does not prevent MDE from taking action against inculpable or responsible persons for new or exacerbated contamination. Additionally, for responsible persons, the COC does not prevent MDE from taking action for previously undiscovered contamination at the property or imminent and substantial threats to public health or the environment. If a COC is conditioned on the permissible use of the property, the participant shall pay \$2,000 upon issuance of the COC.

## **1.1 ELIGIBLE PROPERTIES**

Any property contaminated or perceived to be contaminated by CHS or oil is eligible for participation in the VCP. Eligible properties also include:

- Sites listed on CERCLIS (i.e. sites on the State Master List);
- Sites listed on CERCLIS and designated NFRAP by the federal government; and
- Sites under active enforcement if:
  - All applications for the property are filed by inculpable persons, as defined in Section 1.4.2; and
  - Any RAP and cleanup criteria approved by MDE are at least as protective of public health and the environment as the requirements of any outstanding enforcement action.

## **1.2 INELIGIBLE PROPERTIES**

The following are not eligible for the participation in the VCP:

- Sites on the National Priorities List (the federal Superfund list);
- Sites under active enforcement by MDE except as discussed above;
- Sites subject to a State CHS permit on currently operating facilities;
- Sites contaminated after October 1, 1997, if the applicant is a responsible person; and
- Oil-contaminated or CHS-contaminated sites that exhibit emergency conditions (see Section 8.0).

## **1.3 ELIGIBLE APPLICANTS**

Any person may submit a VCP application for an eligible property. A person who knowingly or willfully violated any law or regulation concerning CHS or oil is not eligible to participate in the VCP. Examples of types of applicants who may submit VCP applications for eligible properties include property owners, commercial lenders, developers, prospective purchasers, lessees, innocent purchasers, and operators.

## **1.4 RESPONSIBLE AND INCULPABLE PERSONS**

Sections 7-201 and 7-501 of the Environment Article, Annotated Code of Maryland, define two types of persons with respect to liability for site contamination: responsible persons and

incurable persons. MDE notifies the applicant in writing within 45 days of receipt of a complete application package whether the applicant's status is approved as a responsible or incurable person.

MDE will provide expedited incurable person approval within five business days of receipt of a written request, a \$2,000 fee and an executed incurable person status affidavit. Expedited incurable person approval will expire if the application and fees are not filed within six months of approval.

#### **1.4.1 Responsible Person (RP)**

A responsible person means a person who is the owner or operator of a site contaminated by a CHS. Those responsible for the cleanup of hazardous substance are property owners, operators, generators and transporters of the CHS. Section 7-201(x) of the Environment Article, Annotated Code of Maryland, provides a complete description of responsible persons, including a list of exceptions. VCP applicants qualifying for an exception listed in Section 7-201(x)(2) of the Environment Article are considered incurable persons (see Section 1.4.2).

#### **1.4.2 Incurable Person (IP)**

An incurable person, as defined in Section 7-501(j) of the Environment Article, means a person who, at the time of application for participation in the VCP, has no prior or current ownership interest in an eligible property and has not caused or contributed to contamination at the eligible property. An incurable person also includes a person who is not considered a responsible person under Section 7-201(x)(2) of the Environment Article.

##### **1.4.2.1 Lender Liability Provisions**

Section 7-201 of the Environment Article, Annotated Code of Maryland, describes the liability protections available to lenders, fiduciaries and persons who hold title to a property to protect a security interest and are not considered responsible for site contamination. The following are not considered responsible persons and are therefore entitled to incurable person status:

- A person who holds indicia of ownership to protect a security interest in the property;
- A person who holds a mortgage or deed of trust to protect a security interest in the property;
- A fiduciary who has legal title to a site as trustee or administrator of an estate;
- A holder of a mortgage or deed of trust who forecloses on property;
- A holder of a mortgage or deed of trust who acquires title to a property in the VCP subject to a written agreement in accordance with the VCP; or
- A lender who extends credit for removal or remedial actions.

A lender who takes action to protect or preserve a mortgage or deed of trust on a site or a security interest in property located on a site by stabilizing, containing, removing or preventing the release of a hazardous substance is not a responsible person if the lender provides advance written notice to MDE.

In addition to the protections already provided to mortgage or deed of trust holders, or anyone who held title to protect a security interest, these new exceptions specifically protect a mortgage holder who acquires title to a property in the VCP, and lenders who extend credit to finance a cleanup, or who do the cleanup themselves as long as they work with MDE. The new exceptions specifically apply to lenders who may be involved with a project in the VCP, or who are otherwise working with MDE on a cleanup of a contaminated property.

A separate section was also added in 1997 to further limit lender liability if the lender caused contamination during a cleanup (Section 7-201(x)(3)). This section provides that a lender taking action to protect or preserve a mortgage or deed of trust or security interest who causes or contributes to a release of a hazardous substance will only be responsible for costs incurred as a result of the release to which the lender caused or contributed, unless the lender was otherwise a responsible person.

#### **1.4.2.2 Liability Provisions for Government Entities**

A State, county, or municipal government or other political subdivision of the State that owns or operates on a property is subject to similar liability protection as an inculpable person except in the case of gross negligence or willful misconduct (Section 7-201(2)(vii)). The liability of a government entity designated an inculpable person is limited to causing new contamination, exacerbation of existing contamination and fraud/material misrepresentation.

#### **1.4.2.3 Liability Provisions for Heirs and Contiguous Property Owners**

If a person acquires a property contaminated by CHS by inheritance or bequest of the transferor, that person is eligible for similar liability protection as an inculpable person (Section 7-201(x)(2)(ii)). An heir designated an inculpable person is liable in the event of new contamination, exacerbation of existing contamination and fraud/material misrepresentation.

If a person owns property that is contaminated solely by a contiguous property, that person is excluded from the definition of responsible person provided that person could establish that all requirements in Section 107(q) of CERCLA have been met (Section 7-201(x)(7)).

#### **1.4.2.4 Innocent Purchaser**

Inculpable person designation includes a person who can establish by a preponderance of the evidence that at the time the person acquired an interest in a site containing a hazardous substance, the person did not know and had no reason to know that any hazardous substance was disposed of on, in, or at the site; however, any person claiming an exemption from liability under this subparagraph must establish that the person had no reason to know, in accordance with Section 101(35)(B) of the federal act, and that the person satisfied the requirements of Section 107(b)(3)(a) of the federal act.

### **1.5 LIABILITY PROTECTIONS**

The Maryland law defining these liability provisions can be found in Title 7 (Sections 7-201 and 7-501) of the Environment Article, [Annotated Code of Maryland](#).

#### **1.5.1 Liability of Responsible Persons**

Responsible persons who successfully complete the VCP process gain liability protection. This includes protection against State enforcement actions at the eligible property, release from further liability for the remediation of contamination identified in the environmental investigations, and protection against contribution actions instituted by other responsible persons (Section 7-513(b)). Re-openers applicable to responsible persons are discussed below in Section 1.5.4.

#### **1.5.2 Liability of Inculpable Persons**

After an applicant has been designated as an inculpable person, the law provides that the inculpable person shall not be liable for existing contamination at the site. The inculpable person is only liable for new contamination or the exacerbation of the existing contamination (Section 7-

505). Although an inculpable person may prepare a RAP to address environmental conditions at a property, the inculpable person is not liable for the contamination.

### **1.5.3 Tort Liability**

The VCP law specifically states that it does not provide any liability protection against tort (personal injury) claims (Section 7-516(b)). The risks associated with tort liability may be addressed through commercially available insurance protection.

### **1.5.4 Re-openers**

After a NFRD or COC is issued, a participant may be required to comply with certain land use requirements. The re-openers are broader for responsible persons than for inculpable persons. Re-openers, or caveats, for both the NFRD and the COC include the following:

- New or Exacerbated Contamination
- Undiscovered Contamination
- Imminent and Substantial Endangerment
- Fraud/Material Misrepresentation

If a NFRD or COC is issued contingent on a certain future use of the property, failure to comply with the use restriction shall void the NFRD or the COC. For those sites that receive a COC but have long-term monitoring and land use controls, failure to comply with those requirements shall void the COC. However, the recipient of the NFRD or COC and any successors in interest shall continue to be protected from liability in the event of a violation of the conditions placed on the use of the property as long as the recipient or successor in interest did not cause or contribute to the violation (see Sections 7-506 and 7-514).

### **1.5.5 Protection from Federal (EPA) Actions**

MDE and the United States EPA Region III signed a Memorandum of Agreement in 1997 that provides VCP participants with certain protections from federal action after MDE issues a NFRD or a COC. U.S. EPA Region III recognizes that Maryland has, through the VCP, developed and implemented strategies to promote the cleanup and redevelopment of underutilized properties and has agreed to consider sites that have been investigated or remediated under the VCP to be of “no federal interest” unless:

- U.S. EPA determines conditions at the site present an imminent and substantial endangerment to public health and welfare or the environment, or an emergency situation exists;
- Previously undiscovered contamination or new contamination is found at the site after the issuance of a NFRD or approval of a RAP;
- New information concerning site conditions is made available after approval of the RAP; or
- The NFRD or COC was obtained through fraud or material misrepresentation.

## **1.6 VCP FINAL APPROVAL DOCUMENTS**

The VCP provides two types of final site approval documents: a NFRD and a COC. The NFRD and COC are issued by MDE for properties contaminated or perceived to be contaminated by CHS substances or oil.

**No Further Requirements Determination:** A NFRD is issued for an eligible property when the application package is approved and MDE has determined that a RAP is not required. The issued

NFRD states there are no further requirements related to the investigation of CHS or oil at the property. The NFRD is based on VCP specific land use (residential, commercial, or industrial) and may contain certain land use requirements (e.g. excavation notification, use of air monitoring devices, maintenance of existing asphalt or concrete pavement, soil disposal requirements, a groundwater use prohibition). If the NFRD is conditioned on certain uses of the property or the maintenance of certain conditions, the participant shall:

- Pay a \$2,000 fee to MDE upon issuance of the NFRD;
- Send a copy of the NFRD to the public utility one-call system (e.g. “Miss Utility”); and
- Record the NFRD in the local land records within 30 days.

If the property owner wants to change the permissible use of the property from that specified in the NFRD (i.e. change from commercial to residential use), the owner is responsible for the cost of cleaning up the property to the appropriate standard. This would require submission of a new application to the VCP.

A property owner may request an alteration of the NFRD once it has been recorded in the land records office. This request must be made in writing by the property owner and be accompanied by payment of \$2,000 and documentation regarding the request (i.e. manifests and sample data indicating a removal of contaminated soil).

The participant and any subsequent owners of a property subject to a NFRD shall continue to be protected from liability in the event of any violation of the conditions placed on the use of the property, provided that the participant and any subsequent owners did not cause or contribute to the violation.

**Certificate of Completion:** A COC is issued for an eligible property following the satisfactory completion of an approved RAP. The three steps preceding the issuance of a COC include: acceptance of the property into the VCP and a determination that a RAP is necessary; development of a proposed RAP for MDE review and approval and completion of the public participation requirements; and satisfactory implementation and completion of the requirements of the approved RAP.

Upon submission of the RAP to MDE, certain public participation requirements must be completed (see Section 6). If the proposed RAP is approved, MDE will issue a RAP approval letter. If the RAP is implemented, completed to the satisfaction of MDE, and achieves the cleanup criteria and/or remedial objectives, the participant will receive a COC. The participant is released from further liability for the remediation of the eligible property for any contamination identified in the environmental site assessment and is not subject to a contribution action. The COC is based on VCP-specific land use (residential, commercial or industrial) and may contain certain land use requirements (e.g. excavation notification, maintenance of existing asphalt or concrete pavement, soil disposal requirements, a groundwater use prohibition, groundwater monitoring, submittal of periodic inspection reports, periodic inspection of controls, continual maintenance of containment remedies). If the COC is conditioned on permissible use of the property, the participant shall:

- Pay a \$2,000 fee to MDE upon issuance of the COC;

- Send a copy of the COC determination to the public utility one-call system (e.g. “Miss Utility”); and
- Record the COC in the local land records of the local jurisdiction.

A property owner may request an alteration of the COC once it has been recorded in the land records office. This request must be made in writing by the property owner and be accompanied by payment of \$2,000 and documentation regarding the request (i.e. manifests and sample data indicating a removal of contaminated soil).

The participant and any subsequent owners of a property subject to a COC shall continue to be protected from liability in the event of any violation of the conditions placed on the use of the property, provided that the participant and any subsequent owners did not cause or contribute to the violation.

### 1.6.1 VCP Land Uses

Each VCP applicant shall choose a VCP land use and restriction category based on the planned future use of the property, which will be used by MDE to determine whether there are further requirements for the property. A NFRD or COC issued for a property will be contingent on future use of the property as defined in one of the land use categories listed below:

**Tier 1 (Residential):** Planned use of the property that allows exposure and access by all populations including infant, children, elderly, and infirmed populations.

- **A (Unrestricted):** No land use controls are imposed on the property. Tier 1A properties typically include single-family and multi-family dwellings.
- **B (Restricted):** One or more land use controls are imposed as a condition of residential use of the property. Tier 1B properties typically include hospitals and health care facilities, education facilities, day care facilities, playgrounds and other recreational areas.

**Tier 2 (Commercial):** Planned use of the property that allows exposure and access by the general public, workers, and other expected users, including customers, patrons, or visitors. Commercial purposes allow access to the property and duration consistent with a typical business day. Tier 2 properties typically include shopping centers, retail businesses, vehicle service stations, medical offices, hotels, office space, religious institutions and restaurants.

- **A (Unrestricted):** No land use controls are imposed on the property for commercial use.
- **B (Restricted):** One or more land use controls are imposed as a condition of commercial use of the property.

**Tier 3 (Industrial):** Planned use of the property by workers over the age of 18, adult workers and construction workers, and other potential expected users. Industrial purposes allow access to the property at a frequency and duration consistent with a typical business day. Tier 3 properties typically include manufacturing facilities, maritime facilities, metal working shops, oil refineries, chemical and other material plants.

- **A (Unrestricted):** No land use controls are imposed on the property for industrial use.
- **B (Restricted):** One or more land use controls are imposed as a condition for industrial use of the property.

**Land Use Controls** means any restriction or control that serves to protect human health and the environment by limiting use of or exposure to any portion of the property, including water resources. These controls may include:

- **Engineering controls**, which are remedial actions directed toward containing or controlling the migration of contaminants through the environment. These include, but are not limited to, stormwater conveyance systems, slurry walls, liner systems, caps, leachate collection systems, pump and treat systems, and groundwater recovery systems.
- **Institutional controls**, which are legal or administrative tools designed to prevent or reduce human or exposure to remaining contamination and to prevent activities that may result in increased exposure to or spread of such contamination.

### 1.6.2 Allowable Land Use Controls

The following information is a guide to assist in determining whether a property is eligible to receive a NFRD or a COC depending on its expected land use category and which restrictions or controls are applied. The Department must consider site-specific factors to determine whether a property is eligible to receive a NFRD or a COC; this guide does not replace or supersede a determination based on a site-specific evaluation.

Land Use Category	Allowable LUCs	
	NFRD	COC
Tier 1A (Residential Unrestricted)	No LUCs	No LUCs
Tier 1B (Residential Restricted)	Groundwater Use Prohibition	Groundwater Use Prohibition, Asphalt and Concrete Maintenance, Other restrictions as outlined in an approved RAP
Tier 2A (Commercial Unrestricted)	Commercial Use Restriction	Commercial Use Restriction
Tier 2B (Commercial Restricted)	Commercial Use Restriction, Groundwater Use Prohibition, Excavation Notification, Soil Disposal Requirements, Asphalt and Concrete Maintenance	Commercial Use Restriction, Asphalt and Concrete Maintenance, Other restrictions as outlined in an approved RAP
Tier 3A (Industrial Unrestricted)	Industrial Use Restriction	Industrial Use Restriction
Tier 3B (Industrial Restricted)	Industrial Use Restriction, Groundwater Use Prohibition, Excavation Notification, Soil Disposal Requirements, Asphalt and Concrete Maintenance	Industrial Use Restriction, Asphalt and Concrete Maintenance, Other restrictions as outlined in an approved RAP

### **1.6.3 Uniform Environmental Covenants Act (UECA)**

Effective October 1, 2005, UECA (HB 679) established a new legal mechanism that will help to reinforce the implementation and enforcement of land use controls that are already used in the VCP. For years, Maryland has used institutional controls to protect human health and the environment, while encouraging the redevelopment of brownfield sites. These institutional controls include restrictions on the use of groundwater, cap maintenance requirements and limitations on future use of property. While Maryland typically requires that these institutional controls be included on property deeds, UECA should help ensure that these land use requirements and restrictions will be enforced over time and not be inadvertently extinguished through the operation of real property or bankruptcy laws.

The environmental covenants created under UECA are based upon traditional property law principles and are recorded in the local land records. The environmental covenant must contain a legal description of the property subject to the covenant, describe the activity and use restrictions for the property and list the holder(s) of the covenant. The covenant is binding upon successive owners of the property and provides a clear mechanism through which the State may enforce the covenant in order to ensure the safe re-use of the property involved. The environmental covenant is perpetual, but may be amended or terminated under certain conditions with the consent of the holders.

Environmental covenants created under UECA will be listed in a newly created registry that will be maintained by the MDE. The registry will increase public awareness of the land use requirements and restrictions. Greater familiarity with these types of controls and confidence their longevity will enhance the marketability of these properties. More effective uniform institutional controls should also make it easier for buyers and developers to obtain financing. Potential buyers will have a clear understanding of the restrictions on the property, and sellers will have greater assurance that those restrictions will remain.

Additional information on UECA is available on the MDE website, <http://www.mde.state.md.us/brownfields>.

### **1.6.4 Cleanup Criteria**

There are six cleanup criteria available under the VCP (see Section 4). The VCP applicant may select one or more of the proposed cleanup criteria that protect public health and the environment, as may be appropriate, based on the current and intended future use of the property. The cleanup criteria that may be selected by the applicant are:

- Uniform numeric risk-based standards (refer to the MDE's Cleanup Standards for Soil and Groundwater – August 2001, Interim Final Guidance (Update No. 1) available at <http://www.mde.state.md.us>);
- Measurable standards based on site-specific risk assessments;
- Background levels;
- Federal or State soil standards and/or water quality standards;
- Standards based on federal or State MCLs; or
- Any other federal or State standards (e.g. ambient water quality criteria).

## 1.7 WITHDRAWAL PROVISIONS

VCP applicants and participants may withdraw from the VCP at anytime, including before or after approval of an application or RAP. The participant may also withdraw from the program after receipt of a COC and prior to completion of long-term monitoring or land use controls. An applicant or participant must provide ten days written notice of the anticipated withdrawal, stabilize and secure the property to the satisfaction of MDE to ensure protection of public health and the environment, and forfeit any application fees.

If an application, RAP or COC is withdrawn, any letter or COC issued to an applicant or participant shall be void. In addition, any bond or other security, as required by an approved RAP, shall be maintained by MDE for up to 16 months from the date of a RAP withdrawal. Further obligations after withdrawal differ for inculpable and responsible persons. After withdrawal, an inculpable person shall not be required by MDE to cleanup the property except in the event of new contamination or exacerbation of existing contamination, whereas a responsible person remains liable for existing contamination and may be subject to applicable enforcement action.

In addition to a voluntary withdrawal by an applicant or participant, MDE may withdraw an application or RAP in the following circumstances:

*Failure to Provide Notice of Intent Following Application Approval:* Within 30 days of receiving notification from MDE regarding approval of an application, a participant must inform MDE in writing whether the participant intends to proceed or withdraw from the program. If the participant fails to notify MDE, the application may be deemed withdrawn.

*Failure of Participant to Resubmit a Revised RAP:* After MDE notifies the participant that modifications to a proposed RAP are necessary before approval, and if the participant does not resubmit the plan within 120 days, MDE may consider the participant's application to be withdrawn.

*Failure to Reach Agreement on Revised RAP Schedule:* During implementation of a RAP, if the participant fails to meet the approved schedule and an agreement to revise the schedule cannot be reached with the participant, MDE may withdraw approval of the RAP. In this case, MDE may not require an inculpable person to complete the RAP. The inculpable person, however, would be required to secure and stabilize the property to ensure protection of public health and the environment. In addition, the inculpable person would remain liable for new contamination or the exacerbation of existing contamination. A responsible person would be required, upon withdrawal, to secure and stabilize the property and may be subject to an enforcement action.

## 1.8 FINANCIAL INCENTIVES

A number of financial incentives are available to participants in the VCP. These include low-interest loans, grants, and tax credits through the BRIP, administered by the DBED. No cost site assessments may be available through MDE's Brownfield Site Assessment Initiative.

### 1.8.1 Brownfields Revitalization Incentive Program

**Source:** DBED

**Contact:** Jim Henry, DBED, 410-767-6353

DBED administers the BRIP, which provides financial incentives for the redevelopment of Brownfields. Eligible Brownfield sites include properties that qualify for the VCP and properties subject to a corrective action plan for oil-contaminated sites. Generally, properties must be underutilized former industrial or commercial sites. Financial incentives are designed to stimulate redevelopment in areas where cleanup will have significant environmental, economic development and urban revitalization benefits.

*Low-interest loans or grants for Phase I and Phase II environmental assessments:* Available for conducting site assessments of potential Brownfield sites that have not already applied to participate in the VCP.

*Tax credits:* May be provided by local jurisdictions to participants who complete the VCP process for the difference on the assessed property value after pre- and post-cleanup and/or redevelopment. In order for a participant to receive tax credits, the local jurisdiction must pass an ordinance that comports with the tax credit provisions indicated in the BRIP. If the local government elects to enact the enabling ordinance, a prospective purchaser or developer can receive a property tax credit of 50 to 70 percent on the increased value of the property for five to seven years.

*Low interest loans or grants for site remediation:* Financial incentives are available to parties who have received inculpable person status from the VCP. Low interest loans and grants are available for the remediation of property. The inculpable person may submit an eligibility request for financial incentives to DBED at the same time an application is submitted to MDE for participation in the VCP. These incentives are also available to inculpable parties for oil-contaminated sites that have an MDE-approved corrective action plan under the OCP.

Low interest loans are also provided to responsible persons for site remediation. Economic development criteria are included in the statute for determining eligibility for the BRIP.

### 1.8.2 Brownfield Site Assessment Initiative

**Source:** Maryland Department of the Environment

**Contact:** Kim Lemaster, Environmental Restoration and Redevelopment, 410-537-3440

The Brownfield Site Assessment Initiative was established by MDE to encourage the redevelopment and reuse of contaminated and potentially contaminated properties. The initiative, funded by U.S. EPA grants, is designed to help eligible property owners or prospective property owners determine the extent and type of contamination on their property. These environmental assessments are conducted free of charge.

*Eligible participants:* Property owners and prospective property owners are both eligible to participate. Owners and prospective purchasers of property interested in applying to the VCP may also apply for a Brownfields assessment, which will reduce the investigation costs associated with a VCP application.

*Eligible properties:* For eligibility, a property should meet the following conditions: have perceived or known contamination; be vacant or underutilized; be located in a commercial or industrial area; create jobs; and improve the local tax base following redevelopment. Eligible properties also include sites on the U.S. EPA CERCLIS and the State Master List. Please note that properties under active enforcement by MDE are not eligible to participate in the initiative.

*How the Initiative works:* If the property qualifies for the program, MDE staff will investigate past land uses and may conduct soil, surface water, sediment and groundwater sampling. For those properties that are only minimally contaminated, the U.S. EPA and MDE will issue letters stating that they have no further interest in the property based on the results of the assessment. For those properties moderately contaminated or requiring additional investigation, MDE will provide recommendations for actions that should be taken.

This service is administered on a first-come-first-serve basis beginning July of each calendar year and is open to both the public and private sector.

### **1.8.3 Clean Water State Revolving Loan Fund**

**Source:** Maryland Department of the Environment  
**Contact:** Jag Khuman, Water Quality Finance Administration, 410-537-3981

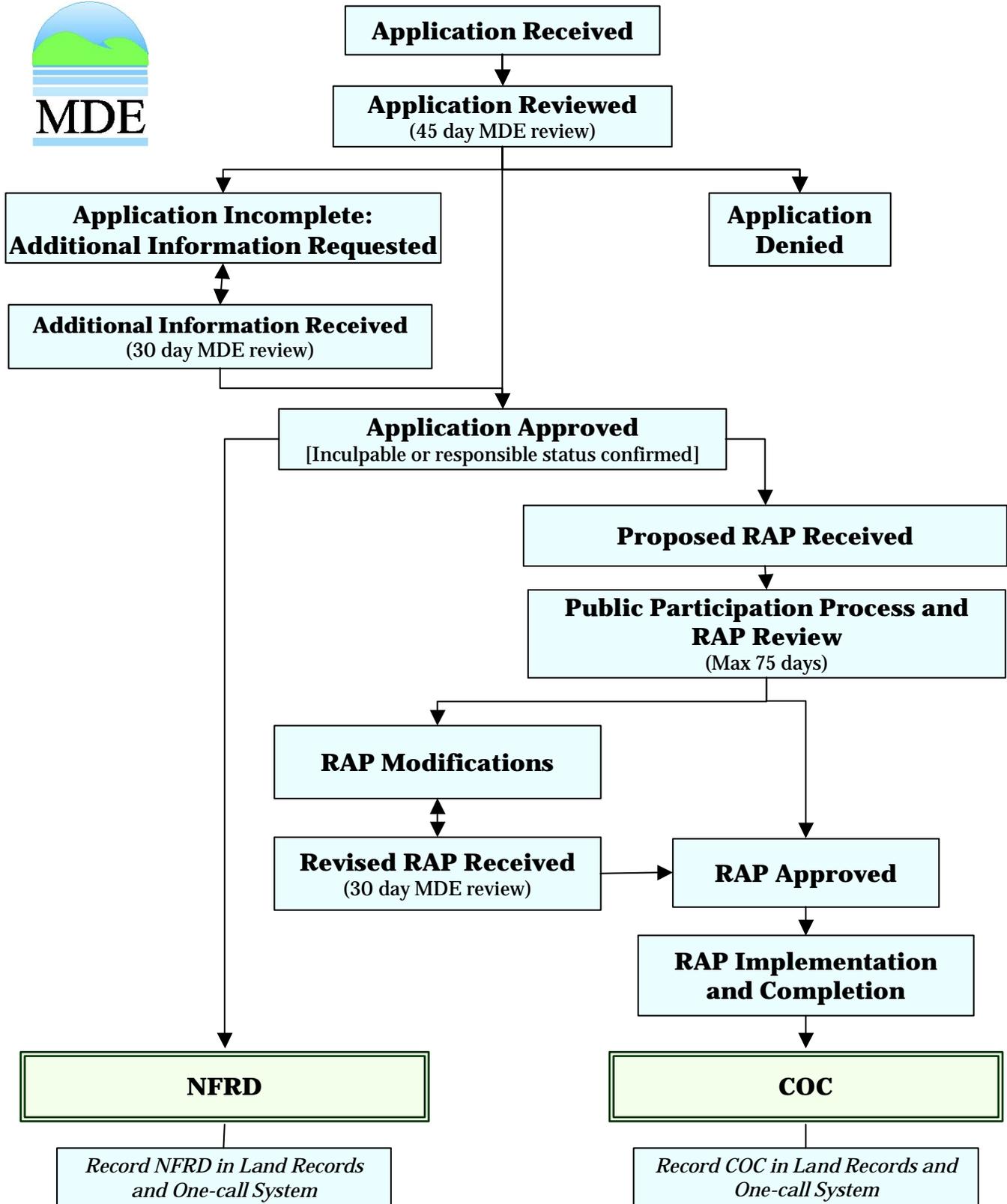
Low interest loans available for cleanup costs to complete approved cleanup plans for sites on the State Master List (commonly referred to as State Superfund sites or CERCLIS NFRAP sites) or in the VCP where water quality is an issue. This funding is provided to parties legally responsible for cleanup of sites of parties who have been accepted as applicants to the VCP.

### **1.8.4 Brownfields Cleanup Revolving Loan Fund (BCRLF)**

**Source:** Maryland Department of the Environment  
**Contact:** Jim Carroll, Environmental Restoration and Redevelopment, 410-537-3437

The BCRLF provides low-interest loans and grants to cleanup and redevelop vacant or underutilized Brownfields properties throughout the State of Maryland. The BCRLF supports cleaning up and redeveloping abandoned or under-utilized Brownfield sites. These redevelopment efforts create new jobs and encourage economic expansion in chronically depressed urban industrialized areas.

# VOLUNTARY CLEANUP PROGRAM FLOWCHART



Please refer to the VCP Flowchart Key for supplemental information.

# VCP FLOWCHART KEY

## SUPPLEMENTAL INFORMATION

<p><b>Application Received</b></p>	<p>A VCP application package consisting of a Phase I and possible Phase II environmental site assessment and application fee is received by MDE, and an informational sign stating that the property is applying to the VCP is posted at the property. Submittal of the Phase II may be delayed, which will subsequently delay all review deadlines.</p> <p>Expedited inculcable person approval may be obtained for an additional fee of \$2,000. If the VCP application and applicable fees are not filed with MDE within six months after receiving expedited inculcable person approval, the inculcable person approval will expire.</p> <p>The applicant may also submit a request to the DBED to determine eligibility to qualify for the financial incentives for the redevelopment of a Brownfields site (BRIP). Within 30 days of receiving the request, DBED will notify the applicant of eligibility for financial incentives.</p>
<p><b>Application Reviewed</b> (45 day MDE Review)</p>	<p>Within 45 days of receiving an application package, MDE may approve the application, deny the application, or request additional information (which may include sampling). If approved, a NFRD may be issued for the property or the applicant may be advised to develop a proposed RAP, if remediation is necessary.</p>
<p><b>Application Denied</b></p>	<p>If the application package is denied, the applicant will be notified in writing within 45 days and provided the reasons for the decision. Within 60 days following receipt of the decision by MDE to deny the application, the applicant may resubmit the application package.</p>
<p><b>Application Incomplete: Additional Information Requested</b> (may resubmit application within 60 days)</p>	<p>If MDE determines the application package to be incomplete, the applicant will be notified in writing within 45 days and comments on the deficiencies will be provided. The applicant may resubmit an application within 60 days following receipt of the decision by MDE that the application package is denied, or is incomplete.</p>

# VCP FLOWCHART KEY

## SUPPLEMENTAL INFORMATION

<p><b>Additional Information Received</b> (30 day MDE review)</p>	<p>Within 30 days of receipt of the revised application or additional information to complete the application package, MDE will approve or deny the application.</p>
<p><b>Application Approved</b></p>	<p>When the application package is approved, MDE will issue an approval letter and confirm the inculpable or responsible person status of the applicant. If MDE has no further requirements for the property, a NFRD will be issued upon approval of the application. If the application package is approved and MDE determines that a RAP is necessary to further address CHS or oil conditions at the property, the applicant will be advised to develop a proposed RAP. Within 30 days of receipt of application approval and notice to prepare a proposed RAP, the participant must notify MDE in writing of the intent to proceed or withdraw from the program.</p>
<p><b>NFRD</b></p>	<p>The NFRD is issued when MDE has no further requirements regarding the investigation of CHS or oil at the property. If the NFRD is conditioned on certain uses of the property or on the maintenance of certain conditions at the property, the participant shall pay a \$2,000 fee upon issuance, record the NFRD in the local land records within 30 days of receipt and submit a copy to the public utility one-call system.</p>
<p><b>Proposed RAP Received</b></p>	<p>The applicant submits a proposed RAP containing a work plan and implementation schedule to MDE for review and approval. The RAP must demonstrate that the appropriate cleanup criteria and/or remedial strategy will be achieved and will be protective of public health and the environment.</p>
<p><b>Public Participation Process and RAP Review</b> (Max 75 days)</p>	<p>At the same time the proposed RAP is submitted to MDE, the participant shall publish a notice of the proposed RAP, including the location of the public information meeting, in a local newspaper of general circulation once a week for two consecutive weeks. A notice of intent to conduct a RAP shall also be posted at the property for 30 days. The public informational meeting shall be held within 40 days of publishing the notice of the proposed RAP. MDE will receive written comments from the public for 5 days after the informational meeting or 30 days after the local newspaper publication, whichever is later. At the conclusion of the public participation period and within 75 days of receipt of the proposed RAP, MDE will either approve the RAP or reject the plan and describe the modifications that are necessary to receive MDE approval.</p>

# VCP FLOWCHART KEY

## SUPPLEMENTAL INFORMATION

<b>RAP Modifications</b>	MDE will provide the participant with a written description of the modifications that will be necessary in order to receive MDE approval of the proposed RAP.
<b>Revised RAP Received</b> (30 day review)	<p>Within 120 days of receiving notice that modifications to the proposed RAP are necessary, the participant may resubmit the RAP. If the participant does not resubmit the proposed RAP to MDE within 120 days, the VCP application will be deemed withdrawn by the participant.</p> <p>Within 30 days of receipt of the resubmitted RAP, MDE will notify the participant whether the plan has been approved.</p>
<b>RAP Approved</b>	The RAP approval letter will state that a COC will be issued once the approved plan has been implemented to the satisfaction of MDE and the RAP has achieved the applicable cleanup criteria. Within 10 days of receiving approval of the RAP, the participant must file a performance bond or other security with MDE.
<b>RAP Implementation and Completion</b>	The approved RAP shall be implemented and completed in accordance with the approved schedule. Upon completion of the RAP requirements, the participant shall notify MDE in writing that the RAP has been completed. Within 30 days of receiving the notice of RAP completion, MDE will verify whether the RAP has been satisfactorily implemented and completed and, if so, will proceed with issuance of the COC.
<b>COC</b>	The COC shall be issued by MDE upon verification that the requirements of the approved RAP have been completed to the satisfaction of the Department. If the COC is conditioned on permissible uses of the property, the applicant must record the COC in the local land records within 30 days of receipt from MDE, submit a copy to a public utility one-call system, and pay a \$2,000 fee to MDE.



# Maryland Department Of The Environment Voluntary Cleanup Program

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## Section Two Applying to the Voluntary Cleanup Program

Persons wishing to apply to the VCP must submit a completed application, a Phase I and, in most cases, a Phase II environmental site assessment, the appropriate application fee (see Section 2.2), and any other information concerning the property that MDE may require in order to evaluate the eligibility of the applicant and the property. The submittal of the Phase II environmental site assessment may be delayed until after the application and applicable fees are submitted. Alternatively, the applicant may submit a Phase II work plan in lieu of the Phase II environmental site assessment. The applicant is encouraged to discuss details of the work plan during the pre-application meeting.

### 2.1 PRE-APPLICATION MEETINGS

Pre-application meetings are strongly recommended to ensure that parties are familiar with the VCP application process and participation requirements. These meetings aid in the submittal of complete application packages and may reduce the time for approval of applications.

A pre-application meeting usually includes the applicant, the environmental consultant retained for the project, the project engineer or architect, and staff members of the VCP. Topics discussed at a pre-application meeting may include the following:

- Scope of the proposed project;
- Special conditions or time constraints (e.g. dates for property settlement);
- Previous sampling results;
- Proposed work plans for Phase II investigations;
- Cleanup standards; and
- General questions about the VCP and the application process.

MDE also encourages the applicant and environmental consultant to present the construction schedule and development plans for the property. Submittal of the schedule allows the VCP project managers to work with the applicant to efficiently coordinate the environmental and development activities at the property.

During the VCP application review process, it sometimes becomes apparent that environmental permits have expired or are due for renewal, or that on-site equipment is lacking the appropriate registration certificates. This is especially applicable to older underground storage tanks, which commonly lack registration certificates. Discharge permits for industrial process water, remediated groundwater, and the off-gas derived from various industrial processes may also be either outdated or missing.

Although VCP project managers do not conduct environmental compliance inspections at the applicant's property, site visits are conducted to determine if recognized environmental concerns are present. Frequently, potential RECs are related to an industrial process requiring an

environmental permit. By reviewing internal MDE files and prepared databases, VCP project managers also may note that certain industrial processes are occurring or have occurred on the property, or certain USTs are present on the property that have not been permitted or registered with the State or local authorities. The applicant will be notified if a permit or registration violation is noticed during the site review process, and the applicant will be expected to rectify the irregularity by contacting the appropriate State or local authority.

To schedule a pre-application meeting, please contact the VCP/Brownfields Division, at 410-537-3493.

## 2.2 VCP APPLICATION FEES

Please refer to the table below to determine the appropriate fee to be submitted with the application. Please contact the Division Chief of the VCP with any questions.

Fee Amount	Purpose
\$6,000	Initial application fee for a property (may include contiguous properties) that may be reduced if financial hardship is adequately demonstrated.
\$2,000	Application fee for each subsequent application for the same property.
\$2,000	Application fee for each application submitted subsequent to the initial application for contiguous or adjacent properties that are part of the same planned unit development or similar development plan.
\$2,000	Fee for expedited inculpable person approval letter within five business days. The fee, a request letter from the applicant, a signed inculpable person affidavit and if available, a chain of title should be sent directly to the Chief of the Voluntary Cleanup Program.

All application fees should be made payable to the “Voluntary Cleanup Fund” and forwarded with the fee form (Attachment 1 of the VCP application) to the Maryland Department of the Environment, P.O. Box 1417, Baltimore, Maryland 21203, except as noted above when requesting expedited inculpable person approval.

The Department shall adopt regulations to establish criteria for determining whether an applicant has demonstrated financial hardship (Section 7-506(b), Environment Article, Annotated Code of Maryland).

## 2.3 VCP APPLICATION AND CHECKLIST

A single application may be submitted for multiple contiguous parcels. Subsequent to the original application, additional contiguous parcels or as noted in the table above may apply to the program under a separate application and a \$2,000 application fee. If parcels are not contiguous, a separate application and a \$6,000 application fee must be filed for each non-contiguous parcel.

A request for expedited inculpable person approval may be made if the person meets the requirements of Section 7-506(a)(1)(i), (ii), and (iii) of the Environment Article and submits a \$2,000 fee with the written request. The inculpable person approval will expire if the application

and applicable application fees are not filed with MDE within six months after the notice of inculpable person approval.

Applicants should ensure that all information detailed in the Phase I and Phase II guidance document and in the application checklist have been included with the application. The application checklist is included as Attachment III of the application. Both documents are available on the MDE website, <http://www.mde.state.md.us/brownfields>, and as Attachment 1 of the VCP Guidance Document.

Applicants are encouraged to complete the checklist to help expedite the 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. If the applicant is completing a Phase I, Phase II or other environmental assessment solely for submittal to the VCP, the reports can be tailored to include those items listed in the checklist.

All reports, sample results, plans, response to comments, and other supplemental materials submitted subsequent to the initial application package must be accompanied by another signed statement of certification (see Section XIV of the VCP application).

## **2.4 PUBLIC NOTICE REQUIREMENTS UPON SUBMISSION OF APPLICATION**

Upon submission of an application to MDE, the applicant must also post a notice at the property with the following information:

- The name and address of the applicant and the property;
- The name, address, and telephone number of the office within MDE from which information about the application can be obtained; and
- The deadline for the 30-day time period during which MDE will receive and consider written comments from the public.

In addition to the above information, the notice at the property must:

- Be located in the area of the property with the greatest visibility and highest volume of traffic;
- Be at least six (6) feet wide by four (4) feet high; and
- 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, either 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 template (see Attachment 6). In addition to the public notice posted at the property, MDE will post a notice of the application on the MDE website, <http://www.mde.state.md.us/brownfields>.



# Maryland Department Of The Environment Voluntary Cleanup Program

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## Section Three Environmental Site Assessments

This section presents standards, principles, and technical considerations for environmental site assessments at properties applying for participation in the VCP.

### 3.1 ENVIRONMENTAL SITE ASSESSMENT REQUIREMENTS UPON APPLICATION

Generally, a two-phase environmental assessment is required for each property participating in the VCP. The first phase, typically called Phase I, of the assessment consists of a site reconnaissance, a review of historical records pertaining to the subject property and adjacent properties, interviews with property owners and operators, and a review of State and federal regulatory databases in an effort to identify possible environmental concerns such as buried tanks, chemical use and disposal, and environmentally-sensitive land uses (see Attachment 1, VCP Checklist). The second phase, typically called Phase II, of the assessment is a field investigation and sampling program designed to confirm or deny the presence of contamination due to the environmental concerns identified by the Phase I research and site visit. Results of the environmental site assessment must be presented as a written report submitted as part of the applicant's VCP application package.

In accordance with Section 7-506(c) of the Environment Article, the applicant may delay submitting the Phase II assessment until after the application, including a Phase I site assessment, and applicable fees are submitted. In addition, the applicant may submit a Phase II work plan with the application for MDE's review and approval. If the applicant delays submitting the Phase II site assessment, all related deadlines for public notice and action by the Department will be extended accordingly to conform to the submittal date of the completed Phase II assessment.

Pursuant to Section 7-506(a)(1) of the Environment Article, a Phase II assessment may not be necessary if the Department concludes, based on a review of the Phase I, any public comments, and other available information, that there are no recognized environmental conditions as defined by the ASTM.

VCP site assessments must follow site assessment standards and principles established by the ASTM, specifically ASTM Standards E1527-00 and E1903-97 (reauthorized 2002). The primary objectives of conducting a Phase II ESA are to evaluate the recognized environmental conditions identified in the Phase I ESA or transaction screen process for the purpose of providing sufficient information regarding the nature and extent of contamination to assist in making informed business decisions about the property; and where applicable, providing the level of knowledge necessary to satisfy the innocent purchaser defense under CERCLA. The ASTM guidance notes that achieving these objectives may require the performance of more than a single iteration of assessment. The intent of ASTM guidance is to foster an iterative approach to Phase II

assessments and allows the user to terminate the Phase II ESA at the point where sufficient data have been generated to meet the user's objectives.

The ASTM assessment principles provide a solid assessment framework in the context of the stated objectives discussed above. However, the ASTM assessment principles are intended on assessing recognized environmental conditions. E1903-97 clearly acknowledges that it is not intended to satisfy the level of inquiry that may be necessary to support remedial solutions for a site. For that reason, the VCP may require the applicant to provide additional environmental assessment data to demonstrate that the proposed future land use is not impacted by the environmental conditions at the site.

For the purposes of the VCP, data from environmental site assessments should be no more than one year old. Although older reports may be useful, the Phase I and II site assessments must be updated to account for changes at the property since the date of the older reports and must include sampling data that is no more than one year old.

During the Phase II and subsequent investigations, the applicant must still adhere to regulations and reporting requirements related to oil contamination. If during the course of the initial site assessment, there are indications of petroleum saturated soil or free phase product in monitoring pipes or wells, this information must be reported to the OCP (COMAR 26.10.08.01) whether or not the property will be submitted to the VCP.

## **3.2 ESSENTIAL COMPONENTS OF VCP APPLICATION PACKAGES**

The VCP Application Checklist (see Attachment 1) summarizes the essential components of environmental site assessments that must be submitted for potential VCP properties. The following items are presented as a supplement to the application checklist. Including this information in an application package will help minimize the need for document revisions, additional submissions, and field remobilizations.

**A. Current Property Conditions:** The environmental site assessment must describe the property conditions at the time of application and summarize any changes that have occurred at the property since the most recent Phase I site assessment. Photographs, site drawings, or other figures may be helpful to accurately describe the current property conditions.

**B. Current and Past Uses of the Property:** The environmental site assessments must provide the current zoning of the property, as well as a complete list of the entities that have owned or occupied, including tenants, the property from the time of first agricultural, commercial, or industrial use or since 1940, whichever date is earlier. The assessment should clearly identify the standard and supplementary historical sources used to determine the history of the property. An abstract of a property title search should be provided that covers records of ownership, leases, land contracts, easements, liens, and other encumbrances on the property. The name and type of each current or historical business should be identified along with years of occupancy and a description of the on-site operations. If a business was likely to have stored or handled CHS or petroleum products, the site assessment should include the storage and handling procedures and methods that business followed. The potential for environmental impact from these procedures should also be discussed.

**C. Historical Maps and Aerial Photographs:** The site assessment should provide legible copies of all available historical maps, aerial photographs, property tax files, United States Geological Survey 7.5 minute topographic maps, building department records, fire insurance maps, recorded land title records, local street directories, zoning and land use records, records on file and other historical sources, such as newspaper archives or interviews. The approximate boundaries of the property must be indicated on each historical map and aerial photograph provided to MDE.

**D. Summary Review of Historical Site Plans and Interviews:** The site assessment should summarize the review of historical site plans and interviews with individuals having knowledge of the past uses of the property. The assessment should identify historic on-site work areas, process areas, manufacturing operations, chemical and hazardous waste handling activities, aboveground and underground storage tanks, and spills or releases that may have resulted in environmental contamination at the property.

**E. Property Investigations:** Any previous environmental investigations at the property should be summarized chronologically in the most recent report submitted as part of the VCP application. The application should also include one copy of each previous environmental investigation, including but not limited to site assessments, subsurface investigations, and groundwater sampling reports. Applicable analytical data reports and quality assurance and quality control documentation should also be included. Duplicate copies of reports are not necessary for multiple applications filed for contiguous properties or for multiple applicants for the same property, although MDE reserves the right to request duplicate copies to expedite the application review.

The site assessment should include a discussion of any federal and State environmental records and any other available environmental records. Files at MDE may include permits, regulatory compliance history, violations, administrative orders, consent orders, and correspondence. To obtain information from MDE about a specific site, please submit a Public Information Act request to Joane Mueller, PIA Coordinator, Maryland Department of the Environment, 1800 Washington Boulevard, Baltimore, Maryland 21230, telephone 410-537-4120 or fax 410 537-3998. Additional information about PIA requests can be obtained from the MDE website at <http://www.mde.state.md.us>.

**F. Current and Past Uses of Adjoining Properties:** The site assessment should include a summary of the historical and current uses of all adjacent properties.

**G. Property Hydrology:** The site assessment should describe the property's topography, surface drainage pathways, including man-made channels and drains, and receiving surface water bodies, such as wetlands, seeps, streams, rivers, lakes, and ponds. Local surface water use for potable, recreational, irrigation, or commercial purposes should also be discussed.

**H. Property Hydrogeology:** The site assessment should describe the property's soil conditions, fill materials, geology, depth to groundwater, groundwater flow direction, and potential subsurface contaminant migration pathways. Regional geologic and hydrogeologic conditions should also be discussed.

**I. Scaled Site Plan:** The site assessment should include a scaled site plan that clearly shows the legal boundaries and acreage of the property and the locations of all existing buildings, paved areas, monitoring wells, tanks, surface water bodies, rail spurs, and other structures.

**J. Site Plan with Utilities:** The site assessment should include a site plan showing the approximate location and depth of each water, sanitary, storm sewer, and natural gas pipeline currently on the property, as well as service providers for each utility.

**K. Tax Parcel Map:** The site assessment should include a current tax parcel map that clearly defines the property boundaries. If multiple parcels are included in the VCP application, please ensure that the tax map shows each parcel. Tax parcel maps can be obtained from local county agencies and via the Internet using the Real Property Data search at the website for Maryland Department of Assessment and Taxation (<http://www.dat.state.md.us>).

**L. Surface Drainage Description and Site Plan:** The site assessment should include a written description of the surface drainage system at the property as well as a site plan that identifies the location of each swale, trench, culvert, catch basin, sewer, drainage pathway, interior drain, and sump on the property. The written description should describe the nature and source of historic and current runoff or releases to each identified feature. The point of discharge, such as a drain field, a named or unnamed surface water body, or municipal sanitary sewer, should be described for each identified feature.

**M. Groundwater Use Investigation:** The site assessment should include written documentation from the state, county, municipality, and any other water authorities concerning existing potable wells, the availability of municipal water, and potential future groundwater use areas within one-half mile of the property boundary. The documentation should include a copy of the county and municipality water plan maps that depict existing service areas, planned service areas, and no-service-planned areas within a minimum of one-half mile radius of the property boundary.

It is necessary to contact state and local government departments directly because commercial information search services do not include sufficient information on municipal or domestic wells. The MDE Water Supply Program (410-537-3702) and Water Rights Division (410-537-3714) should be contacted to obtain a survey for all area wells and other available information pertaining to groundwater use in the vicinity of the proposed property.

The site assessment should include a scale map with all of the identified wells, excluding test or observation wells. If available, the permit number, screen depth, and current use of each well should be provided. If exact well addresses are unavailable, delineate likely groundwater use areas based on reported street names, subdivision names, and other information available in the well survey and other sources.

**N. Groundwater Contour Plan:** The site assessment should include a groundwater contour plan for the site that is less than one year old.

**O. Future Development Plans:** The application package should include information regarding the anticipated future use of the property and any development plans, such as planned future construction or landscaping or any changes in current business operations. Examples of proposed

alterations to the property include grade changes, demolition of buildings, construction of new structures or additions, extensions of public water or sewer, and installation of storm water management systems. The applicant also should include a schedule for all site development activities, if available.

**P. Property Reconnaissance:** The application package should describe the methodology, limitations, and findings of the property reconnaissance, and discuss the interior and exterior conditions observed at the property and exterior conditions observed on the adjoining properties. The report should also discuss any limiting site conditions that could affect the results of the reconnaissance such as snow cover, thick vegetation, locked buildings, or areas that are unsafe to enter.

**Q. Required Oil Information:** Applicants applying to the VCP with properties with active or abandoned USTs and/or ASTs should provide the following site information with the VCP application (refer to Item O in the application checklist):

- Facility Identification number;
- Number of registered tanks (provide a copy of the registration form, if available);
- Indicate the number of active and abandoned tanks and provide a scaled site map showing the location and/or former location of all tanks (above and below ground), piping, dispensing units and tank field monitoring pipes;
- Describe the date the tank was installed/removed/abandoned;
- For each tank describe the capacity and material stored in each tank; and
- Describe if the property has any open or closed OCP cases and provide the case numbers.

#### **a) Active Underground Storage Systems**

For sites with USTs currently in use (motor fuels, heating oil, waste oil and emergency generator tanks) also provide the following:

- Date of last system tightness test.
- Date of last compliance inspection by OCP.
- If required, describe how the facility meets the financial responsibility provision of COMAR 26.10.11.01.
- Describe the release detection methods in place at the site. If an electronic tank gauging system is used, describe the manufacturer, model number and functions programmed into the unit on site.
- Describe the method used for inventory reconciliation.
- Describe if an impressed current system is in use on any tank present at the property.
- Describe if any tank has had a change in service, i.e. #6 fuel oil converted to #2 fuel oil.
- Describe if an oil/water separator tank is present and indicate the location on a site map; Describe influent into the separator tank, i.e. floor drains or parking lot runoff.
- Describe the composition of the piping system(s), i.e. fiberglass, copper, etc.
- If applicable, describe previous releases from the system and repairs or remedial actions taken to address the release.
- If a release occurred, describe if off-site impacts have been evaluated for the site.

## **b) Abandoned USTs**

For sites with previously abandoned tanks provide the following:

- For each tank describe the method of abandonment (removal, filled in place, etc.);
- Describe site assessment activities associated with tank abandonment; and
- Provide copies of all site assessments, laboratory sampling, etc.

## **c) Aboveground Tanks**

For sites with ASTs (total storage capacity 10,000 gallons and above)

- Provide the Oil Operations Permit Number; and
- Indicate permit expiration date.

## **d) Sites with Active Remediation Systems**

Sites with operational remediation systems (pump and treat, soil venting, etc.), as required under an active enforcement action by the OCP, may apply to the VCP, if the applicant meets the definition of an inculpable person. The applicant should include all relevant information on active remediation systems with the VCP application:

- Brief description of system-technologies used;
- Date system operation began;
- Any changes made to the system since operations began (additional extraction points brought on-line, iron treatment installed, chemical oxidant or biological stimulants injected into wells, etc.);
- Summary of removal effectiveness since operations began (i.e. the volume of soil vapor removed, pumped volume of water, influent levels dropped x % plume has receded, etc.);
- Permits obtained for system operation (discharge, air, etc.);
- Site map showing the location of the system and extraction points, monitoring points, etc.;
- Sampling frequency for system and/or monitoring wells;
- Tabulated summary of previous sampling data; and
- Anticipated cleanup standards.

The VCP will evaluate the application, but may not issue the final sign-off until the OCP indicates the enforcement requirements have been met (i.e. the system has been shut-off after achieving the cleanup goals and the site undergone the necessary post-shut off monitoring period). The applicant should also be aware that the VCP may require institutional or engineering controls or a RAP, if contamination levels in the soil or groundwater at the site exceeds the acceptable levels of risk for the requested land usage.

### **e) Compliance Inspection**

All sites with active oil storage and/or dispensing systems, including heating oil, will be inspected for compliance with COMAR 26.10.03 through 26.10.05 by an OCP regional inspector and the VCP project manager. The applicant will be contacted to set up a mutually convenient date and time for the inspection. All records required under COMAR 26.10.05 should be available on-site at the time of inspection. VCP cannot complete review of the application until all active store systems, including heating and waste oil, are in compliance.

A fact sheet with a brief summary of pertinent compliance issues is provided in Appendix B.

For additional information on tank registration and compliance requirements please visit the MDE website at:

[www.mde.state.md.us/Programs/LandPrograms/Oil\\_Control/index.asp](http://www.mde.state.md.us/Programs/LandPrograms/Oil_Control/index.asp)

### **f) Tank Removal**

If an existing or previously abandoned tank(s) will be removed from a property that has applied to the VCP, then the tank removal will occur under the supervision of an OCP regional inspector. The tank removal must comply with the provisions of COMAR 26.10.10.02, which includes at a minimum:

- A certified remover must remove the tank;
- All liquid and sludges must be removed from the tank;
- All aboveground portions of vent lines shall be removed and the remaining lines capped at their bases;
- The tank shall be purged of all explosive vapors and monitored with an appropriate meter for vapors before and during removal;
- Tanks shall be disposed of at a location acceptable to MDE (disposal receipts submitted to the VCP project manager); and
- An updated registration form must be submitted to the OCP.

To obtain a list of certified removers and/or copies of registration forms contact OCP at 410-537-3442.

After the tank removal operation has been completed, any additional site assessment and on-site remediation required can be completed within the auspices of the VCP.

## **3.3 SOIL SAMPLING TECHNICAL CONSIDERATIONS**

Generally, samples must be collected and analyzed for any potential contaminants identified in the Phase I site assessment based on historical operations at the property. Environmental sampling may be necessary for VOCs; SVOCs including PAHs; priority pollutant metals; oil; and any other contaminants that may be present at the site based on the results of environmental assessments and on-site observations. For example, limited sampling for pesticide, herbicides, and PCBs may be required for portions of the property if past activities or operations may have involved the use of these substances. For instance, PCBs would be added to the list of analytes

for samples collected in the vicinity of a former transformer storage pad. See Section 3.9 for a list of preferred analytical methods.

Properties at which historical operations are uncertain or the types and locations of activities have changed over time will require more extensive soil sampling and a more diverse set of analytical parameters for characterization.

*Sample Depths:* Surface (0-1') and subsurface (4-5') grab samples are generally required at each sample location for site characterization and risk evaluation purposes. Surface soil samples should only be analyzed for VOCs if there is visual or historical evidence that makes the presence of VOCs in the surface soil likely (i.e. outside the rear door of dry cleaning facility or beneath areas of staining). Deeper soil samples may be required in some areas depending on historical operations or the presence of certain features, such as underground storage tanks.

*VOC Sample Collection:* SW 846 Method 5035A is a closed system purge and trap collection method suggested for VOC analysis of soil samples collected at VCP projects. This method incorporates chemical preservatives and sample storage techniques to limit volatilization and biodegradation of organic compounds. The samples must be received and preserved by the laboratory within 48 hours. Please refer to the guidance document published by U.S. EPA Region III, "Field Samplers' Guide to the Collection and Handling of Soil Samples for Volatile Organic Analysis Using SW-846 Method 5035A", May 15, 2003, ([http://www.epa.gov/region3/esc/QA/5035\\_Fact\\_Sheet\\_Final.pdf](http://www.epa.gov/region3/esc/QA/5035_Fact_Sheet_Final.pdf)).

*Chromium Analyses in Soils:* If total chromium is detected in soil samples at levels exceeding the MDE cleanup standard relevant to the future use designation of the property, soil samples must be collected and speciated for Cr(VI) and Cr(III). If total chromium concentrations reported to MDE are not speciated for Cr(VI) and Cr(III), MDE will assume that the chromium concentrations reported are Cr(VI), which is the more toxic form of chromium and has lower cleanup standards than trivalent chromium.

*Mercury Analyses in Soils:* If mercury is detected in soil samples at levels exceeding the MDE cleanup standard relevant to the future use designation of the property, at least two samples (those with the highest mercury concentrations) must be differentiated for inorganic/elemental mercury. If total mercury concentrations are not differentiated, MDE will evaluate the reported mercury as both elemental mercury and organic mercury.

*USTs:* At sites where petroleum contamination is anticipated due to the presence of USTs and/or piping, a minimum of three soil borings should extend from the ground surface to the first unconfined saturated zone. The borings should be continuously cored or split spooned to accurately determine lithology and detect contamination.

### **3.4 GROUNDWATER SAMPLING TECHNICAL CONSIDERATIONS**

Generally, groundwater samples are necessary as part of Phase II site assessments to evaluate impacts to groundwater. Groundwater samples should be taken in locations most likely to have been contaminated by past and present operations on the property. Samples must be analyzed for any potential contaminants identified in the Phase I site assessment based on current and

historical operations at the property. Analysis for a broader range of parameters will be necessary at sites with an uncertain or varying operational history.

*Groundwater Sample Locations and Depths:* A sufficient number of groundwater samples are necessary to evaluate impacts to groundwater in the vicinity of source areas or areas of potential concern. More extensive groundwater sampling will be necessary at properties located in groundwater use areas, including more complete plume delineation. This may include downgradient samples near the property boundary as well as upgradient samples. Considering the nature of the known or suspected contamination, groundwater samples must be collected at appropriate depths to delineate the vertical extent of contamination. Groundwater samples may also be necessary to evaluate the impact from off-site sources, such as gasoline stations.

Prior to sampling any monitoring well, or direct push borehole, the sampler should verify that floating free phase product is not present by use of a clean, clear bailer or a factory-calibrated interface probe. Monitoring wells should be purged of at least three well volumes prior to sampling. All purge water must be properly containerized and characterized to determine appropriate disposal method.

If measurable (0.01 feet) free phase petroleum product is present in a monitoring well, the groundwater should not be sampled for volatile or semi-volatile organics. Product samples may be collected for characterization of the petroleum type.

*Groundwater Elevation and Flow Direction:* Groundwater flow direction is necessary to evaluate potential impacts of contaminated groundwater on nearby receptors, such as drinking water wells, surface water bodies, or nearby homes and buildings via vapor intrusion. For this reason, monitoring wells, including small-diameter temporary wells or piezometers, must be surveyed to allow for the measurement of groundwater elevation. If free product is present, the water table elevation must be corrected for the differences in density.

Direct-push technology using exposed screens or well points to collect groundwater samples is not appropriate for determining groundwater elevation. Although this method may be useful for characterizing groundwater contamination and determining the horizontal and vertical extent of contamination, more permanent monitoring wells or piezometers will be required under most circumstances to evaluate groundwater flow direction.

*Off-Site Plume Delineation:* Off-site groundwater sampling is sometimes necessary at properties located in groundwater use areas if the contaminant plume is suspected to be migrating off site in the direction of drinking water wells. Applicants may be requested to seek permission to install and sample off-site monitoring wells on adjacent properties or in right-of-ways. Since the VCP authority does not extend to off-site issues, MDE encourages applicants to work closely with the OCP or CHS Enforcement /Fund Lead Site Assessment Division.

*Monitoring Wells, Piezometers, and Direct-Push Technology:* Multiple technologies may be used to obtain groundwater samples, including monitoring wells, piezometers, direct push technologies, and multi-level groundwater sampling devices. The technology should be selected based on the objectives of the site investigation. As indicated in the paragraph above, direct-push technology using exposed screens or well points to collect groundwater samples is acceptable for

initial characterization and detailed plume delineation, but not necessarily acceptable for determining groundwater gradients.

Sites potentially contaminated with petroleum products and CHS may require multilevel samplers or nested monitoring wells to accurately determine the presence of free phase light nonaqueous phase liquid or dense nonaqueous phase liquid. All monitoring wells must be installed in a manner that prevents downward migration of contamination into lower water bearing units. Wells should not be completed below confining layers without prior approval of the installation and construction methodology.

Wells or piezometers less than two inches in diameter are acceptable at VCP properties. If free product recovery is required, 4-inch, inner diameter or larger wells may be necessary. If you have any questions about acceptable well construction designs at VCP projects, please contact a VCP project manager at 410-537-3493.

Monitoring wells installed using hollow-stem augers must be developed and allowed to equilibrate for 7 to 10 days prior to sampling and measuring static water levels.

Small-diameter wells or piezometers installed using direct-push technologies must be allowed to equilibrate for at least 24 hours prior to gauging or sampling.

Copies of well logs, well installation reports and boring logs must be provided in the Phase II site assessment report. All wells must be installed by a Maryland licensed well driller, with proper permits obtained from the county or municipality in which the field investigation is conducted.

*Potable Well Sampling:* Drinking water well sampling may be necessary if the Department determines that site conditions pose a threat to downgradient potable wells.

*Filtered Samples for Priority Pollutant Metals:* Groundwater samples for metals analyses must be filtered prior to preservation because MCLs and water quality criteria are based on metals in solution (dissolved concentrations) rather than in suspension (total concentrations). However, for some sites, unfiltered groundwater samples may be required for comparison purposes or to evaluate the potential risk from dermal contact under a construction worker scenario.

### **3.5 SURFACE WATER AND SEDIMENT SAMPLING TECHNICAL CONSIDERATIONS**

Surface water and sediment samples generally must be collected on the property and from adjacent drainage ditches, outfalls, intermittent streams, or other areas that receive significant amounts of runoff from the VCP property.

### **3.6 SOIL GAS AND INDOOR AIR SAMPLING TECHNICAL CONSIDERATIONS**

The presence of volatile contaminants in the soil and groundwater may affect the quality of indoor air, and the inhalation pathway is evaluated to determine if volatile compounds, other than radon gas, can potentially migrate from the soil or groundwater into an existing or future building. To evaluate the potential for vapor intrusion, a comprehensive characterization of foundation air must be performed, which may include sampling of the groundwater, soil, soil gas, and indoor air. Typically, this characterization is performed in a systematic manner utilizing

the U.S. EPA Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (<http://www.epa.gov/correctiveaction/eis/vapor.htm>).

This guidance recommends using the Johnson & Ettinger model to evaluate the potential for vapor intrusion. It is a screening level model that incorporates both convective and diffusive mechanisms for estimating the transport of contaminant vapors emanating from subsurface soils or groundwater into indoor spaces. Inputs to the model are inherently conservative and include parameters such as chemical properties of the contaminants detected in the subsurface, soil type, depth to groundwater, and depth from receptor.

Evaluation of the vapor intrusion pathway may require that certain compounds, such as total mercury, be differentiated to determine their presence in the subsurface. Failure to differentiate may require MDE to evaluate risk using more conservative assumptions.

When evaluating the vapor intrusion pathway for the VCP, the most recent version of the Johnson & Ettinger model should be used. Prior to rendering any decision on a property, MDE reserves the right to review the Johnson & Ettinger results.

Indoor air models such as the Johnson & Ettinger model are valuable screening tools for estimating the human health risks for the migration of volatile compounds from soil and groundwater into an indoor air space. If the results of the screening process and modeling indicate a potential risk, the model must be verified to ascertain whether an inhalation risk actually exists at a property. MDE recommends a systematic approach that may require soil gas sampling from beneath a building foundation and indoor air sampling to validate indoor air model results.

*Sub-slab Soil Gas Sampling:* To confirm the results of the Johnson & Ettinger model, MDE requires that sub-slab soil gas samples be collected beneath existing buildings, including possibly impacted tenant spaces.

MDE recommends the protocols for collection of soil gas samples conveyed in the U.S. EPA Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway (Groundwater and Soils - 2002). In addition, MDE recommends the protocols for analysis of sub-slab soil gas and indoor air samples conveyed in the U.S. EPA Methods TO14, TO15, TO17, or equivalent. U.S. EPA Method 8260 may also be used depending on what detection limit is necessary to meet data requirements. At a minimum, samples should be collected in accordance with the following requirements:

- Samples should be collected between three and five feet in depth or from the layer of highest permeability;
- Sample locations should be collected beneath the building and at least several feet from the edge of the building (angled boring may be used if sub-slab sampling cannot be performed);
- To ensure that representative samples are collected, sampling periods should be greater than eight hours for commercial properties and twenty-four hours for residential properties. The sampling frequency and period should be sufficient to minimize the effects of breakthrough of ambient air into the vapor sample and changes in barometric pressure and temperature;
- At least one duplicate sample should be collected;

- The hole in the slab should be plugged immediately following initiation of sample collection with non-VOC pliable caulk or equivalent; and
- Other soil should not be disturbed.

Results reported to MDE should include the following:

- A narrative summary describing the area sampled, slab condition, sampling period, sample depth, methods used, and soil type encountered;
- Figures and photographs adequately documenting the location of the sample and condition of the slab;
- Results for all detected analytes in units of  $\mu\text{g}/\text{m}^3$ ; and
- Copies of the laboratory analytical data sheets with minimum detection limits and practical quantitation limits.

After the results have been received, MDE will review the sub-slab soil gas data to determine whether there is a potential risk based on the specific site characteristics. Comparison to the Occupational Safety and Health Administration Permissible Exposure Limits and Threshold Exposure Limits are not acceptable. If a risk is identified, MDE will require further investigation of the exposure pathway by indoor air sampling or remediation to remove the risk.

*Indoor Air Sampling:* To evaluate the indoor air exposure pathway when the screening process or sub-slab sample data have identified a potential risk, MDE requires collection of indoor air samples in existing buildings or tenant spaces that may be impacted. The sampling protocol for indoor air should meet the following requirements:

- The sampling apparatus should be located in the area likely to have the highest concentrations;
- A background ambient air sample should be collected;
- A duplicate sample should be collected for each area sampled;
- If possible, the area should be closed for at least 12 to 24 hours before the sampling period begins and the use of pressure difference causing devices (e.g. clothes dryers, exhaust fans, and Heating Ventilation Air Conditioning systems) should be suspended during this time and during the sampling; and
- The sampling apparatus should be set two (2) to five (5) feet above floor level.

MDE endorses the protocols for collection of indoor air samples conveyed in the U.S. EPA Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (2002).

If the screening process identifies a potential human health risk in an active dry cleaner facility, samples do not need to be collected from the active facility but should be collected from the adjoining tenant spaces as long as the facility is active.

Results reported to MDE should include the following:

- A narrative description of the area investigated, sampling results and methods used, including a detailed list of all possible interior sources of contamination that may have affected the results;
- A detailed drawing of the building including all indoor partitions, doors, windows and other sources of outdoor air including, but not limited to exhaust fans, plumbing vents, and HVAC supply and return vents. The drawing should also include the location of samples collected and all interior sources of contamination (i.e. storage closets of cleaning products);
- A summary of all detected analytes; and
- Copies of the laboratory analytical data sheets with minimum detection limits and practical quantitation limits.

Once the results are received, MDE will review the indoor air data to determine whether there is a potential risk based on the specific site characteristics. Comparison to the OSHA PEL and TEL are not acceptable unless the facility or specific tenant space is operating and utilizes the identified chemical(s) of concern in their business operations. If a potential risk is identified, MDE will require remediation to address the risk.

### **3.7 INVESTIGATION DERIVED MEDIA (IDM)**

IDM describes the groundwater, surface water, soils and sediments that are generated during an environmental site assessment. Specifically, IDM may include development and purge water from monitoring wells, drill cuttings, and soils removed during sample collection. IDM generated during a sampling event must be properly containerized and characterized prior to determining the appropriate disposal method.

To evaluate whether the IDM must be managed as a hazardous waste, the generator must first determine whether the IDM is a solid waste as defined in Section 7-201(t) of the Environment Article, Annotated Code of Maryland, and COMAR 26.13.02.02.

*Oil-contaminated media:* IDM contaminated with oil may be handled with guidance from the MDE OCP (410-537-3442).

*Initial Evaluation:* At a minimum, IDM must be screened to determine if it is contaminated or inherently waste-like. IDM must be handled as a solid waste when:

- It is visually or grossly contaminated;
- It has activated any field monitoring device indicating the presence of VOCs, metals, or other contaminants;
- In previous monitoring or sampling activities, it has exhibited levels of contamination above accepted environmental quality standards; or
- Based on historical information, the responsible party or the regulatory agency believes it warrants caution or additional testing.

If the appropriate analytical testing determines that the waste is hazardous, then it must be disposed at an appropriate hazardous waste disposal facility. If the waste is not hazardous, then the IDM may be disposed at an appropriate permitted waste management facility.

Naturally-occurring media and media with contaminant concentrations less than the appropriate comparison values (e.g. MDE soil and groundwater standards) need not be managed as a waste. If the appropriate analytical testing determines that purge water has no apparent contamination, it may be released to the ground surface after obtaining MDE approval.

### 3.8 WELL ABANDONMENT

Any boreholes, including direct push locations, that intercept the water table for groundwater monitoring purposes are considered to be wells and must be abandoned according to the State of Maryland well abandonment standards (COMAR 26.04.04.11). VCP participants should petition MDE for approval to abandon existing monitoring wells.

### 3.9 ACCEPTABLE ANALYTICAL METHODS

Typical Sampling Analyses	Media	Method Reference	Typical Analytical Methods (Current EPA Promulgation)
VOCs	Solid	EPA SW-846	EPA Method 8260B (Rev 2 - 12/96) Note: The soil and sediment collection method has changed to EPA Method 5035.
	Aqueous	EPA SW-846	EPA Method 8260B (Rev 2 - 12/96)
	Air Summa Canister	EPA TO15.CRF (01/00)	EPA Method TO-15 Or EPA Method TO-17 (Revised 01/99)
	Air Tedlar Bag	EPA TO15.CRF (01/00)	EPA Method TO-15 Or EPA Method TO-17 (Revised 01/99)
SVOCs including PAHs	Aqueous	EPA SW-846	EPA Method 8270C (Rev 3 - 12/96)
	Solid	EPA SW-846	EPA Method 8270C (Rev 3 - 12/96)

PCBs	Aqueous	EPA SW-846	EPA Method 8082 (Rev 0 - 12/96)
	Solid	EPA SW-846	EPA Method 8082 (Rev 0 - 12/96)
Organochlorine Pesticides	Aqueous	EPA SW-846	EPA Method 8081A (Rev 1 - 12/96)
	Solid	EPA SW-846	EPA Method 8081A (Rev 1 - 12/96)
Priority Pollutant Metals	Solid	EPA SW-846	EPA Method 6020 (Rev 0 - 9/9)
	Aqueous (Field filter sample as required prior to preservation)	EPA SW-846	EPA Method 200.8 (Rev 5.4 - 1994)
Elemental Mercury	Solid (only)	EPA SW-846	Lab specific
Chromium, Hexavalent	Aqueous (Field filter sample as required)	EPA SW-846	EPA Method 7196A (Rev 1 - 7/92)
	Solid	EPA SW-846	EPA Method 3060A (Rev 1 - 12/96)
Perchlorate	Aqueous	EPA DW	EPA Method 314.0 (Rev 1.0 - 11/99)
Dioxins	Aqueous & Solid	EPA SW-846	EPA Method 8280A (Rev 1 - 12/96)
Furans	Aqueous & Solid	EPA SW-846	EPA Method 8290 (Rev 0 - 9/94)
Chlorinated Herbicides	Aqueous	EPA SW-846	EPA Method 8151A (Rev 1 - 12/96)
	Solid	EPA SW-846	EPA Method 8151A (Rev 1 - 12/96)
Free and Total Cyanide	Aqueous & Solid	EPA SW-846	EPA Method 9014 (Rev 0 - 12/96)

TPH-DRO/GRO	Aqueous & Solid	EPA SW-846	EPA Method 8015B (Rev 2 - 12/96) Note: Although TPH results provides a gross estimate of petroleum compounds present in the media, use of this data is limited in a risk evaluation.
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Note: Alternative validated methods may be utilized for an analytical suite. Adequate detection limits must be achieved.

### 3.10 QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) MEASURES

MDE recommends that VCP applicants implement data validation including appropriate quality assurance and quality control measures during the sampling program. Such a program ensures the veracity of analytical results and prevents the applicant from performing additional work that may not be necessary. These measures include the collection of blind duplicate samples, matrix spikes, field blanks, rinsate or equipment blanks, and trip blanks. MDE may elect to collect split samples to verify analytical precision. The following table summarizes the type and frequency of collection for various QA/QC samples that are recommended for all site investigations conducted at properties applying to or participating in the VCP:

Type of Sample	Brief Description	Frequency of Collection
Blind Duplicate	Samples that are collected at the same time, from the same location, with the same apparatus, and placed into identical containers that were prepared and handled in the same manner. The samples are laboratory-analyzed for precision using the same analytical procedures and instruments.	One blind duplicate per matrix per every 10 samples submitted to the laboratory.
Matrix Spike(s)	Various spike recovery tests are performed at the laboratory using non-reactive compounds to determine possible matrix interferences that may affect sample reporting.	One matrix spike per matrix for every 20 samples submitted to the laboratory. Requires collection of additional sample material.
Field Blank	Prepared in the field and consists of distilled, de-ionized water which is transferred to the appropriate sample container, treated with preservatives (if necessary), and handled in the same manner as the samples. The field blank verifies the field collection procedure.	One field blank per container type per matrix for laboratory analyses.
Rinsate / Equipment Blank	Prepared in the field and verifies the effectiveness of equipment decontamination procedures. A sample container is filled with equipment rinsate (e.g. distilled, de-ionized water) after the decontamination procedures for each matrix type. The appropriate preservative must also be added, if necessary.	One rinsate blank is necessary if, for example, soil sampling equipment is decontaminated. The rinsate blank may be eliminated if dedicated sampling equipment is utilized.

Trip Blank	Prepared at the laboratory and is used to test for potential contamination of VOC samples during round-trip transit to the lab. 40 ml vials are filled with de-ionized water, preserved, and chilled to a temperature less than 4° C.	Two 40 ml vials per sample event are recommended for laboratory analyses. Do not open the vials after the laboratory seals them closed.
Split Sample	One sample is divided into equal portions. Each portion is analyzed at a different qualified laboratory to verify the precision of the analytical method.	The Department may elect to split one or more samples during a sample event.

MDE recommends that QA/QC measures follow U.S. EPA’s protocols for Level IV data, which is used in site characterization and risk assessments (refer to Data Quality Objectives for Remedial Response Activities, Volumes I and II, U.S. EPA 1987). Please include the following items when submitting project deliverables (also refer to Attachment 2 – MDE Fixed Laboratory Data Deliverables):

- Analytical data;
- Date of sample collection and laboratory receipt of samples;
- Laboratory analyses IDs & time and date of analyses;
- Sample IDs as labeled on the chain-of-custody;
- Chain-of-custody;
- Surrogate spike recovery results;
- Method and reagent blank results;
- Sample preparation and extraction dates; and
- TICs results.

Applicants should ensure that the fixed laboratory reports include the analytical results based on the lowest possible detection limits for each methodology. For example, detection limits for groundwater samples should be comparable to federal and State MCLs, whereas soil samples should be comparable to the MDE cleanup standards for soil [MDE Cleanup Standards for Soil & Groundwater –August 2001, Interim Final Guidance (Update No. 1)].

If matrix interference or high levels of contamination elevate detection limits, reasonable efforts must be made to accurately quantify contaminants of concern and a detailed explanation must be provided for these detection limits.

### 3.11 SCREENING SAMPLE COLLECTION PROTOCOL

MDE encourages the use of sample-screening technologies to characterize the property. In an effort to keep analytical costs down while completing a thorough site characterization, MDE can assist program participants by screening soil samples using the x-ray fluorescence, gas chromatography/mass spectrometer, and immunoassay testing equipment, which is maintained by MDE. The screening process can greatly reduce analytical costs by reducing the number of samples submitted to a fixed laboratory for certain analytical parameters, such as metals, VOCs, PCBs, and select SVOCs.

Sample screening can also be performed for pesticides; however, the test method is compound specific and requires individual tests kits. Knowledge of the specific type of pesticide present at a property allows MDE to perform sample-screening analyses for the specific pesticide of concern. Otherwise, samples requiring pesticide analyses must be sent to a fixed laboratory.

The fees charged by MDE for sample screening analysis are outlined on the attached form, "Request for Sample Screening Analytical Services" (see Attachment 3). The fees for lab services include the analytical fees and cost of labor and are not included in the application fee. The applicant will be invoiced separately for the laboratory service fees.

The applicant must complete the "Request for Sample Screening Analytical Services" form that lists all samples. Once submitted, MDE will estimate the labor costs and return the form to the applicant for authorization. Once the signed form has been returned to MDE, an invoice will be sent to the applicant. The invoice must be paid before the samples are collected and submitted for analysis.

Once the samples have been analyzed the results will be submitted to the applicant or the applicant's consultant. Based on sample screening results, MDE, in conjunction with the applicant, will select 35% to 50% of the field screen samples for fixed laboratory analysis. See Attachment 4 for MDE Field Screening Protocol.

### **3.12 ELECTRONIC DATA DELIVERABLES**

MDE recommends that EDD be requested from the analytical laboratory for environmental reports with analytical data. Submittal of EDD to MDE allows staff to evaluate data in an efficient, time-sensitive manner. MDE can only accept EDD submitted in a Department-approved Microsoft Excel format.



# Maryland Department Of The Environment Voluntary Cleanup Program

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## Section Four Cleanup Criteria

Section 7-508 of the Environment Article, Annotated Code of Maryland, lists six cleanup criteria that may be used for determining if further requirements are necessary at a property:

- Uniform numeric risk-based standards;
- Standards from a site-specific risk assessment;
- Background levels;
- Federal or State soil or water quality standards;
- Standards based on federal or State MCLs; and
- Any other federal or State standards.

One or more of these criteria can be used to evaluate conditions at a VCP property. In addition, use of the available cleanup criteria does not exempt applicants from meeting all other applicable Maryland environmental regulations at the property.

### 4.1 UNIFORM NUMERIC RISK-BASED STANDARDS

The MDE Cleanup Standards for Soil and Groundwater (August 2001, Update No. 1) were developed to provide statewide uniform cleanup standards. Cleanup standards for soil were developed for both residential and non-residential land use scenarios. The standards represent concentration levels at which no further remedial action would be required at a property as long as use of the standards is consistent with the conditions provided in the guidance document. The document is available from the MDE or on the MDE website at: <http://www.mde.state.md.us/brownfields>.

MDE may deny the use of these cleanup standards in situations where property conditions or expected exposures differ significantly from the assumptions used to derive the standards. The MDE Cleanup Standards for Soil and Groundwater (August 2001, Update No. 1) do not in any way imply protection of ecological receptors. At properties where adverse effects to ecological receptors may be of concern, an ecological risk assessment following methods approved by MDE will be required.

In addition, the MDE Cleanup Standards for Soil and Groundwater (August 2001, Update No.1) do not imply protection from vapor migration to indoor air. Depending on site-specific conditions, additional evaluation, including modeling, may be required to evaluate potential risks from vapor migration to indoor air.

### 4.2 MEASURABLE STANDARDS BASED ON SITE-SPECIFIC RISK ASSESSMENTS

Participants may choose to complete a site-specific risk assessment to evaluate potential risk posed to human and ecological receptors based upon site-specific scenarios. The risk assessment

should be based on the U.S. EPA guidance document entitled Risk Assessment Guidance for Superfund.

To expedite the review and approval of risk assessments used to establish measurable standards based on site-specific risk assessments for RAPs, the VCP recommends the following outline:

## **A. Introductory Information**

**1. Executive Summary:** Summary of risk assessment conclusions and a brief description of the estimated risks to public health and the environment.

### **2. Introduction:**

- Brief description of the site, location, and previous/current activities which have contributed to the contamination;
- Identification of each surface water body on or adjacent to the site, and the specific use designation for each surface water body as stated in COMAR Section 26.08.02;
- Identification, location and use of all wells within a half-mile radius of the site that utilize groundwater (e.g. residential, production, monitoring);
- Direction of groundwater flow;
- Distance to the nearest surface water body in the direction of groundwater flow and the specific use designation for this surface water body as stated in COMAR 26.08.02;
- Map or series of maps that identify the location of all samples collected at the site and used in the risk assessment; and
- Data tables for all samples contained in the risk assessment including date of sample collection and analysis; depth of each soil, sediment, and groundwater sample; detection limits; analytical results; and all data qualifiers and explanations of qualifiers.

## **B. Human Health Risk Assessment**

### **1. Hazard Identification:**

Screening process used to identify contaminants of potential concern in each media. Screening values recommended by MDE include:

- MDE Cleanup Standards for Soil and Groundwater (Update No. 1), August 2001;
- U.S. EPA Region III Risk-Based Concentrations;
- U.S. EPA Soil Screening Levels; and
- Final list of chemicals of potential concern included in the human health risk assessment. Note: As stated in U.S. EPA guidance, risk-based concentrations for non-carcinogenic chemicals will be divided by 10 prior to comparison. Also, please follow all appropriate guidance for screening values. Other screening values may be used if approved by MDE.

### **2. Exposure Assessment:**

- Include current and proposed specific future use of the property (e.g. housing development, office space, manufacturing facility), if known;
- Identify current and proposed future use of the property as either residential, commercial, or industrial, consistent with definitions utilized by the VCP;
- Identify all populations and subpopulations of concern. The VCP typically evaluates the following populations, based on proposed future use:

- Residential use: adult residents, youth (between 6 and 18 years old) residents, child (less than 6 years old) residents, and construction workers;
- Commercial use: adult on-site workers, youth (between 6 and 18 years old) intermittent visitors, child (less than 6 years old) intermittent visitors, and construction workers; and
- Industrial use: adult on-site workers, youth (between 6 and 18 years old) intermittent visitors, and construction workers;
- Evaluate all appropriate exposure pathways, including fate and transport assumptions. Pathways typically considered include:
  - Incidental ingestion of subsurface soil (during construction/excavation activities) and surface soil;
  - Dermal contact with subsurface soil (during construction and excavation activities) and surface soil;
  - Inhalation of fugitive dust from subsurface soil (during construction/excavation activities) and surface soil;
  - Inhalation of volatiles from subsurface soils into indoor air and outdoor air;
  - Ingestion of groundwater used as a potable water supply;
  - Dermal contact with groundwater;
  - Inhalation of volatiles while showering with groundwater used as a potable water supply;
  - Inhalation of volatiles from groundwater into indoor air and outdoor air;
  - Incidental ingestion of surface water while recreating;
  - Dermal contact with surface water;
  - Incidental ingestion of sediment; and
  - Dermal contact with sediment;
- Identify the exposure point concentration for each contaminant of concern, including how the exposure point concentration was quantified, if the data are normal or lognormal, and if the exposure point concentration represents the 95th percentile upper confidence limit (UCL) of the arithmetic mean, the maximum concentration, or some other value;
- Document all exposure models and assumptions used, including references for all assumptions and for each exposure pathway included in the risk assessment; and
- Calculate intakes for each exposure pathway included in the risk assessment.

If the risk assessment is based on future industrial or commercial use of the property, it may be necessary to place a restriction on the property deed. To preclude the use of a restriction, the risk assessment may also include an estimated risk for future residential use. If the estimated risks for future residential, commercial and industrial use are within U.S. EPA's recommended levels of risk, the deed restriction may not be necessary.

“Intermittent visitors” includes trespassers, customers, and patrons. Other potentially exposed populations may be evaluated, when appropriate, based on site use. If these potentially exposed populations are not included, please provide the basis for that omission.

These exposure pathways may be evaluated either quantitatively or qualitatively. Please provide an explanation for any exposure pathway not included in the risk assessment.

### **3. Toxicity Assessment:**

- Toxicity data for all non-carcinogenic chemicals;
- Toxicity data for all carcinogenic chemicals; and
- Evaluation of all chemicals for which no toxicity data are available.

Toxicity information from the following sources is typically used: IRIS, HEAST, U.S. EPA NCEA office, and the U.S. EPA Region III Risk-Based Concentration table. Toxicity data may be used from other sources if approved by MDE.

#### **4. Risk Characterization:**

- Cumulative non-carcinogenic risk;
- Systemic non-carcinogenic risk;
- Cumulative carcinogenic risk;
- Discussion of the chemicals for which no toxicity data are available; and
- Discussion of uncertainty in the human health risk assessment.

### **C. Ecological Risk Assessment**

#### **1. Ecological Hazard Identification:**

- Description of all areas of the site at which ecological receptors may frequent;
- Conceptual site model that identifies all exposure pathways, media, fate and transport assumptions, and potential receptors;
- Description of the screening process used to identify contaminants of potential ecological concern in each media. Screening values recommended by MDE include:
  - Maryland ambient water quality standards;
  - U.S. EPA recommended ambient water quality criteria;
  - U.S. EPA draft sediment quality criteria;
  - U.S. EPA sediment quality benchmarks;
- National Oceanographic and Atmospheric Administration effects range median and low values for sediment; and
- Appropriate screening values for terrestrial receptors; and
- Final list of contaminants of potential concern that are included in the ecological risk assessment.

Other screening values may be used if approved by MDE.

#### **2. Ecological Exposure Assessment:**

- Discussion of potential ecological receptors at the site;
- Discussion of the potential for exposure at the site; and
- Description of assessment endpoints.

#### **3. Ecological Risk Characterization:**

- Ecological risk associated with each contaminant of potential ecological concern in each media;
- Relevant field observations; and
- Discussion of the uncertainty in the ecological risk assessment.

### **4.3 BACKGROUND LEVELS**

Non-anthropogenic background levels also may be selected as appropriate cleanup criteria at properties located in areas characterized by high levels of naturally occurring metals. Properties

with organic contaminants are not amenable to a background-level cleanup since these compounds rarely occur naturally.

#### **4.4 FEDERAL OR STATE SOIL OR WATER QUALITY STANDARDS**

The most common use of the federal or State soil or water quality cleanup option is to address issues of surface water or sediment contamination at VCP sites. This is due to the fact that the VCP does not have cleanup standards for surface water and sediment and other State and federal agencies have well-established standards for these media.

#### **4.5 FEDERAL OR STATE MAXIMUM CONTAMINANT LEVELS**

MCLs are used as cleanup criteria at sites where groundwater at the site or in the vicinity of the site is being used for potable supply. In these instances, MCLs are most appropriate because they are enforceable standards and are health based.

#### **4.6 ANY OTHER FEDERAL OR STATE STANDARDS**

To date, federal or State standards other than those already listed have not been used in the VCP.



## Maryland Department Of The Environment Voluntary Cleanup Program

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### Section Five No Further Requirements Determination

Issuance of a NFRD depends on several factors:

- The results of a data screen risk evaluation or the results of the site-specific toxicological evaluation;
- Current and intended future VCP land use; and
- Whether cleanup activities are limited to soil contamination removal under an approved IRM.

If the eligible property meets the appropriate cleanup criteria upon approval of the VCP application package, MDE will issue a NFRD, stating there are no further requirements related to the investigation of controlled hazardous substances or oil at the property (see Attachment 5 for sample NFRD language). The NFRD is based on a VCP-specific land use category, such as restricted or unrestricted residential, commercial or industrial (see Section 1.6.1). The NFRD may also contain certain land use requirements, including, but not limited to, excavation notification, maintenance of existing paved areas, soil disposal requirements, or a groundwater use prohibition.

**Recording the NFRD in the Land Records:** If the NFRD issued for the eligible property is conditioned on certain uses of the property or on the maintenance of certain conditions, the participant shall record the NFRD in the land records of the local jurisdiction within 30 days after receipt of the NFRD. Failure to record the NFRD conditioned on certain uses of the property or on the maintenance of certain conditions shall render the NFRD void.

**One-Call System:** If the NFRD is conditioned on certain uses of the property or on the maintenance of certain conditions, the participant shall send a copy of the NFRD to a one-call system, as defined in Section 12-101 of the Public Utility Companies Article, Annotated Code of Maryland, within 30 days of the effective date of the NFRD.

**Fee Due Upon Issuance of NFRD:** If the NFRD is conditioned on certain uses of the property or on the maintenance of certain conditions, the participant shall pay MDE a fee of \$2,000 upon issuance of the NFRD.

**Fee Due Upon Alteration of Record of Determination:** If a participant files a request to alter a record of determination in the land records for an eligible property with conditions in accordance with Section 7-506(i) of the Environment Article, the participant shall pay MDE a \$2,000 fee.



# Maryland Department Of The Environment Voluntary Cleanup Program

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## Section Six Response Action Plan

The RAP contains a specific remedial approach and schedule for addressing environmental concerns at a property not eligible for a NFRD. The decision to conduct a RAP for a property can be made voluntarily by the participant early in the application process or by MDE at the time the property is accepted into the VCP.

It is the participant's responsibility to develop the RAP and comply with the public participation requirements. The role of MDE is to ensure that the plan is protective of human health and the environment, available for public review and comment, adequate to address the environmental concerns at the property, and properly implemented and completed to the satisfaction of the Department.

Once MDE verifies that a RAP has been successfully implemented and completed, a COC (see Section 7) will be issued to the participant stating that the plan has achieved the applicable cleanup criteria at the property.

### **6.1 NOTICE OF INTENT TO PROCEED**

After an application has been approved for the VCP and the participant has been notified that a RAP must be developed, the participant must notify MDE in writing within 30 days whether the participant intends to proceed with or withdraw from the program. If the participant fails to provide the required notification within 30 days, the application will be considered withdrawn. See Section 1.7 for more information about the VCP withdrawal provisions.

### **6.2 RAP DEVELOPMENT ASSISTANCE**

The proposed RAP must focus on constructing a remedial strategy that addresses all environmental concerns at the site, is protective of human health and the environment, ensures the health and safety of the workers implementing the plan, and has a clearly defined schedule for implementation and completion.

To assist with RAP development, participants may review previously approved RAPs for other VCP properties that may be relevant to the participant's site. MDE also recommends that participants meet with VCP staff early in the development process to get feedback on the RAP approach and discuss any questions. The VCP project manager can help participants with both of these activities.

### **6.3 RAP SUBMISSION AND REVIEW**

At the time the proposed RAP is submitted to MDE, the 75-day review period will begin provided the following have also been completed:

- Publication of a notice of the proposed RAP, including the date and location of the public informational meeting, in a local newspaper of general circulation (see Section 6.4.1); and
- Posting at the eligible property a notice of intent to conduct a RAP at the property (see Section 6.4.2).

Please note that publication of the first newspaper notice and posting of the notice of intent to conduct a RAP at the property should be completed at the same time the proposed RAP is submitted to MDE.

On or before the end of the 75-day review period, MDE shall inform the participant in writing whether the RAP has been approved or rejected. If the proposed RAP is rejected, MDE shall state the modifications necessary to receive approval.

## **6.4 RAP PUBLIC PARTICIPATION REQUIREMENTS**

MDE will receive written comments from the public for 30 days after publication of the first newspaper notice and placement of a notice on the property or five days after the public informational meeting, whichever is later.

MDE will hold a public informational meeting at the expense of the participant on the proposed response action plan within 40 days after publication of the first newspaper notice. MDE will attend the meeting and accept written public comments on the proposed plan for five days after the meeting, or 30 days after publication and posting of the public notice, whichever date is later.

The following sections describe the public participation requirements associated with the RAP process.

### **6.4.1 Newspaper Notice**

The notice for the proposed RAP must be published once a week for two consecutive weeks in a daily or weekly newspaper of general circulation where the eligible property is located. Attachment 7 provides a template for the content of the notice.

All newspaper notices must be reviewed by MDE prior to publication. The participant must submit documentation confirming that the selected newspaper's circulation coverage area includes the property and vicinity as well as proofs of publication from the newspaper.

### **6.4.2 Property Sign**

The participant shall post a notice of the proposed response action plan at the property. The participant must submit photographs, either digital or print, documenting that the sign is located in an area with high visibility and traffic volume. In addition, the participant must provide a close-up photograph showing the text of the sign. A template for the sign is provided in Attachment 7. The text of the posted notice must be reviewed by MDE prior to placing the sign on the property. The posted notice must:

- Be located in an area of the property with the greatest visibility and highest volume of traffic;
- Contain the same information as the newspaper notice;
- Be no smaller than six (6) feet wide by four (4) feet high; and

- Remain standing, and its printed message maintained in a legible condition, for the full 30-day public comment period.

### 6.4.3 Public Informational Meeting

MDE shall hold a public informational meeting on the proposed response action plan at the expense of the participant within 40 days after publication of the notice in a newspaper of general area circulation. During the public informational meeting, the participant should present the history of the property, the contamination determined to be present at the property, a description of the proposed response action plan, and future development plans for the property.

The participant is responsible for all costs associated with the meeting, which shall take place in a public building at a location and time that are readily accessible and convenient to the majority of citizens living near the property.

## 6.5 PROPOSED RAP PREPARATION

The proposed RAP must meet the requirements outlined in Section 7-508 of the Environment Article, Annotated Code of Maryland. It should be prepared in the following format and, at a minimum, must include the information described below.

MDE may request any additional information or provisions it determines necessary to achieve the cleanup criteria or protect public health or the environment as set forth in Section 7-508 of the Environment Article, Annotated Code of Maryland.

**A. Site Overview:** This section of the RAP must provide a brief description of the property and a summary of the site history. It should identify the specific areas of the site requiring remediation and provide a map clearly delineating each area. This section should summarize the proposed response actions, including the applicable future land use category (see Section 1.6.1), each proposed remedial technology, and each proposed land use control.

**B. Additional Investigatory Information:** Any post-Phase II investigatory work completed or proposed must be summarized in this section. This includes any additional monitoring or sampling data that may be collected after approval of the VCP application for the purpose of selecting the appropriate remedial actions. Types of additional information include further sampling for source or plume delineation or additional investigation completed as part of a remediation pilot study.

**C. Exposure Assessment:** Information presented in the exposure assessment should include:

- Current and future use as defined by the VCP land use definitions (see Section 1.6.1);
- All media of concern, including fate and transport assumptions and the rationale for excluding any medium;
- Potentially exposed populations, based on current and future use, including specific subpopulations such as children or the elderly;
- A discussion of all potential exposure pathways and complete exposure pathways (i.e., pathways for which a contaminant, receptor and contact are present), and the rationale used to determine whether an exposure pathway is complete; and

- Ecological receptors.

**D. Cleanup Criteria:** A proposed RAP must demonstrate achievement of the appropriate cleanup criteria selected by the participant and the protection of public health and the environment (see Section 4).

**E. Selected Technologies and Land Use Controls:** Discuss each land use control and selected technology that will be used to address contaminated media at the site:

- Provide the rationale for selecting the remedial technology and demonstrate the applicability and effectiveness of the selected technology in protecting public health and the environment;
- Clearly indicate any proposed deed restrictions, or land use controls to address a risk to public health or the environment or to meet the RAP objectives;
- Discuss the appropriateness of each selected technology based on site-specific conditions (e.g. geology, hydrogeology, type of contaminant, medium, area of concern);
- Demonstrate the applicability and effectiveness of the selected technologies to significantly reduce the toxicity, mobility, or volume of contamination at the site;
- Provide supporting documents such as design tests, pilot tests, case studies, and literature surveys;
- Discuss additional work that may be necessary to develop a remedial design (e.g. pump tests, or any other pilot tests which have not yet been conducted); and
- Propose post-remediation requirements if they are needed to achieve the remedial objectives and maintain the selected cleanup criteria (e.g. post-confirmatory samples, maintenance, long-term monitoring).

**F. Evaluation Criteria for the Selected Technology:** The RAP must establish evaluation criteria to define specific conditions that must be met for MDE to issue the COC. In addition, in certain cases, a RAP must propose criteria (e.g. action levels) that would trigger contingency measures if site conditions change or the approved response actions are not effective.

*Criteria for COC (Project Completion):* The RAP must establish project completion goals or objectives that must be achieved prior to issuance of the COC. These project completion goals must be based on the cleanup criteria (see Section 4) and may include other objectives or conditions, such as decreasing source area concentrations, steady-state plume conditions, or a change in receptors (e.g. municipal water extended to downgradient residences to replace domestic wells). In addition, the completion of fate and transport modeling after confirmatory sampling or a groundwater monitoring program may be required as one criterion for issuing the COC.

*Criteria for Contingency Measures:* In certain cases, the RAP must propose contingency measures that must be implemented if site conditions change or the proposed response actions are not effective. The RAP must specify criteria, such as specific action levels, that will trigger the contingency measures if contaminant concentrations increase or other conditions change. Initial contingency measures may include notifying MDE and collecting confirmatory samples. Based on site specific circumstances, further contingency measures may include preparing a RAP addendum to outline more frequent groundwater sampling, installation of additional monitoring wells or other site investigation, modeling, residential well sampling, or other active remediation options.

*Action Levels:* A RAP may include proposed action levels that will trigger contingency measures when exceeded. The action levels must be established to ensure that changing site conditions (e.g. increasing contaminant concentrations) do not pose a threat to potential on-site and off-site receptors. Since VCP authority does not extend to off-site issues, MDE encourages close cooperation between the applicant and the OCP or CHS Enforcement/Fund Lead Site Assessment Division.

As an example, for on-site receptors, a groundwater action level could be set based on vapor intrusion modeling to calculate the concentration of contaminants of concern that would pose an unacceptable health risk considering the site's future use scenario. The vapor intrusion modeling would provide a basis for establishing an on-site action level to trigger contingency measures if exceeded.

For off-site receptors (e.g. domestic wells), appropriate action levels would be MCLs at the downgradient monitoring wells and other values derived from fate and transport groundwater modeling. The appropriate action levels will be established in consultation with the CHS Enforcement/Fund Lead Site Assessment Division or the OCP.

*Establishing Action Levels:* MDE's remedial action standards have been set at a carcinogenic value of  $1.0 \times 10^{-5}$  and noncarcinogenic HQ value of 1. An exceedance of either of these remedial action standards represents an unacceptable risk to human health. Contingency plan trigger levels generally should be set for carcinogens between  $1.0 \times 10^{-6}$  and  $1.0 \times 10^{-5}$  and for noncarcinogens between a HQ of 0.1 and 1. The resulting action levels will then be below MDE's remedial action standards to account for the presence of multiple contaminants and to trigger appropriate contingency measures before site conditions reach unacceptable levels.

**G. Proposed Response Actions:** This section must include a plan for all work necessary to perform the proposed RAP, including long-term monitoring and maintenance of the site, if necessary. The following items must be considered during preparation of the work plan:

*Reporting Requirements:* The work plan must outline notification and reporting time frames for sampling and report submittal. All analytical reports and documentation generated as a result of an approved RAP must be submitted to MDE for review. This includes manifests for off-site disposal of contaminated solid or hazardous material.

*Maintenance:* A detailed maintenance plan is required to ensure that future conditions at the site do not compromise the integrity of any physical maintenance controls, which must be visually inspected on a periodic basis.

*Excavations and Clean Fill:* All excavated material must be disposed in accordance with applicable local, State and federal laws and regulations. The source of backfill material must be documented, and MDE may require laboratory analysis to certify its cleanliness.

*Asbestos, Lead, Oil:* Any demolition activities at the site must be performed in accordance with all applicable federal, State, and local regulations regarding asbestos containing material and lead based paint. To ensure compliance with asbestos regulations, State law requires notification of the Division of Asbestos Licensing & Enforcement of MDE at 410-537-3200 at least ten days

prior to beginning demolition. Please contact the Environmental Lead Division of MDE at 410-537-3825 regarding regulations concerning demolition activities and lead based paint. Please contact the OCP of MDE at 410-537-3442 for guidance on the proper abandonment and removal of storage tanks.

**H. Permits, Notifications, and Contingencies:** The participant must comply with all local, State, and federal laws and regulations by obtaining all necessary approvals and permits to conduct the activities pursuant to an approved RAP.

- An approved RAP does not negate or otherwise affect any other provision of law requiring a person to report a release or a threat of a release of a controlled hazardous substance on a site.
- MDE must be notified immediately of any previously undiscovered contamination, changes to the RAP schedule, previously undiscovered storage tanks and other oil-related issues, and citations from regulatory entities related to health and safety practices.
- The work plan must outline procedures for amending the RAP in the event of unexpected conditions such as encountering free product, buried tanks, or other issue not contemplated in the work plan.

**I. Implementation Schedule:** The RAP must provide a detailed schedule for all work necessary to perform the proposed action, including post-remediation requirements (e.g. long-term monitoring). The proposed plan must specify the dates and time frames for implementing and completing each phase of the work.

- For the project tasks in the proposed plan, the implementation schedule shall list the start-complete time frames in days from RAP approval (e.g. “30 days from RAP approval”). Upon RAP approval, the schedule should be finalized with actual anticipated dates for each phase of work.
- MDE encourages the use of Gantt charts and flow charts to present the implementation schedule and track the on-going project.
- During implementation of the RAP, MDE must be notified in writing of all requested changes to the schedule.

**J. Administrative Requirements:** This section of the RAP must include the following items (see Section 6.6 for details):

*Written Agreement:* A written agreement that if the RAP is approved, the participant agrees to comply with the provisions of the plan.

*Zoning Certification:* A certified statement that the eligible property meets all applicable zoning requirements.

*Bond or other Security:* A proposal to file a performance bond or other security with MDE within ten days after receiving approval of the RAP. The performance bond or other security amount will be determined by the participant and approved by MDE as necessary to secure and stabilize the property if the RAP is not completed.

## 6.6 ADMINISTRATIVE REQUIREMENTS

### 6.6.1 Written Agreement

Section 7-508 of the Environment Article, Annotated Code of Maryland, requires that the RAP shall “include a written agreement that if the response action plan is approved, the participant agrees, subject to the withdrawal provisions set forth in Section 7-512 of this subtitle, to comply with the provisions of the plan.” The following language is approved as meeting this requirement:

#### WRITTEN AGREEMENT

“If the response action plan is approved by the Maryland Department of the Environment, the participant agrees, subject to the withdrawal provisions of Section 7-512 of the Environment Article, to comply with the provisions of the response action plan. Participant understands that if he fails to implement and complete the requirements of the approved plan and schedule, the Maryland Department of the Environment may reach an agreement with the participant to revise the schedule of completion in the approved response action plan or, if an agreement cannot be reached, the Department may withdraw approval of the plan.”

Revised 4/10/05

### 6.6.2 Zoning Certification

Section 7-508 of the Environment Article, Annotated Code of Maryland, requires that the participant develop a RAP that includes a “certified written statement that the property meets all applicable county and municipal zoning requirements.” The following language is approved as meeting this requirement:

#### CERTIFIED STATEMENT FOR COUNTY AND MUNICIPAL ZONING REQUIREMENTS

“The participant hereby certifies that the property meets all applicable county and municipal zoning requirements.

The participant acknowledges that there are significant penalties for falsifying any information required by MDE under Title 7, Subtitle 5 of the Environment Article, Annotated Code of Maryland, and that this certification is required to be included in a response action plan for the Voluntary Cleanup Program pursuant to Title 7, Subtitle 5 of the Environment Article, Annotated Code of Maryland.”

(Include participant’s signature and date)

Revised 2/1/07

### 6.6.3 Performance Bond or other Security

The proposed RAP must include a proposal for a performance bond or other security to secure and stabilize the property if necessary. The obligation of the performance bond or other security must be available for use by MDE upon notification to the participant by MDE. The performance bond or other security must be filed with MDE within ten days following approval of the RAP.

The performance bond or other security, such as a surety bond, letter of credit, escrow account, environmental insurance or other mechanism approved by MDE, must provide, to the benefit of MDE, an obligation to satisfy MDE’s requirements to secure and stabilize the property if

necessary. That obligation exists until a COC is issued or, if the participant withdraws, until 16 months after the date of withdrawal. Please see Attachment 8 for the approved template for the performance bond.

Securing and stabilizing the property includes activities necessary to:

- Post appropriate warnings and notices about conditions on the property;
- Restrict access to contaminated portions of the property;
- Prevent exposure to contaminated soil, water or contaminants prior to continuing implementation of a RAP;
- Prevent dust or other movement of contaminated soil or contaminants off the property prior to continuing implementation of a RAP;
- Where applicable, abandon monitoring wells, dismantle and dispose of treatment systems, and backfill open excavations;
- Prevent and abate any other dangerous conditions prior to continuing implementation of a RAP; and
- Maintain the above-referenced measures in effective working order.

Before taking action to secure and stabilize the property, MDE will notify the participant at the participant's last known address on file with MDE that:

- Upon the participant's withdrawal, the site was not secured and stabilized to a level determined by MDE to be protective of public health and the environment, and state requirements for securing and stabilizing the property; or
- MDE has deemed the participant withdrawn, the reasons for that decision, and setting forth the requirements for securing and stabilizing the property; and if activities to secure and stabilize the property are not completed within ten days, the bond or other security will be forfeited to MDE to perform the necessary activities.

If the recipient anticipates being unable to file the performance bond or other security within ten days of approval of the RAP, a request for an extension must be filed with MDE. The performance bond or other security must be filed with MDE prior to the performance of any work under the approved RAP at the property.

Templates for the administrative requirements, including the written agreement, zoning certification, or performance bond, are also available online at <http://www.mde.state.md.us/> or by contacting the project manager at 410-537-3493.

#### **6.6.4 Health & Safety Plan**

A detailed Health and Safety Plan must be available prior to the implementation of an approved RAP. At a minimum, the plan should reference key regulations that may apply to project activities (i.e. applicable sections of the OSHA regulations, 29 CFR 1910 (General Industry – Hazardous Waste Site Operations, Excavations, Personal Protective Equipment, Respiratory Protection) and 29 CFR 1926 (Construction)). The Health and Safety Plan should include, but not limited to, the following:

- Appropriate PPE and monitoring devices that must be utilized by workers to ensure that all worker protection requirements are met, and the rationale for the PPE selected;
- Site control measures that will be maintained during RAP implementation to restrict access (e.g. security guards, warning fences);
- Dust abatement or suppression methods; and
- Compliance by all on-site workers with OSHA guidelines for managing contaminated material regardless of their characterization as hazardous or non-hazardous. The remedial contractor must possess the necessary certification for the transportation of any controlled hazardous substance.

## **6.7 RESPONSE ACTION PLAN REVIEW AND APPROVAL**

At or before the end of the 75-day review period, and after public notice requirements have been satisfied and any public comments received for the property have been considered, MDE will notify the participant in writing whether the RAP has been approved or rejected.

If RAP modifications are necessary, the participant may resubmit the plan within 120 days after receipt of notification by MDE. If the participant fails to resubmit the plan within 120 days, MDE shall consider the application withdrawn in accordance with Section 7-512 of the Environment Article.

Within 30 days following receipt of a resubmitted plan, MDE will notify the participant whether the plan is approved. Upon approval, MDE will notify the participant in writing that no further action will be required to accomplish the objectives set forth in the approved plan other than those actions described in the plan.



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### Section Seven Issuance of Certificate of Completion

Upon completion of the requirements of the approved RAP, the participant shall notify MDE in writing that the requirements of the approved RAP have been completed. Within 30 days thereafter, MDE will review the implementation and completion of the RAP at the eligible property and will determine whether the requirements have been satisfactorily completed and the cleanup criteria have been achieved.

Upon determining that the requirements of the approved RAP have been completed to the satisfaction of MDE, a COC will be issued that states the following:

- The requirements of the approved RAP have been completed;
- The participant has demonstrated that the implementation of the approved RAP at the eligible property has achieved the applicable cleanup criteria pursuant to Section 7-508(b) of the Environment Article;
- MDE may not bring an enforcement action against the participant at the eligible property;
- The participant is released from further liability for the remediation of any contamination of the eligible property identified in the environmental assessments of the property; and
- The participant may not be subject to a contribution action instituted by a responsible person.

**Long-term Monitoring:** A requirement for long-term monitoring and maintenance in an approved RAP may not delay the issuance of a COC. If the issued COC is conditioned on the completion of the long-term monitoring requirements, the participant or subsequent property owner will be responsible for the completion of these long-term monitoring activities.

In the event that action levels or other evaluation criteria established in the approved RAP are triggered, the participant or subsequent property owner will be responsible for implementing appropriate measures to remedy the situation, including implementation of any contingency plan contained in the approved RAP. The participant or subsequent property owner will also be responsible for the completion of these corrective actions.

**Recording the COC in the Land Records:** If the COC issued for the eligible property is conditioned on the permissible use of the property, the participant shall record the COC in the land records of the local jurisdiction within 30 days after receipt of the COC. Failure by the participant to record the COC within 30 days shall render the COC void.

**One-Call System:** If the COC is conditioned on permissible use of the property, the participant shall send a copy of the COC to a one-call system, as defined in Section 12-101 of the Public Utility Companies Article, Annotated Code of Maryland, within 30 days of the effective date of the COC.

**Fee Due Upon Issuance of COC:** If the COC is conditioned on permissible use of the property, the participant shall pay MDE a fee of \$2,000 upon issuance of the COC.

**Fee Due Upon Alteration of Record of Determination:** If a participant files a request to alter a record of determination, specifically the COC, in the land records for an eligible property with conditions in accordance with Section 7-514(d) of the Environment Article, the participant shall pay to MDE a fee of \$2,000.



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## Section Eight Oil Contaminated Sites

The Brownfields Redevelopment Reform Act of 2004 authorized the VCP to accept applications for properties with known or perceived oil contamination. Because the VCP will accept applications for properties with underground and aboveground petroleum storage systems, an applicant may work with staff from both the VCP and the OCP. Participation in the VCP does not exempt a tank owner or operator from the provisions of COMAR 26.10. Questions regarding regulations for aboveground or underground storage tank management should be directed to the OCP at 410-537-3442.

### 8.1 ELIGIBLE PROPERTIES

As authorized by the passage of House Bill 294 and Senate Bill 186, beginning October 1, 2004, sites contaminated by oil became eligible for participation in the VCP. Oil is defined as follows in Section 4-401 of the Environment Article, Annotated Code of Maryland:

- “Oil” means oil of any kind and in any liquid form including petroleum; petroleum by-products; fuel oil; sludge containing oil or oil residues; oil refuse; oil mixed with or added to or otherwise contaminating soil, waste, or any other liquid or solid media; crude oils; aviation fuel; gasoline; kerosene; light and heavy fuel oils; diesel motor fuels; asphalt; and regardless of specific gravity, every other nonedible, no substituted liquid petroleum fraction unless that fraction is specifically identified as a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. § 9601 et seq.
- “Oil” does not include: liquefied propane; liquefied natural gas; or any edible oils.

Under the new law, an eligible property also includes a site under active enforcement if the following criteria are met:

- All applications filed in connection with the property are filed by inculpable persons; and
- Any RAP and cleanup criteria approved by the Department are at least as protective of public health and the environment as the requirements of any outstanding active enforcement action.

Properties with previously closed or currently open cases with the OCP may participate in the VCP, provided the applicant meets the eligibility requirements as described in Section 1.1.

### 8.2 INELIGIBLE PROPERTIES

Not all oil-contaminated properties are eligible for VCP participation. In addition to the types of sites listed in Section 1.2, Ineligible Properties, oil-contaminated sites with emergency conditions are not eligible to participate in the VCP until the emergency conditions have been abated.

### 8.3 EMERGENCY CONDITIONS

The VCP will not accept an application for a property that presents an imminent and substantial endangerment to the public health or the environment due to a release or threatened release of oil. If at any time during the VCP application review process, conditions are encountered at the property that constitute an immediate threat to human health or the environment, the VCP review process will be held in abeyance until the emergency condition has been abated. After the emergency condition has been addressed, the VCP application review process will resume. The application may also be withdrawn based on off-site impacts that require a referral to the OCP for appropriate enforcement action.

Examples of emergency conditions may include, but not limited to, the following:

- Petroleum vapors or free product inside a structure;
- Discovery of free product in tank field monitoring pipes;
- Inventory discrepancies on an active underground storage tank system greater than allowed under COMAR 26.10.04.01E-G;
- Unusual operating conditions, such as the erratic behavior of product-dispensing equipment, the sudden loss of product from the UST system, or unexplained presence of water in the tank;
- Monitoring results from a leak detection method, such as alarms from an interstitial monitoring device;
- Petroleum product or dissolved phase discharge to a surface water body;
- Petroleum products, vapor, or contaminated groundwater impacting an underground utility; or
- Indications of petroleum contamination, such as laboratory sampling results, in a water supply well.

Evidence of an oil discharge must be reported within two hours, as specified in COMAR 26.10.08.01, to the OCP at 410-537-3442 or, if after normal business hours, to the 24-hour Spill Reporting Hotline at 1-866-633-4686. If you have any question on whether a situation qualifies as an emergency condition, do not hesitate to call the above numbers.

The investigation and abatement of emergency conditions will be conducted under the direct supervision of the OCP, in accordance with the following requirements:

- Investigation of Off-Site Impacts, COMAR 26.10.08.02;
- Release Investigation and Confirmation Steps, COMAR 26.10.08.03;
- Reporting and Cleanup of Spills and Overfills of a Regulated Substance, COMAR 26.10.08.04;
- Release Response and Corrective Action for UST Systems Containing Petroleum or Hazardous Substances, COMAR 26.10.09.01-05

If you have any questions regarding the eligibility of a property for VCP participation, contact Jim Metz, Voluntary Cleanup/Brownfields Division, at 410-537-3493.

## 8.4 LIABILITY ISSUES

Under the VCP, the participation status of an applicant falls under two classifications, responsible and inculpable person, briefly described below and in more detail in Section 1.4 of this document. The liability of responsible or inculpable persons in the VCP is different than that of owners and operators of petroleum sites under OCP law. Potential applicants for petroleum sites are encouraged to schedule pre-application meeting to discuss VCP and OCP liability issues at their sites.

### 8.4.1 Comparison with the Oil Control Program

Environment Article, Annotated Code of Maryland, Section 4-401(i) defines a person responsible for a petroleum discharge differently than a responsible person under Section 7 201(x) of the Environment Article, Annotated Code of Maryland. Specifically, Section 4-401(i) states that responsibility for the prompt control, containment, and removal of any released regulated substance shall be with the person responsible for the discharge, the owner and/or operator of the oil storage facility, the owner of the regulated substance, the owner and/or operator of the storage system, and the person-in-charge of the facility, vessel or vehicle involved in the release. For releases occurring from improperly abandoned storage systems, the current landowner, and any person who owned, leased, or was otherwise responsible for a system at the time it was abandoned shall also be responsible. This responsibility shall continue until removal of the released regulated substance has been accomplished to the satisfaction of the Department (COMAR 26.10.02.01).

A purchaser of oil-contaminated property does not become a person responsible for the discharge solely as a result of the purchase of the property, unless the purchaser is otherwise a person responsible for a discharge under Environment Article, 4-401(i), Annotated Code of Maryland (COMAR 26.10.01.05 G).

The OCP issues four types of site status letters as described in COMAR 26.10.01.05.

**Notice of Compliance Letter:** Issued upon request, to a person who has received a notice of violation from MDE stating the violation has been corrected to the satisfaction of MDE.

**Site Condition Letter:** States whether MDE requires remedial action or if the site is in compliance.

**Cleanup Suspension Letter:** Issued upon request, if MDE determines that no further treatment of soil or groundwater is required. This letter will state the requirements for monitoring the site after the remediation activities cease (i.e. monthly gauging, or quarterly monitoring following remediation system shut down). If issued, a cleanup suspension letter is applicable to any transferee of title, successor or assignee of the person responsible for the discharge of oil, or other person, who performed the cleanup.

**Final Closure Letter:** A letter shall be issued after MDE determines that a site at which a discharge of oil occurred is in compliance of the applicable oil regulations. A final closure letter is applicable to any transferee of title, successor or assignee of the person responsible for the discharge of oil, or person who performed the cleanup. MDE may require a person responsible for the discharge to take further remedial action at a site subject to a closure letter if it determines that:

- There is a threat to public health and welfare or the environment;
- The discharge recurs as free phase oil product;
- The letter was obtained through fraud or misrepresentation; or
- A new or previously undiscovered discharge of oil is found that would require a corrective action under the oil regulations.

## 8.5 UNDERGROUND STORAGE TANK REMOVALS

If an existing or previously abandoned underground storage tank will be removed from a property that has applied to the VCP, then the tank removal will occur under the oversight of the OCP pursuant to the provisions of COMAR 26.10.10.02. The following must occur when the tank system is closed:

- A certified remover must remove the tank;
- All liquid and sludge must be removed from the tank;
- All aboveground portions of vent lines shall be removed and the remaining lines capped at their bases;
- The tank shall be purged of all explosive vapors and monitored with an appropriate meter for vapors before and during removal;
- Tanks shall be disposed of at a location acceptable to MDE, and the disposal receipts submitted to the both VCP and OCP project managers; and
- An updated registration form must be submitted to the OCP.

To obtain a list of certified removers or copies of registration forms, contact the OCP at 410-537-3442.

After the tank removal operation has been completed, any additional site assessment and on-site remediation required can be completed within the auspices of the VCP.

## 8.6 REMEDIATION ISSUES

**Free Product Recovery:** When liquid phase or free product is found on site, the free product must be removed to the maximum extent practicable as determined by MDE. As stated in Section 8.3, the discovery of free phase petroleum product must be reported to OCP within two hours. If free phase product is discovered at a site under non-emergency conditions (see Section 8.3 for Emergency Conditions), a brief work plan for the initiation of a product recovery method such as hand bailing, sorbent wicking and enhanced fluid recovery (vacuum truck) should be submitted to the OCP with a copy to the VCP project manager. Free product recovery may proceed with approval from the OCP. Waste disposal receipts must be provided for all petroleum products removed from the property. For additional information on the reporting requirements for free phase petroleum product recovery please refer to the Maryland Environmental Assessment Technology for Leaking Underground Storage Tanks guidance document, which can be downloaded from the Maryland Department of the Environment website at [www.mde.state.md.us](http://www.mde.state.md.us).

If necessary, free product recovery may proceed while a RAP is prepared and the public participation requirements fulfilled; however, the final RAP approval may not be issued until the

free phase recovery has been completed to the satisfaction of the OCP. Post recovery monitoring activities such as periodic gauging and sampling may be included as part of the RAP.

**Petroleum Contaminated Soil:** As defined in COMAR 26.10.13.11, soil showing a contaminant level over 10 mg/kg of total petroleum hydrocarbons is considered “oil contaminated” if removed from a site or otherwise handled on site. In certain circumstances, OCP guidance allows soils contaminated by oil to remain in place so long as the soils are undisturbed. The OCP guidance specifies that only soils with TPH levels below 230 mg/kg as determined by EPA method 8015B gasoline range organics/diesel range organics can remain in place so long as it “does not pose a risk or threat of adverse effects if left in place.” Soil that is treated at a permitted oil-contaminated soil facility must be treated to a level of 10 mg/kg TPH or as established by the facility’s permit, such as incorporating a soil solidification process.

If petroleum-contaminated soil is disturbed by site activities such as the installation of utility lines or site grade changes, the soil must be handled in a manner that would comply with State and local regulations regarding sediment control and disposal. This also applies to properties that have received a NFRD or COC and are owned by an inculcable person. A work plan as described in the IRM or RAP process must be approved prior to the removal of petroleum-contaminated soil.

#### **8.6.1 Remediation System Discharge Permit Requirements**

In order to operate a remediation system, permits must be obtained from MDE for the discharge of vapors or treated groundwater. The applicant must also comply with all applicable State and local requirements for the construction and operation of a remediation system. For example, discharges into the sanitary system will require approval from the operator of the utility and the installation of sheds or fences require local permits.

**Air Permit Requirements:** A remediation system that will discharge contaminated vapors produced as a result of soil vapor extraction or use of air stripping equipment for water treatment may require a permit under COMAR 26.11.02.09, unless it meets all of the following conditions:

- The uncontrolled VOC emissions are less than one (1) ton per calendar year;
- The uncontrolled emissions of Class II toxic air pollutants are less than one (1) ton per calendar year; and
- The emission of Class I toxic air pollutants are no more than one (1) pound per day.

Because benzene is a common component of many petroleum products and a Class I toxic air pollutant, the concentrations of benzene and any other Class I TAP must be measured to ensure the remediation system qualifies for a permit exemption.

As outlined in COMAR 26.11.06.06, remediation equipment emitting more than 20 pounds per day of VOCs located in Baltimore City and Anne Arundel, Baltimore, Calvert, Carroll, Cecil, Charles, Frederick, Harford, Howard, Montgomery, and Prince George’s counties is required to reduce emissions by 85 percent or more overall.

**Treated Groundwater Discharge Permits:** If petroleum is the sole contaminant in the groundwater, the OCP will issue a general discharge permit. For information on discharge permits for sites solely contaminated with petroleum products contact the OCP at 410-537-3442.

For information on discharge permits for sites contaminated with petroleum and other substances, such as chlorinated solvents, contact the MDE Water Management Administration at 410-537-3323.

**Groundwater Reinjection Permits:** If the treated water will be reinjected in an infiltration gallery or well please contact the MDE Water Management Administration at 410-537-3778 for more information on permit requirements.

### 8.6.2 Reporting Requirements for Active Remediation

As discussed in Section 7, a RAP must include a work plan that outlines notification and reporting time frames for sampling and report submittal. If an active remediation system is installed at a site the reporting requirements should include at a minimum, a concise summary of activities at the site on a quarterly basis, or other specified period, which may include the following:

- System configuration;
- Work authorized during the period of report;
- Work performed;
- Portion of the period the system was operational (e.g. system was pumping 28 out of 31 days);
- Problems or routine maintenance to the system;
- Amount of water pumped through the recovery system, including flow meter readings,
- Pounds of vapors recovered, with the flow rate in cubic feet per meter;
- Volume of free product recovered this period and cumulative total volume;
- Status of outstanding permits, including permit numbers that affect installation or operation of the system; and
- Analysis of influent and effluent samples to demonstrate the treatment system is functioning properly.

Please note that MDE must be contacted if the system is inactive for more than 48 hours.

Water Quality Tables must include the following:

- Well or sample point identification;
- Date sampled;
- Constituent name; and
- Units for each constituent.

Gauging and Liquid Level Data must include the following:

- Well identification;
- Date gauged;
- Top of casing elevation;
- Liquid phase hydrocarbon depth in feet from top of casing;
- Water depth in feet from top of casing;
- LPH thickness in feet;
- Groundwater elevation in feet;

- Corrected groundwater elevation in feet (include product density value used); and.
- Amount of product removed during the gauging event.

Other reporting requirements as necessary may be required by VCP, based on the specific site conditions and the remediation technology chosen.



# Maryland Department Of The Environment Voluntary Cleanup Program

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## Guidance Document Attachment List

- A1 Voluntary Cleanup Program Application
- A2 MDE Fixed Laboratory Data Deliverable
- A3 Request for MDE Sample Screening Analytical Services
- A4 MDE Screening Sample Collection Protocol
- A5 No Further Requirements Determination Sample Letter
- A6 Template for Public Notice of Application to the VCP
- A7 Template for Public Notice of a Response Action Plan
- A8 Performance Bond Template
- A9 Certificate of Completion Sample Letter
- A10 Interim Removal Measures



# Maryland Department Of The Environment Voluntary Cleanup Program

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## Attachment One Voluntary Cleanup Program Application

**WASTE MANAGEMENT ADMINISTRATION  
ENVIRONMENTAL RESTORATION AND REDEVELOPMENT PROGRAM**

**VOLUNTARY CLEANUP PROGRAM APPLICATION**

➤ **APPLICATION REVIEW AND APPROVAL**

The information provided in this application will be used to determine the eligibility of the applicant and the property for Maryland's Voluntary Cleanup Program pursuant to Title 7 of the Environment Article.

Within 45 days after receipt of the application, the Department will notify the applicant, in writing, whether the application is approved, incomplete, denied or if the Department has no further requirements related to the investigation of controlled hazardous substances at the property. If the application is denied, the Department will provide reasons for its denial in writing and will advise the applicant that the application may be resubmitted within 60 days.

➤ **PRE-APPLICATION MEETINGS**

**Applicants are encouraged to request a pre-application meeting to discuss the environmental issues at the property prior to submitting the application. To schedule a meeting, please contact Jim Metz at 410-537-3493.**

➤ **APPLICATION PACKAGE MAILING ADDRESS**

Please submit the application package and required environmental site assessment information and all other available site information to the following address:

Maryland Department of the Environment  
Voluntary Cleanup/Brownfields Division  
1800 Washington Boulevard, Suite 625  
Baltimore, Maryland 21230-1719  
ATTN: VCP Division Chief

➤ **APPLICATION FEE MAILING ADDRESS**

Please send the applicable \$6,000 or \$2,000 application fee, made payable to the Voluntary Cleanup Fund, and the Application Fee Form (VCP Application Attachment I) to the following address:

Maryland Department of the Environment  
P.O. Box 1417  
Baltimore, Maryland 21203

➤ **EXPEDITED INculpABLE PERSON APPROVAL REQUESTS**

To obtain expedited inculpable person approval, a written request accompanied by a completed Inculpable Person Affidavit (VCP Application Attachment II) and the \$2,000 fee made payable to the Voluntary Cleanup Fund must be forwarded or hand delivered to the Department at the 1800 Washington Street address listed above.

➤ **QUESTIONS**

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

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**FOR DEPARTMENT USE ONLY**  
PCA# 13758 AOBJ# 5650, Suffix 630

**I. PROPERTY**

Property Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ County \_\_\_\_\_ Zip Code \_\_\_\_\_  
 Tax Parcel Number \_\_\_\_\_ Acreage \_\_\_\_\_

List any other names (i.e. aliases) for this property that could help identify historical environmental records:  
 \_\_\_\_\_

Please check one of the following, if applicable:

- This application is for multiple contiguous parcels. Please include the tax parcel number and the acreage for each parcel. If parcels are not contiguous, a separate application accompanied by another \$6000 application fee must be filed for each non-contiguous parcel.
- This property has already applied to the VCP under a different applicant.
- This property is adjacent to a property has already applied to the VCP and both properties are part of the same planned unit development or similar development plan.

*Please note that pursuant to Maryland law, properties that are listed on the National Priorities List, subject to a controlled hazardous substance permit issued by the State, or owned by a "responsible person" and contaminated after October 1, 1997, are not eligible for this Program.*

**II. APPLICANT**

**Attachment III of the application provides a checklist of the information that must be included in the VCP application package. Although not mandatory, applicants are encouraged to complete the checklist and submit it with the application.**

Name(s) of Representative(s) \_\_\_\_\_ Title \_\_\_\_\_  
 Organization \_\_\_\_\_  
 Mailing Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
 Telephone (\_\_\_\_\_) \_\_\_\_\_ Fax (\_\_\_\_\_) \_\_\_\_\_  
 Federal Tax Id. No. \_\_\_\_\_ E-mail \_\_\_\_\_

- (A) Indicate the legal form of the applicant's organization and provide the date founded.  
 \_\_\_\_\_

**III. APPLICANT'S INTEREST IN PROPERTY**

- (A) Indicate the interest in the property by checking the appropriate box(es).

<b>Interest in Property</b>	<i>(Check all that apply)</i>
Currently own property	
Currently renting or leasing property	
Under contract for option to purchase property	
Under contract for conditional sale of property	
Considering purchasing property	
Considering renting or leasing property	
Considering making a loan or investment to a purchaser for the acquisition of the property	
Holder of a mortgage, deed or trust or other security interest	
Other (explain)	

- (B) If purchasing the property and a contract offer has been accepted, has a settlement date been scheduled?  
 Yes \_\_\_\_\_ Date \_\_\_\_\_  
 No \_\_\_\_\_

- (C) If considering renting or leasing the property, has the applicant entered into a lease option or lease agreement?  
 Yes \_\_\_\_\_ Date term of lease option expires or lease begins \_\_\_\_\_  
 No \_\_\_\_\_

**IV. DEPARTMENT ACTION SOUGHT BY APPLICANT (Check only one)**

\_\_\_\_\_ **“No Further Requirements Determination.”** (A “No Further Requirements Determination” is a notice by the Department that it has no further requirements related to the investigation of controlled hazardous substances at the eligible property. Please be aware that the “No Further Requirements Determination” will be conditioned on a specific property use (residential, industrial or commercial) and might include land use controls that include, but are not limited to: maintenance of existing pavement or ground covering; use of air monitoring instruments during excavation; and, a deed restriction on use of groundwater beneath the property for any purpose.)

\_\_\_\_\_ **“Certificate of Completion.”** (A “Certificate of Completion” is a notice issued by the Department after satisfactory completion of an approved response action plan stating: the requirements of the response action plan have been completed; implementation of the response action plan has achieved the applicable cleanup criteria; the Department may not bring an enforcement action at the eligible property; the participant is released from further liability for remediation of the eligible property for any contamination identified in the environmental site assessment; and the participant will not be subject to a contribution action instituted by a responsible person. Please be aware that the “Certificate of Completion” may be conditioned on a specific property use (residential, industrial or commercial) and might include land use controls that include, but not limited to: continual maintenance of controls (e.g., cap); use of air monitoring instruments during excavation; a deed restriction on groundwater use beneath the property for any purpose; periodic inspection of controls; and, submittal of periodic inspection reports to the Department.)

**V. PARTICIPANT STATUS SOUGHT BY APPLICANT (Check only one)**

\_\_\_\_\_ **“Responsible Person”**  
 (A responsible person is defined as any person who: 1) is the owner or operator of a vehicle or site containing a hazardous substance; 2) at the time of disposal of any hazardous substance, was the owner or operator of any site at which the hazardous substance was disposed; 3) by contract, agreement or otherwise, arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of a hazardous substance owned or operated by another party or entity and containing such hazardous substances; or 4) accepts or accepted any hazardous substances for transport to a disposal or treatment facility or any sites selected by the person. Please note that there are numerous exceptions to the definition of responsible person set forth in Section 7-201 (x)(2) of the Environment Article, *Annotated Code of Maryland*.)

\_\_\_\_\_ **“Inculpable Person”**  
 (An inculpable person is defined as any person who has no prior or current ownership interest in an eligible property and has not caused or contributed to contamination at the eligible property at the time of application to participate in the Voluntary Cleanup Program.) **An applicant seeking inculpable person status must complete the Application Attachment II: “Inculpable Person Affidavit.”**

Expedited inculpable person approval is requested (additional \$2,000 fee required).

**VI. CURRENT PROPERTY OWNER (if different from applicant)**

Organization \_\_\_\_\_  
 Name(s) of Representative(s) \_\_\_\_\_ Title \_\_\_\_\_  
 Mailing Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
 Telephone (\_\_\_\_) \_\_\_\_\_ Fax \_\_\_\_\_  
 E-Mail \_\_\_\_\_

- (A) Indicate the legal form of the property owner’s organization and provide the date founded.  
 \_\_\_\_\_

**VII. CURRENT PROPERTY USE**

- (A) Describe all current property uses (e.g. residential, retail, office space, warehousing, industrial, manufacturing, etc.).

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(B) Provide the property's current zoning classification:

(C) Are any requests for zoning variances, special exceptions or reclassification pending? If yes, explain.  
Yes \_\_\_\_\_ No \_\_\_\_\_

(D) Has the property been subdivided during the present ownership? If yes, attach an explanation and provide the date and zoning classification of the subdivision.  
Yes \_\_\_\_\_ No \_\_\_\_\_

**VIII. FUTURE PROPERTY USE**

(A) Indicate the intended future use of the property as defined by the VCP land use definitions.  
*This section must be completed because the selected cleanup criteria and issuance of a No Further Requirements Determination or a Certificate of Completion will be contingent upon the future use of the property. If this section is not completed, the property will be evaluated under the most conservative scenario of Tier 1 (Residential). (Check one.)*

\_\_\_\_\_ **Tier 1 (Residential):** Planned use of the property that allows exposure and access by all populations including infant, children, elderly, and infirmed populations. Tier 1 properties typically include single-family and multi-family dwellings, hospitals and health care facilities, education facilities, day care facilities, playgrounds and other recreational areas.

\_\_\_\_\_ **Tier 2 (Commercial):** Planned use of the property that allows exposure and access by the general public, workers, and other expected users, including customers, patrons, or visitors. Commercial purposes allow access to the property and duration consistent with a typical business day. Tier 2 properties typically include shopping centers, retail businesses, vehicle service stations, medical offices, hotels, office space, religious institutions and restaurants.

\_\_\_\_\_ **Tier 3 (Industrial):** Planned use of the property by workers over the age of 18, adult workers and construction workers, and other potential expected users. Industrial purposes allow access to the property at a frequency and duration consistent with a typical business day. Tier 3 properties typically include manufacturing facilities, maritime facilities, metal working shops, oil refineries, chemical and other material plants.

(B) Indicate whether any land use controls are part of the anticipated future use of the property. "Land Use Controls" means any restriction or control that serves to protect human health and the environment by limiting use of or exposure to any portion of the property, including water resources. These controls may include engineering controls and institutional controls. *If this section is not completed, the property will be evaluated under the most conservative scenario of unrestricted use. (Check one.)*

\_\_\_\_\_ **A (Unrestricted):** No land use controls are imposed on the property for residential, commercial, or industrial use, as applicable.

\_\_\_\_\_ **B (Restricted):** One or more land use controls are imposed on the property as a condition for residential, commercial, or industrial use, as applicable.

(C) Based on future use of the property, please describe any anticipated physical changes to the property (e.g., building demolition, building expansion, paving, changes in site operations, etc.)

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(D) Will a day care facility be located on the property?  
Yes \_\_\_\_\_ No \_\_\_\_\_  
*(Note: A day care facility is included under the Tier 1 (Residential) category in the VCP land use definition and is not permitted under Tier 2 or Tier 3 land use categories.)*

(E) If known, describe the number and types of businesses that will be operating at the property after completion of the Voluntary Cleanup Program.  
\_\_\_\_\_  
\_\_\_\_\_

(F) If known, provide the estimated cost of property redevelopment, number of jobs created, and the approximate increase in the property tax after redevelopment.  
\_\_\_\_\_  
\_\_\_\_\_

**IX. INVOLVEMENT WITH OTHER REGULATORY PROGRAMS**

(A) Based on information known to the applicant, describe any prior contact with federal, State, or local environmental regulatory agencies regarding this property. Prior contact includes any permits, notices of violation, consent orders, and other enforcement actions that have been issued for the property, as well as any applications, remediation plans, sampling data, or reports that have been submitted for the property.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(B) List all processes, discharges, tanks, and activities at the property that require an environmental permit. For each permit, include the appropriate regulatory agency contact information, the relevant permit identification number, and confirm the permit's compliance status. Please be advised that if the VCP identifies permits that are out of compliance or processes, discharges, tanks, or activities that may not be properly permitted, VCP will notify the appropriate regulatory agency or program.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(C) Has the applicant ever been convicted in any Maryland state court of a criminal offense under either the Annotated Code of Maryland, Environment Article, Title 7 (Hazardous Materials and Hazardous Substances) or any Code of Maryland Regulations (COMAR) provision promulgated under the Annotated Code of Maryland, Environment Article, Title 7? If yes, attach an explanation.  
Yes \_\_\_\_\_ No \_\_\_\_\_

(D) Has the applicant ever been convicted in a criminal court of any other state of knowingly or willfully violating that particular state's laws or regulations governing hazardous materials, hazardous substances or hazardous wastes? If yes, attach an explanation.  
Yes \_\_\_\_\_ No \_\_\_\_\_

(E) Has the applicant ever been convicted in any federal court of a criminal offense under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)? If yes, attach an explanation.  
Yes \_\_\_\_\_ No \_\_\_\_\_

**X. BROWNFIELD INCENTIVE PROGRAMS**

(A) Is the applicant applying, or does the applicant plan to apply, for grants, loans or property tax credits available through the Brownfields Revitalization Incentive Program?  
Yes \_\_\_\_\_ No \_\_\_\_\_

*(For more information about this program, please contact Jim Henry at the Department of Business and Economic Development at 410-767-6353.)*

(B) Is the property located in a State designated enterprise zone? Contact the Maryland Department of Business and Economic Development at 410-767-6438 for information on location of enterprise zones.  
Yes \_\_\_\_\_ No \_\_\_\_\_

**XI. OTHER CONTACTS**

(A) Consultant:

Name(s) \_\_\_\_\_ Title \_\_\_\_\_  
Organization \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Telephone (\_\_\_\_) \_\_\_\_\_ Fax (\_\_\_\_) \_\_\_\_\_  
E-Mail \_\_\_\_\_

Send copies of correspondence to this contact in addition to the applicant.

(B) Other (e.g., Project Manager, Attorney)

Name(s) \_\_\_\_\_ Title \_\_\_\_\_  
Organization \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Telephone (\_\_\_\_) \_\_\_\_\_ Fax (\_\_\_\_) \_\_\_\_\_  
E-Mail \_\_\_\_\_

Send copies of correspondence to this contact in addition to the applicant.

Attach additional contacts as necessary.

**XII. REQUIRED ENVIRONMENTAL INFORMATION**

Pursuant to Maryland Law, each applicant to the Voluntary Cleanup Program is required to submit the following two items:

**1. A detailed report of all available relevant information on environmental conditions including contamination at the property known to the applicant at the time of the application.**

*(The report must include all information known about all controlled hazardous substances and oil contamination and a statement that all known environmental information about the property has been provided to the Department. If information provided by the detailed report will be provided as part of the Phase I and Phase II assessments, an applicant may, in lieu of the report, submit a statement that all known environmental information for the property is being provided to the Department as part of the Phase I and Phase II site assessment.)*

\_\_\_\_\_ All known environmental information for the property is being provided to the Department as part of the following reports (*list reports*):

<u>Title</u>	<u>Prepared by</u>	<u>Date</u>	<u>No. of pages</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**2. An environmental Phase I and Phase II site assessment that: (1) includes established Phase I and Phase II site assessment standards; (2) follows principles established by the American Society for Testing and Materials; and (3) demonstrates that the assessment has adequately investigated all potential sources and areas of contamination.**

*(A discussion of the requirements for the Phase I and Phase II site assessments is provided in the MDE/VCP Guidance Document available on-line at [www.mde.state.md.us/brownfields](http://www.mde.state.md.us/brownfields))*

\_\_\_ Phase I assessment enclosed \_\_\_ Phase II assessment enclosed \_\_\_ Phase II work plan enclosed

**3. A summary description of the proposed voluntary cleanup project including the following information:**

1. Source(s) of contamination;
2. Exposure pathways;
3. Need for additional investigation (e.g., sampling), if applicable;
4. Proposed cleanup criteria;
5. Proposed remedial alternatives;
6. Map depicting areas of the property to be remedied; and
7. Future land use of the property.

**XIII. OVERSIGHT COSTS**

The application must be accompanied by an initial application fee of \$6,000, or a \$2,000 fee for each application submitted subsequent to the initial application for the same property, or a \$2,000 fee for each application submitted subsequent to the initial application for contiguous or adjacent properties that are part of the same planned unit development or a similar development plan. The appropriate application fee shall be made payable to the Voluntary Cleanup Fund and will be used by the Department for activities related to the review of proposed voluntary cleanup projects and the direct administrative oversight of voluntary cleanup projects.

*(Please note that if the application is accepted and a response action plan is approved, the participant will be required to file a performance bond or other security with the Department prior to commencement of any work on the property.)*

**XIV. STATEMENT OF CERTIFICATION**

**“I certify under penalty of law that the information provided in this application is, to the best of applicant’s knowledge and belief, accurate and complete. Applicant is aware that there are significant penalties for falsifying any information required by the Department under Title 7, Subtitle 5 of the Environment Article, Annotated Code of Maryland, Voluntary Cleanup Program, and that the information in this application is required for the Voluntary Cleanup Program authorized by Title 7, Subtitle 5 of the Environment Article, Annotated Code of Maryland.**

**I certify I am an authorized representative of the applicant.**

**I certify that all information on environmental conditions relevant to the property and known to the applicant is provided as part of this application.”**

**Printed Name** \_\_\_\_\_ **Title** \_\_\_\_\_

**Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

*(Please note that another signed Statement of Certification must accompany any documents, maps, reports, or other information submitted to the Department subsequent to the initial application. Multiple items can be submitted under a single Statement of Certification; however, an accurate description of the items being submitted should be included in the cover letter.)*

*VCP Application Attachment I*

**Maryland Department of the Environment  
Voluntary Cleanup Program**

**Application Fee Form**

**This form must be completed and mailed with the appropriate applicable fee(s) to the following address, except as noted below\*:**

Maryland Department of the Environment  
P.O. Box 1417  
Baltimore, Maryland 21203

**Please indicate which fees are included and make the check payable to the “Voluntary Cleanup Fund.”**

- \$6,000 initial application fee
- \$2,000 application fee for a subsequent application for the same property
- \$2,000 application fee for a contiguous or adjacent property that is part of the same planned unit development or a similar development plan
- \$2,000 fee for expedited inculpable person approval (\*please send payment directly to MDE/VCP)
- \$2,000 fee for issuance of a No Further Requirements Determination conditioned on certain use of the property or on the maintenance of certain conditions
- \$2,000 fee for issuance of a Certificate of Completion on the permissible use of the property
- \$2,000 fee for a request to alter a record of determination in the land records for an eligible property with conditions

Applicant's Name: \_\_\_\_\_

Applicant's Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Property Name: \_\_\_\_\_

Property  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Federal Tax Identification No. \_\_\_\_\_

PCA #13758  
AOBJ #5650  
SUFFIX #630

*VCP Application Attachment II*

**INCULPABLE PERSON AFFIDAVIT**

(To Be Completed by Applicants Seeking Inculpable Person Status)

**Affiant's Name and Title:** \_\_\_\_\_  
\_\_\_\_\_

**Property Subject to Voluntary  
Cleanup Program Application** \_\_\_\_\_  
\_\_\_\_\_ (Property Address)

I, \_\_\_\_\_, am over eighteen years of age and competent to testify to the matters set forth in this Affidavit.

**Authorized Representative:** I am presently the \_\_\_\_\_ (title) and an authorized representative of \_\_\_\_\_ (applicant) and I possess the legal authority to make this affidavit on behalf of myself and the Applicant for which I am acting.

**Certification of Property Ownership:**

The Applicant does not currently hold an ownership interest and has never held an ownership interest in the above referenced Property.

**Certification of Position Regarding Environmental Contamination:**

The Applicant has not caused or contributed to a release, discharge or threatened release of any contamination at the above referenced property.

**Certification Regarding Related Entities:**

For the purpose of this "Certification Regarding Related Entities":

- a) shareholder means any shareholder who owns 10 percent or more of a company's stock; and
- b) responsible person means a responsible person as defined in Section 7-201 (x) of the Environment Article of the Annotated Code of Maryland.

The Applicant was incorporated or formed in \_\_\_\_\_ (year) for the purpose of  
\_\_\_\_\_  
\_\_\_\_\_

The Applicant was not organized or established, in part or in whole, to avoid liability as a responsible person pursuant to Sections 7-201 (x) and 7-501 et seq. of the Environment Article of the Annotated Code of Maryland.

The officers, directors and shareholders of the Applicant are not any of the officers, directors and shareholders of the current or any previous owner or responsible person for the above-referenced property.

**Acknowledgement:**

Applicant acknowledges that any fraud or material misrepresentation in this Affidavit shall void inculpable person status, approval letters or certificates of completion issued pursuant to Title 7, Subtitle 5 of the Environment Article.

I acknowledge that this affidavit is made subject to the applicable civil and criminal laws of Maryland including Section 7-267 of the Environment Article of the Annotated Code of Maryland which provides for criminal penalties for false statements in required documents. The Voluntary Cleanup Program application is a document required under Title 7 of the Environment Article of the Annotated Code of Maryland.

I acknowledge that nothing in this affidavit shall be construed to supersede, amend, modify or waive the exercise of any statutory right or remedy under state law with respect to any misrepresentation made.

I DO DECLARE AND AFFIRM UNDER PENALTY OF LAW, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND CORRECT.

Legal Name of Applicant: \_\_\_\_\_

Signature of Authorized Affiant: \_\_\_\_\_

Authorized Affiant's Name and Title: \_\_\_\_\_

Date of Signature: \_\_\_\_\_

Sworn and subscribed before me this \_\_\_\_ day of \_\_\_\_\_, 200\_\_.

Notary's Signature: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

*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.

**Property Name:** \_\_\_\_\_

**Applicant:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**I. APPLICATION**

**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.

**C. Application Fee**

Please mail the application fee to the address listed in Attachment I of the application.

**D. 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. ENVIRONMENTAL 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: \_\_\_\_\_

**B. Current and Past Uses of the Property**

1. 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: \_\_\_\_\_

2. 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: \_\_\_\_\_

3. Provide an abstract of a property title search summarizing recorded land title records, including records of ownership, leases, land contracts, easements, liens, and other encumbrances on the property.

Location: \_\_\_\_\_

4. Summarize the standard and supplementary historical sources used to determine the history of the property from the present back to the property's first developed use or 1940, whichever is earlier.

Location: \_\_\_\_\_

5. Define the current zoning of the property. Describe any requested changes in zoning and detail the status of the request.

Location: \_\_\_\_\_

**C. Historical Maps and Aerial Photographs**

Provide legible copies of all available historical maps, including Sanborn Fire Insurance Maps, and aerial photographs. The approximate boundaries of the property must be indicated on each historical map and aerial photograph provided to the Department.

Location: \_\_\_\_\_

**D. Summary Review of Historical Site Plans and Interviews**

Summarize the review of historical site plans and interviews with individuals having knowledge of the past use(s) of the property to identify historic on-site work areas, process areas, manufacturing operations, chemical and hazardous waste handling activities, aboveground and underground storage tanks, and spills or releases that may have resulted in environmental contamination at the property.

Location: \_\_\_\_\_

**E. Property Investigations**

1. Discuss the federal and State environmental records, and any additional environmental records reviewed for the assessment.

Location: \_\_\_\_\_

2. Chronologically summarize all environmental property investigations.

Location: \_\_\_\_\_

3. Submit one copy of each environmental report previously prepared for the property, including site assessments, subsurface investigations, and groundwater sampling reports. Include all applicable analytical data reports and quality assurance / quality control documentation for the laboratory analyses. Review these documents to ensure that there are no missing pages, figures, or appendices.

Location: \_\_\_\_\_

**F. Current and Past Uses of Adjoining Properties**

Summarize the historical and current uses of all adjacent properties.

Location: \_\_\_\_\_

**G. Property Hydrology**

Describe the property's topography, surface drainage pathways (including man-made channels and drains) and receiving surface water bodies (e.g., wetlands, seeps, streams, rivers, lakes, ponds). Discuss local surface water uses (e.g., reservoir, recreational, irrigation, commercial).

Location: \_\_\_\_\_

**H. Property Geology and Hydrogeology**

Describe the property's soil conditions, geology (including fill materials), depth to groundwater, groundwater flow direction, and potential subsurface contaminant migration pathways. Discuss regional geologic and hydrogeologic conditions.

Location: \_\_\_\_\_

**I. Scaled Site Plan**

Provide a scaled site plan which clearly shows the legal boundaries and acreage of the property and the locations of all existing buildings, paved areas, monitoring wells, tanks, surface water bodies, rail spurs, and other structures.

Location: \_\_\_\_\_

**J. Site Plan with Utilities**

Provide a site plan showing the approximate location and depth of each water, sanitary, storm sewer, and natural gas pipeline currently on the property. List service providers for each utility.

Location: \_\_\_\_\_

**K. Tax Parcel Map**

Provide a current tax parcel map that clearly defines the property boundaries.

Location: \_\_\_\_\_

**L. Surface Drainage Description and Site Plan**

1. Describe the surface drainage system at the property.

Location: \_\_\_\_\_

2. Provide a site plan that identifies the location of each swale, trench, culvert, catch basin, sewer, drainage pathway, interior drain, and sump on the property and describe the nature and source of the historic and current runoff or release to each identified feature.

Location: \_\_\_\_\_

3. Describe the point of discharge (e.g., a drain field, a named or unnamed surface water body, the municipal sanitary sewer, etc.) for each identified feature.

Location: \_\_\_\_\_

**M. Groundwater Use Investigation**

1. Provide written documentation from the county, municipality, and/or water authority concerning existing potable wells, the availability of municipal water, and potential future groundwater use areas within 0.5-miles of the property boundary.

Location: \_\_\_\_\_

2. Provide a copy of the county and/or municipality water plan map that depicts existing service areas, planned service areas, and no-service-planned areas within a minimum of 0.5-miles from the property boundary.

Location: \_\_\_\_\_

3. Contact the Department's Water Supply Program at 410-537-3702 and Water Rights Division at 410-537-3714 to request a survey for all area wells and other available information pertaining to groundwater use in the vicinity of the proposed property. Please note that commercial information search services do not include sufficient information on municipal and/or domestic wells and are not appropriate substitutes for contacting state and local authorities.

Location: \_\_\_\_\_

4. Locate each identified well (excluding test or observation wells) on a scaled map. If available, provide the permit number, screen depth, and current use of each well. If exact well addresses are unavailable, delineate likely groundwater use areas based on reported street names, subdivision names, and other information available in the well survey and other sources. Provide written documentation from the local health department, engineering department, or water authority, confirming whether or not these wells are being used.

Location: \_\_\_\_\_

**N. Groundwater Contour Plan**

Provide a current (i.e., less than a year old) groundwater contour plan for the site.

Location: \_\_\_\_\_

**O. Future Development Plans**

Provide the anticipated future use of the property and any development plans. Detail any planned future improvements (pavement, landscaped areas, buildings, etc.) and/or any changes in current operations (e.g. number of employees that will work on the property, type of work future employees will perform) anticipated for this property. Discuss any proposed alterations to the property, such as grade changes, demolition of buildings, construction of new structures or additions, extensions of public water or sewer, and installation of storm water management systems.

Location: \_\_\_\_\_

**P. Property Reconnaissance**

Summarize the methodology, limitations, and findings of the property reconnaissance, and discuss the interior and exterior conditions observed at the property and exterior conditions observed on the adjoining properties. The site inspection should verify the location of all areas that could be potential discharge points. The report should also discuss any limiting site conditions that could affect the results of the reconnaissance such as snow cover, thick vegetation, locked buildings, unsafe areas to enter etc.

Location: \_\_\_\_\_

**Q. Phase II Environmental Assessments**

1. Provide a copy of an updated Phase II site assessment for the property.

Location: \_\_\_\_\_

2. Provide a copy of a work plan for Phase II site characterization of the property for review.

Location: \_\_\_\_\_

3. Documentation that sufficient site characterization has been performed to waive Phase II requirement.

Location: \_\_\_\_\_

Any questions regarding the application or requests for a pre-application meeting should be directed to Jim Metz of the Voluntary Cleanup/Brownfields Division at 410-537-3493.



# Maryland Department Of The Environment Voluntary Cleanup Program

## Attachment Two MDE Fixed Laboratory Data Deliverables

	Submit to MDE	Do not submit unless requested by MDE <sup>1</sup>
<b>Data Deliverable Level I:</b>		
Analytical data	X	
Sample collection date	X	
Laboratory receipt date	X	
Laboratory analysis date and time	X	
Laboratory analysis IDs	X	
Sample IDs	X	
Surrogate spike recovery results (GC and GC/MS data)	X	
Copy-of-chain of custody	X	

<b>Data Deliverable Level II:</b>		
Instrument calibration data		X
Method and reagent blank results	X	

<b>Data Deliverable Level III</b>		
Sample preparation/extraction dates	X	
MS/MSD results		X
Initial/continuing calibration verification results		X
Reference standards and I.C.S. recoveries		X
Instrument time specifications for GC/MS analysis		X
Internal standard summaries		X

<b>Data Deliverable Level IV:</b>		
Copies of internal chain-of-custody forms		X
Copies of preparation logs		X
Tentatively Identified Compound (TIC) results <sup>2</sup>	X	
Complete ICP information		X
Raw data		X

<sup>1</sup> The laboratory must be able to provide this information to MDE upon request.

<sup>2</sup> TICs presented in a summary table of the (10) most likely TIC VOCs and (20) most likely TIC SVOCs for each sample ID.





## Maryland Department Of The Environment Voluntary Cleanup Program

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### Attachment Four MDE Screening Sample Collection Protocol

MDE encourages the use of sample-screening technologies to characterize the property. In an effort to keep analytical costs down while completing a thorough site characterization, MDE offers to screen site samples using the XRF, GC/MS, and immunoassay testing equipment owned by MDE. The screening process can greatly reduce analytical costs by reducing the number of samples submitted to a fixed laboratory for certain analytical parameters, such as metals, VOCs, PCBs and cPAHs a subset of SVOCs. The fees charged by MDE are outlined in the “Request for MDE Sample Screening Analytical Services” (See Attachment 3).

**The applicant must sign and return this form, agreeing to pay a separate fee for the cost of sample-screening analyses by MDE. Once the signed form has been submitted, MDE will send an invoice for laboratory costs to the applicant. Sampling cannot be completed until the applicant has paid the invoice.**

Once the samples have been analyzed the results will be submitted to the applicant or the applicant’s consultant. Based on sample screening results, MDE, in conjunction with the applicant, will select 35-50% of the screen samples for fixed laboratory analysis.

A combination of sample screening technology and fixed laboratory sampling can be used to characterize a site while greatly reducing the cost of only using fixed laboratory analytical services. MDE has sample screening capabilities for the analyses of metals, VOCs, PCBs, and cPAHs.

*Note: Sample screening for pesticides is compound specific and requires individual tests kits. However, MDE can perform sample screening analyses for the specific pesticide(s) of concern present at a property if applicant specifically knows what type(s) of pesticide were used. Otherwise samples requiring pesticide analyses must be sent to a fixed laboratory.*

#### Billing

Applicants will be billed directly for analytical costs.

#### Protocol

The following protocol applies to all sample screening services provided by MDE:

- a) The applicant must sign and date the “Request for MDE Sample Screening Analytical Services” (Attachment 3) and return it to the Department.
- b) 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 Monday through Wednesday or Thursdays before 10 am.**

- c) Except for VOC samples, soil samples must be well homogenized in the field prior to being containerized. Please note that dry media are preferred to eliminate matrix interference during XRF analyses.
- d) For metals, PCBs, and cPAH analyses, provide a minimum of 30 grams but not more than 200 grams of soil from each sample depth in one labeled Zip-Loc bag or sample jar. Label each sample and place in a cooler on ice for delivery to the MDE lab. Containers such as Zip-Loc bags and sample jars will not be supplied by MDE. Also, MDE will not provide the weighing device.
- e) For VOC analyses of soils, provide two separate vials; one with 5 grams of soil and one with 10 grams of soil, measured using a 100.0 gram balance or equivalent. Add 10 ml of methanol to the sample with 10 grams soil and shake it vigorously. The other soil aliquot must remain unpreserved and capped. Label the preserved and unpreserved samples and place in a cooler on ice for delivery to MDE lab. *The methanol will be supplied by MDE in pre-measured 10 ml quantities and will be available for pick-up at MDE's offices. Please note that MDE will not provide the weighing device or the VOA vials.*
- f) For VOC analyses of groundwater, provide a minimum of 80 milliliters (i.e. two 40 milliliter glass VOA vials) of groundwater from each sample location. Each groundwater sample must be appropriately preserved with hydrochloric acid. Label the sample and place in a cooler on ice for delivery to MDE lab.
- g) Duplicate soil samples must be collected for each sample screen depth and held by the consultant if confirmatory analysis will be conducted at a fixed laboratory.
- h) MDE is not responsible for the final disposal of the soil. The environmental consultant must make arrangements for soil disposal.



# Maryland Department Of The Environment Voluntary Cleanup Program

## Attachment Five No Further Requirements Determination Sample Letter

MARYLAND DEPARTMENT OF THE ENVIRONMENT  
Waste Management Administration  
Voluntary Cleanup Program

### NO FURTHER REQUIREMENTS DETERMINATION

**Date of Issue:**

**Description of Property**

Name:  
Address:

**Voluntary Cleanup Program Participant**

Name:  
Contact:  
Status:

*This No Further Requirements Determination is issued pursuant to Maryland law authorizing a Voluntary Cleanup Program for properties contaminated by controlled hazardous substances or oil (Section 7-501 et seq. of the Environment Article, Annotated Code of Maryland).*

**The Maryland Department of the Environment, hereinafter referred to as “the Department,” determines it has no further requirements related to the investigation of controlled hazardous substances or oil at the (specify acreage) acre (site name) property, located at the above address in (Town, County), Maryland, if the property is used for Tier (specify 1, 2, 3) purposes and compliance is maintained with the land use requirements specified herein.**

**THE MARYLAND DEPARTMENT OF THE ENVIRONMENT CERTIFIES THAT:**

The Department may not bring an enforcement action against (Applicant) at the eligible property.

(Applicant) is released from further liability for the remediation of the eligible property for those contaminants identified in the environmental assessment of the eligible property. Pursuant to Section 7-506 of the Environment Article, Annotated Code of Maryland, the environmental assessment of the property includes established site assessment standards and follows principles established by the American Society of Testing and Materials that demonstrates to the satisfaction of the Department that the assessment has been conducted in accordance with those standards and principles.

(Applicant) is not subject to a contribution action instituted by a responsible person for the contamination identified in the environmental assessments of the property.

This No Further Requirements Determination does not:

1. Subject to the provisions of Section 7-505 of the Environment Article, Annotated Code of Maryland, prevent the Department from taking action against any person to prevent or abate an imminent or substantial endangerment to the public health or the environment at the above property;
2. Remain in effect if the No Further Requirements Determination is obtained through fraud or material misrepresentation;
3. Affect the authority of the Department to take any action against a responsible person concerning undiscovered contamination; or

4. Affect the authority of the Department to require additional cleanup for future activities at the site that result in contamination by hazardous substances or oil.

### LAND USE CONTROLS

**If this No Further Requirements Determination is conditioned on certain uses of the property or on the maintenance of certain conditions, the participant shall record this No Further Requirements Determination in the land records of the local jurisdiction within 30 days of receipt.**

Check one:

\_\_\_\_\_ This No Further Requirements Determination is not conditioned on certain uses of the property or on the maintenance of certain conditions.

\_\_\_\_\_ This No Further Requirements Determination is conditioned on certain uses of the property (Tier 2A or 3A) or on the maintenance of certain conditions (Tier 1B, 2B or 3B).

**Tier 1 (Residential):** Planned use of the property that allows exposure and access by all populations including infant, children, elderly, and infirmed populations.

- **A (Unrestricted):** No land use controls are imposed on the property. Tier 1A properties typically include single and multi-family dwellings.
- **B (Restricted):** One or more land use controls are imposed as a condition of residential use of the property. Tier 1B properties typically include hospitals and health care facilities, education facilities, day care facilities, playgrounds and other recreational areas.

**Tier 2 (Commercial):** Planned use of the property that allows exposure and access by the general public, workers, and other expected users, including customers, patrons, or visitors. Commercial purposes allow access to the property and duration consistent with a typical business day. Tier 2 properties typically include shopping centers, retail businesses, vehicle service stations, medical offices, hotels, office space, religious institutions, restaurants, and apartment buildings that have commercial use on the first floor.

- **A (Unrestricted):** No land use controls are imposed on the property for commercial use.
- **B (Restricted):** One or more land use controls are imposed as a condition of commercial use of the property.

**Tier 3 (Industrial):** Planned use of the property by workers over the age of 18, adult workers and construction workers, and other potential expected users. Industrial purposes allow access to the property at a frequency and duration consistent with a typical business day. Tier 3 properties typically include manufacturing facilities, maritime facilities, metal working shops, oil refineries, chemical and other material plants.

- **A (Unrestricted):** No land use controls are imposed on the property for industrial use.
- **B (Restricted):** One or more land use controls are imposed as a condition for industrial use of the property.

**Land Use Controls means any restriction or control that serves to protect human health and the environment by limiting use of or exposure to any portion of the property, including water resources. These controls may include:**

- Engineering controls are remedial actions directed toward containing or controlling the migration of contaminants through the environment. These include, but are not limited to, stormwater conveyance systems, slurry walls, liner systems, caps, leachate collection systems, pump and treat systems, and groundwater recovery systems.
- Institutional controls are legal or administrative tools designed to prevent or reduce human or exposure to remaining contamination and to prevent activities that may result in increased exposure to or spread of such contamination.

**LAND USE REQUIREMENTS**

As set forth below, the use of the property is for:

- Restricted Residential (Tier 1B) purposes;
- Restricted Commercial (Tier 2B) purposes; or
- Restricted Industrial (Tier 3B) purposes.

The restricted use of the property requires compliance with the following land use requirements:

**DEPARTMENT NOTIFICATION**

All notifications to the Department required herein shall be in writing and addressed to the attention of the Division Chief, voluntary Cleanup Program, Waste Management Administration, Maryland Department of the Environment, currently located at 1800 Washington Boulevard, Baltimore, Maryland 21230.

**ONE-CALL SYSTEM NOTIFICATION**

If this No Further Requirements Determination is conditioned on certain uses of the property or on the maintenance of certain conditions, the participant shall send a copy of this document to a one-call system, as defined in Section 12-101 of the Public Utility Companies Article. The copy of this No Further Requirements Determination should be sent within 30 days of the effective date to the attention of MISS UTILITY, c/o General Manager, currently located at 7223 Parkway Drive, Suite 100, Hanover, Maryland 21076.

The obligation for the participant to send a copy of the No Further Requirements Determination does not negate the obligation of the owner, as defined in Section 12-101 (f) of the Public Utility Companies Article, to become a member of the one-call system under Title 12 of the Public Utilities Companies Article. Additional information may be obtained by calling 410-712-0056.

**TRANSFER OF OWNERSHIP**

If ownership of the property, or any portion thereof, is transferred, the property owner shall notify the Department at least five (5) business days prior to the transfer. In addition, any successor in interest must submit a written certification to the attention of the Division Chief of the Voluntary Cleanup Program that the successor in interest has a copy of this No Further Requirements Determination, including the land use requirements for the property.

The owner of the property and any successors in interest in the property subject to this No Further Requirements Determination shall continue to be protected from liability in the event of any violation of the conditions placed on the use of this property, provided the owner of the property and any successors in interest did not cause or contribute to the violation.

This No Further Requirements Determination does not prevent the Department from taking action against any person who uses the property for any use other than the use specified herein.

If an owner of the property wants to change the use of the property to a new use that is consistent with the appropriate planning and zoning authority of the appropriate county or municipality, the owner is responsible for the cost of cleaning up the property to the appropriate standard as determined by the Department.

**ANY OTHER USE OF THE PROPERTY OR FAILURE TO COMPLY WITH THE LAND USE CONTROLS SPECIFIED**

**HEREIN MAY RESULT IN THIS NO FURTHER REQUIREMENTS DETERMINATION BECOMING VOID.**

<p><b>(Insert name of Director)</b> Waste Management Administration</p>	<p>Date</p>
---	-------------

STATE OF MARYLAND, \_\_\_\_\_ OF \_\_\_\_\_, TO WIT:

I HEREBY CERTIFY, that on this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_ before me, the undersigned Notary Public of said State, personally appeared (**Insert name of Director**), who acknowledged himself to be the Director, Waste Management Administration, Maryland Department of the Environment, known to me to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained as the duly authorized Director of said Administration by signing his name as Director of said Administration.

WITNESS my hand and Notarial Seal.

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_

**OWNER'S CERTIFICATION AND STATEMENT OF INTENT**

I, \_\_\_\_\_, as the current owner of the property identified in this No Further Requirements Determination, hereby intend that the restrictions on the use of the \_\_\_\_\_ property, as well as the land use requirements set forth in this No Further Requirements Determination, shall run with the land and are binding on all successors and assigns.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Property Owner

\* \* \* \* \*

STATE OF MARYLAND, \_\_\_\_\_ OF \_\_\_\_\_, TO WHIT:

I HEREBY CERTIFY, that on this \_\_\_\_\_ day of \_\_\_\_\_, 2006 before me, the undersigned Notary Public of said State, personally appeared \_\_\_\_\_, who acknowledged himself to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same by signing his name.

WITNESS my hand and Notarial Seal.

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_



## Maryland Department Of The Environment Voluntary Cleanup Program

### Attachment Six Template for Public Notice of Application to the VCP

Upon submission of an application to the Department, the applicant shall post a notice at the property that includes the information contained 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 a minimum 10 business days.

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)*

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 *(10 business 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

Telephone:                410-537-3493

FAX:                        410-537-3472



# Maryland Department Of The Environment Voluntary Cleanup Program

## Attachment Seven Template for Public Notice of a Response Action Plan

### PUBLIC NOTICE OF A RESPONSE ACTION PLAN AND PUBLIC INFORMATIONAL MEETING

*(Name of the Property)*

The property located at *(address of the property)* in *(city/town)*, Maryland has been accepted into Maryland's Voluntary Cleanup Program. A proposed response action plan (RAP) has been submitted to the Maryland Department of the Environment (MDE) for approval. *(Briefly summarize the property's contaminants of concern and affected media.) (Briefly summarize the proposed RAP and how it will address the property's contamination issues.)*

This RAP is based upon future use of the property for *(industrial/commercial/limited residential/residential)* purposes.

Participant: *(Participant's Name)*  
*(Participant's Address)*

Contact: *(Name of Participant's Contact Person)*  
*(Telephone Number of Participant's Contact Person)*

Eligible Property: *(Name/Legal Description of Eligible Property)*  
*(Address of Eligible Property)*

Public Informational Meeting: *(Date and Time of Meeting)*  
*(Location of Meeting)*

Any person wishing to request further information or make comments regarding the proposed RAP must do so in writing. Comments or requests should be submitted to the attention of the Voluntary Cleanup Program project manager, *(Project Manager's Name)*, at the Maryland Department of the Environment, 1800 Washington Boulevard, Suite 625, Baltimore, Maryland 21230; telephone 410-537-3493.

All comments and requests must be received by the Department in writing no later than *(insert due date, which is 30 days after the initial publication date of the notice of proposed Response Action Plan)*.



# Maryland Department Of The Environment Voluntary Cleanup Program

## Attachment Eight Performance Bond Template

### MARYLAND DEPARTMENT OF THE ENVIRONMENT Voluntary Cleanup Program

#### Performance Bond

Total Sum of Bond \_\_\_\_\_ Bond No. \_\_\_\_\_  
This bond assures security and stabilization for the Voluntary Cleanup Program property known as  
[Insert name of property] the "Site") for the participant, [Legal name of Principal]  
[Name, address/location and description of property]

#### KNOW ALL PERSONS BY THESE PRESENTS:

That \_\_\_\_\_ as Principal, and \_\_\_\_\_, a **[State of Incorporation] [Corporation authorized to transact business in the State of Maryland as Surety OR a corporation organized under the laws of the State of Maryland as Surety]**, jointly and severally, are held and firmly bound unto the Maryland Department of the Environment (the "Department"), Voluntary Cleanup Program, as Obligee in the sum of [\_\_\_\_\_ and no/dollars (\$ .00)], lawful money of the United States to the payment of which sum, well and truly to be made, the Principal and Surety bind themselves, their successors, and assigns, jointly and severally, firmly by these presents.

**WHEREAS**, to participate in the Voluntary Cleanup Program (the "Program"), the Principal is required under Section 7-508 of the Environment Article of the Annotated Code of Maryland, to develop and submit for the Obligee's approval a Response Action Plan; and

**WHEREAS**, before the Principal may perform any work upon the Site, the Principal is required to obtain a performance bond ("Bond") or other financial assurance in the amount approved by the Obligee within 10 days after receiving the Obligee's approval of the Reponse Action Plan; and

**WHEREAS**, the Bond shall be in an amount determined by the Obligee to be necessary to secure and stabilize the Site if the Principal does not complete the Response Action Plan; and

**WHEREAS**, pursuant to Section 7-508(d) of the Environment Article, the Bond shall be maintained by the Principal until the earlier of a) the date the Department issues a certificate of completion to the Principal pursuant to Section 7-513 of the Environment Article, Annotated Code of Maryland, or b) sixteen (16) months following the date that the Principal notifies the Department in writing, pursuant to Section 7-512 of the Environment Article, that it is withdrawing from the Program.

**NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH**, that if the above-bound Principal shall fail or refuse, in any respect, to perform, comply or observe (i) the terms, conditions and obligations under the Response Action Plan, (ii) all applicable statutes, ordinances, rules or regulations, pertaining to the Site, and to fully pay, perform, complete and discharge all terms, conditions and obligations thereunder, then the Surety shall:

- (a) fully pay, perform, complete and discharge all terms, conditions and obligations pertaining to the security and stabilization of the Site under the Response Action Plan; and
- (b) indemnify the Obligee against all loss, cost, expense, damage, claim, demand, or action, suit or proceeding against it, which is caused by the Principal's failure, non-compliance with, or breach of (i) any term, condition or obligation for security or stabilization of the Site under the Response Action Plan, or (ii) any judgment, order or decree, pertaining to security or stabilization of this Site under the Response Action Plan, or (iii) any statute, ordinance, rule or regulation pertaining to the security and stabilization of the Site;

provided, however, that nothing herein shall be construed to release, modify or derogate from the primary obligations of the Surety hereunder stated in sub-paragraph(a) of this paragraph.

Upon notification by the Obligeo that the Principal has failed to complete the Response Action Plan or has withdrawn from the Program, performance by the Surety under this Bond shall, at the direction of the Obligeo, include, but not be limited to:

- (a) arranging for the Principal, with the consent of the Obligeo, to perform and complete the Principal's obligations with respect to securing and stabilizing the Site under the Response Action Plan, or under any judgment, order or decree, or under any statute, ordinance, rule or regulation pertaining to security and stabilization of the Site; or
- (b) undertaking to perform and complete the obligations of the Principal with respect to security and stabilization of the Site under the Response Action Plan, itself, through its agents or through independent contractors; or
- (c) arranging for performance of the Principal's actions with respect to security and stabilization under the Response Action Plan as approved by the Obligeo; obtaining bids or negotiated proposals from qualified contractors acceptable to the Obligeo for a contract for performance and completion of the obligation to secure and stabilize under the Response Action Plan or under any judgment, order, decree, statute, ordinance, rule or regulation pertaining to security and stabilization of the Site; arranging for selection of the contractor with the concurrence of the Obligeo; also to be secured with a performance bond executed by a qualified surety, which is equivalent to the bond issued under the Permit.

This Bond is effective as of **[Date Response Action Plan is approved]** and shall expire upon the earlier of the issuance of a certificate of completion or sixteen (16) months from written notification to the Department of withdrawal from the Voluntary Cleanup Program as provided in Section 7-512 of the Environment Article, Annotated Code of Maryland, unless, at least 120 days before the expiration date, the Surety notifies the Obligeo and the Principal by certified mail that the Surety has decided to cancel this Bond. Such cancellation will be effective only on condition that within sixty (60) days following such notice, the Principal provides to the Obligeo substituted security, which is acceptable to the Obligeo in its sole discretion. In the event the Principal fails to provide such substituted security within sixty (60) days following such notice, the Obligeo may make demand upon this Bond in the full amount. The Surety hereby waives notice of amendments to the Response Action Plan, applicable laws, statutes, rules, and regulations and agrees that no such amendment(s) shall in any way modify or release its obligation under this Bond. Release of this Bond shall be conditioned upon receipt by the Surety of a written certificate of completion from an authorized representative of the Obligeo pursuant to Section 7-513 of the Environment Article, Annotated Code of Maryland, that the Principal has satisfactorily fulfilled all obligations under the Response Action Plan, statute, ordinance, rule or regulation pertaining to the Voluntary Cleanup Program.

**PROVIDED**, that irrespective of (i) the number of years this Bond shall continue in force, (ii) the number of premiums that shall be payable or paid or (iii) in the event of any partial payment or succession of payments made hereunder, the Surety shall not be liable hereunder for a larger amount than the amount of this Bond, including but not limited to attorney's fees and other costs of litigation.

**PROVIDED FURTHER**, that this Bond shall be construed as a statutory bond and not as a common law bond, and that to the extent that any payment is required hereunder it shall be deemed a form of performance, which is reasonably incident to satisfying the primary obligation of the Surety hereunder and shall be construed as complying with the requirements of Section 7-501 of the Environment Article, Annotated Code of Maryland, and the provisions of COMAR promulgated thereunder.

All notices or certifications to the Obligeo required hereunder shall be sent by certified mail to:

Director  
Waste Management Administration  
Maryland Department of the Environment  
1800 Washington Boulevard, Suite 625  
Baltimore, Maryland 21230

**IN WITNESS WHEREOF**, the Principal and Surety have executed this Bond and have affixed their respective seals on the date set forth below.

The persons whose signatures appear below hereby certify that they are authorized, respectively, to execute this Bond on behalf of the Principal and Surety.

Signed, Sealed and Dated \_\_\_\_\_

Witness: \_\_\_\_\_

Principal  
By: \_\_\_\_\_

Witness: \_\_\_\_\_

Surety  
By: \_\_\_\_\_

**ACKNOWLEDGED AND ACCEPTED:**

\_\_\_\_\_  
Obligee, Director  
Waste Management Administration  
Maryland Department of the Environment  
1800 Washington Boulevard, Suite 625  
Baltimore, Maryland 21230

[Corporation Seal]

**CORPORATE SURETY(IES)**

[Name and Address]

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

[State of Incorporation]

[Liability Limit]

\$ \_\_\_\_\_

[Signatures]

\_\_\_\_\_  
\_\_\_\_\_

[Name(s) and Title(s)]

\_\_\_\_\_  
\_\_\_\_\_

**Corporate Seal:**

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for the Surety above.]

**Bond Premium:** \$ \_\_\_\_\_



# Maryland Department Of The Environment Voluntary Cleanup Program

## Attachment Nine Certificate of Completion Sample Letter

MARYLAND DEPARTMENT OF THE ENVIRONMENT  
Waste Management Administration  
Voluntary Cleanup Program

### CERTIFICATE OF COMPLETION

**Date of Issue:**

**Description of Property**

Name:

Address:

**Voluntary Cleanup Program Participant**

Name:

Contact:

Status:

*This Certificate of Completion, hereinafter referred to as "Certificate," is issued pursuant to Maryland law authorizing a Voluntary Cleanup Program for properties contaminated by controlled hazardous substances or oil (Section 7-501 et seq. of the Environment Article, Annotated Code of Maryland).*

**THE MARYLAND DEPARTMENT OF THE ENVIRONMENT CERTIFIES THAT:**

The requirements of the Voluntary Cleanup Program response action plan, hereinafter referred to as the "RAP," approved by the Maryland Department of the Environment, hereinafter referred to as "the Department," for the (*insert acreage*)-acre (*insert property name*) property, located at (*insert property address*), (*insert name of city or town*), Maryland (*insert zip code of property*), hereinafter referred to as "the property," have been completed.

(*Insert name of participant*) has demonstrated that implementation of the approved RAP has achieved the applicable cleanup criteria at the property.

The Department may not bring an enforcement action against (*insert name of participant*) at the property.

(*Insert name of participant*) is released from further liability for the environmental cleanup of the contamination identified in the Voluntary Cleanup Program environmental assessment at the property. Pursuant to Section 7-506 of the Environment Article, Annotated Code of Maryland, the Voluntary Cleanup Program environmental assessment at the property is intended to adequately investigate all areas of contamination and potential sources of contamination at the property.

(*Insert name of participant*) is not subject to a contribution action by a responsible person for the contamination identified in the Voluntary Cleanup Program environmental assessments at the property.

This Certificate does not:

1. Prevent the Department from taking any actions against a responsible person to prevent or abate an imminent or substantial endangerment to public health or the environment at the property;
2. Affect the authority of the Department to take any action against a responsible person concerning previously undiscovered contamination at the property;

3. Remain in effect if it was obtained through fraud or material misrepresentation;
4. Affect the authority of the Department to take any action against any person concerning new contamination or exacerbation of contamination at the property;
5. Prevent the Department from taking action against any person who is responsible for long term groundwater well monitoring and maintenance requirements in the RAP;
6. Prevent the Department from taking action against any person who does not comply with the conditions on the permissible use of the eligible property contained in this Certificate; or
7. Prevent the Department from requiring any person to take further action if the property fails to meet the applicable cleanup criteria set forth in the RAP approved by the Department.

### **LAND USES**

**Tier 1 (Residential):** Planned use of the property that allows exposure and access by all populations including infant, children, elderly, and infirmed populations.

- **A (Unrestricted):** No land use controls are imposed on the property. Tier 1A properties typically include single and multi-family dwellings.
- **B (Restricted):** One or more land use controls are imposed as a condition of residential use of the property. Tier 1B properties typically include hospitals and health care facilities, education facilities, day care facilities, playgrounds and other recreational areas.

**Tier 2 (Commercial):** Planned use of the property that allows exposure and access by the general public, workers, and other expected users, including customers, patrons, or visitors. Commercial purposes allow access to the property and duration consistent with a typical business day. Tier 2 properties typically include shopping centers, retail businesses, vehicle service stations, medical offices, hotels, office space, religious institutions, restaurants, and apartment buildings that have commercial use on the first floor.

- **A (Unrestricted):** No land use controls are imposed on the property for commercial use.
- **B (Restricted):** One or more land use controls are imposed as a condition of commercial use of the property.

**Tier 3 (Industrial):** Planned use of the property by workers over the age of 18, adult workers and construction workers, and other potential expected users. Industrial purposes allow access to the property at a frequency and duration consistent with a typical business day. Tier 3 properties typically include manufacturing facilities, maritime facilities, metal working shops, oil refineries, chemical and other material plants.

- **A (Unrestricted):** No land use controls are imposed on the property for industrial use.
- **B (Restricted):** One or more land use controls are imposed as a condition for industrial use of the property.

### **LAND USE CONTROLS**

**Land Use Controls means any restriction or control that serves to protect human health and the environment by limiting use of or exposure to any portion of the property, including water resources. These controls may include:**

- **Engineering controls:** remedial actions directed toward containing or controlling the migration of contaminants through the environment. These include, but are not limited to, stormwater conveyance systems, slurry walls, liner systems, caps, leachate collection systems, pump and treat systems, and groundwater recovery systems.

- **Institutional Controls:** legal or administrative tools designed to prevent or reduce human or exposure to remaining contamination and to prevent activities that may result in increased exposure to or spread of such contamination.

If this Certificate is conditioned on the permissible use of the property for certain purposes, it shall become void if it is not recorded in the land records of the local jurisdiction within 30 days following receipt of the Certificate.

This Certificate is not conditioned on the use of the property for certain purposes.

This Certificate is conditioned on the use of the property as indicated below:

- Restricted Residential (Tier 1B) purposes;
- Restricted Commercial (Tier 2B) purposes; or
- Restricted Industrial (Tier 3B) purposes.

### **LAND USE REQUIREMENTS**

**The (insert uses of the property such as restricted residential, restricted commercial and/or restricted industrial) use of the property requires the property owner to maintain compliance at all times with the following:**

*May include, but not limited to, one or more land use requirements, such as:*

**Groundwater**

**Soil Excavation and Disposal**

**Maintenance of Paved and Landscaped Areas**

**Vapor Barrier**

**Long-Term Ground Water Monitoring and Reporting**

### **DEPARTMENT NOTIFICATIONS**

All notifications to the Department required herein shall be in writing and addressed to the attention of the Division Chief, Voluntary Cleanup Program, Waste Management Administration, Maryland Department of the Environment, currently located at 1800 Washington Boulevard, Baltimore, Maryland 21230.

### **ONE-CALL SYSTEM NOTIFICATION**

If this Certificate is conditioned on certain uses of the property or on the maintenance of certain land use requirements, the participant shall send a copy of this document to a one-call system, as defined in Section 12-101 of the Public Utility Companies Article. The copy of this Certificate of Completion should be sent within 30 days of the effective date to the attention of MISS UTILITY, c/o General Manager, currently located at 7223 Parkway Drive, Suite 100, Hanover, Maryland 21076.

The obligation for the participant to send a copy of the Certificate of Completion does not negate the obligation of the owner, as defined in Section 12-101(f) of the Public Utility Companies Article, to become a member of the one-call system under Title 12 of the Public Utility Companies Article. Additional information may be obtained by calling 410-712-0056.

### **TRANSFER OF OWNERSHIP**

If ownership of the property or any portion thereof is transferred, the property owner shall notify the Department at least five (5) business days prior to the transfer. In addition, any successor in interest must submit a written certification to the attention of the Division Chief of the Voluntary Cleanup Program that the successor in interest has a copy of this Certificate of Completion including the physical maintenance requirements for the property.

The participant and any successors in interest in a property subject to a certificate of completion shall continue to be protected from liability in the event of any violation of the conditions placed on the use of the property, provided that the participant and any successors in interest did not cause or contribute to the violation.

### **TRANSFERABILITY**

This Certificate may be transferred to any person whose actions did not cause or contribute to the contamination at the property. To validate a transfer of this Certificate, the transferee must complete a "Certificate of Completion Transfer Affidavit" available from the Department.

This Certificate does not prevent the Department from taking action against any person who uses the property for any use other than the use of the Property as required by this Certificate.

If an owner of the property wants to change the use of the property to a new use and that new use is consistent with the appropriate planning and zoning authority of the appropriate city or municipality, the owner shall be responsible for the cost of cleaning up the property to the appropriate standard as determined by the Department.

**ANY OTHER USE OF THE PROPERTY OR FAILURE TO MAINTAIN COMPLIANCE WITH THE LAND USE REQUIREMENTS SPECIFIED HEREIN MAY RESULT IN THIS CERTIFICATE BEING VOIDED FOR THE CURRENT HOLDER OF THE CERTIFICATE AND FOR ANY OTHER PERSON WITH OWNERSHIP OR CONTROL OF THIS PROPERTY. THIS PROVISION SHALL NOT APPLY TO A PRIOR HOLDER OF THE CERTIFICATE WHO HAS TRANSFERRED THE CERTIFICATE AND RETAINS NO INTEREST IN THE PROPERTY.**

\_\_\_\_\_  
*(Insert name of Director)*, Director  
Waste Management Administration

\_\_\_\_\_  
Date

\*\*\*\*\*

STATE OF MARYLAND, \_\_\_\_\_ OF \_\_\_\_\_, TO WIT:

I HEREBY CERTIFY, that on this \_\_\_\_\_ day of \_\_\_\_\_, (*insert year*) before me, the undersigned Notary Public of said State, personally appeared (*insert name of Director*), who acknowledged himself to be the Director, Waste Management Administration, Maryland Department of the Environment, known to me to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained as the duly authorized Director of said Administration by signing his name as Director of said Administration.

WITNESS my hand and Notarial Seal.

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_



## Maryland Department Of The Environment Voluntary Cleanup Program

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### Attachment Ten Interim Removal Measures (IRM)

IRMs are limited actions that may be performed if MDE determines there is a release or substantial threat of release of controlled hazardous substances (CHS) or oil into the environment that should be removed (COMAR 26.14.02.05A) in order to adequately protect public health and the environment. An IRM is only appropriate at a property that has been accepted into the VCP, or at a property for which a VCP application has been received. An IRM must be approved by MDE as addressing a threat to public health and the environment, and the IRM must be performed under MDE oversight and completed within six months following receipt of the request to perform the IRM. IRM actions must also be consistent with, or not interfere with, any proposed RAP for a property.

MDE considers the following factors when evaluating IRM requests:

- Actual or potential exposure of CHS or oil to nearby human population or the environment; and
- The presence of CHS or oil in drums, barrels, tanks, or other bulk storage containers that may pose a threat of release.

IRM activities may include, but not limited to, any of the following:

- Removal of contaminated soil to reduce the spread of CHS and;
- Temporary drainage controls to prevent precipitation or runoff from entering contaminant source areas and spreading CHS or oil;
- Temporary stabilization of berms, dikes, or other impoundments to maintain integrity of structures;
- Provisions for alternate water supply to reduce risk to public health;
- Removal of drums, barrels, tanks, or other bulk storage containers containing CHS or oil that may pose a threat of release;
- Installation of fences, warning signs, or other temporary access control measures; and
- Other measures judged by MDE to be technically sound and necessary to protect public health and the environment.

The following must be submitted to MDE for review prior to approval of the request to perform an IRM:

- A written request to perform an IRM;
- A health and safety plan; and
- A work plan that clearly defines the scope of the removal to be performed.

## **IRM WRITTEN REQUEST**

Authorization to perform an IRM must be requested by the VCP applicant or participant. A statement of certification, as found in Section XIV of the VCP Application (Attachment 1), must accompany the written request, the IRM work plan, and the health and safety plan.

## **IRM HEALTH AND SAFETY PLAN**

A detailed health and safety plan must be available to MDE prior to approval of an IRM work plan. The health and safety plan must comply with local, State and federal laws and regulations regarding the protection of site workers, the public health and the environment. At a minimum, the plan should reference key regulations that may apply to project activities, such as applicable sections of OSHA regulations safety criteria, 29 CFR 1910 (General Industry – Hazardous Waste Site Operations, Excavations, Personal Protective Equipment, Respiratory Protection) and 29 CFR 1926 (Construction).

The health and safety plan must include, but not limited to, the following:

- Discussion and rationale for PPE and monitoring devices to be used during the IRM activities;
- Description of site controls used to restrict access (i.e. security guards, warning fences) during performance of the IRM;
- Outline of dust abatement/suppression methods that may be implemented during and after excavation activities; and
- Discussion of worker certification requirements for site activities, including handling and transport of hazardous and non-hazardous materials. All on-site workers must comply with OSHA guidelines for managing hazardous and non-hazardous materials. The remedial contractor must also possess the necessary certification for the transport of any controlled hazardous substances.

Although MDE does not approve health and safety plans, this written plan must be established to address health and safety issues for both on-site and potential off-site receptors prior to approval of an IRM request. Pertinent laws and regulations applicable to the scope of work for the project should be referenced.

## **IRM WORK PLAN**

A work plan describing proposed IRM activities must be submitted to MDE for approval. Outlined below is a template for preparing a proposed IRM work plan for removal of contaminated soils. Work plans for IRM activities other than soil removal may have other requirements in addition to those listed below.

**A. Overview and Objectives:** Provide a brief property description and an overview of site conditions.

- Provide a synopsis of previous site investigations pertinent to removal activities.
- Identify on a site map each area of contaminated soil proposed for removal activities.
- Tabulate the concentration and depth of contaminants detected in each contaminated area.
- Estimate the volume of excavated soil for disposal.
- Briefly discuss current land use and future redevelopment plans for the property and include schematic drawings.

**B. Cleanup Level or Removal Standards:** Specify the cleanup level or removal standards that will be used for each media of concern from the list below (see Section 4). MDE will evaluate the selected option and determine if it is appropriate and protective of human health and the environment.

- Uniform numeric risk based standards (MDE Soil & Groundwater Cleanup Standard–August 15, 2001, Update No. 1);
- Measurable standards based on a site specific risk assessment;
- Background levels;
- Federal or State soil standards or water quality standards (i.e. ambient water quality criteria);
- Standards based on federal or State MCLs; and
- Any other federal or State standards.

**C. Soil Excavation:** Describe the aerial and vertical extent of each area of contaminated soil proposed for removal. Describe the type of heavy equipment that will be utilized to remove each hot spot area (i.e. backhoe, tractor). Observations from each excavation should be recorded in an excavation log, including dimensions, detailed lithology, field screening results if applicable, photographs, and visual and olfactory observations.

**D. Field Screening:** If field-testing methods will be used to screen excavated soil, the work plan must identify both the equipment to be utilized and the contaminants of concern. In addition, the plan must discuss instrument calibration requirements. Calibration logs must be maintained and kept on file for reference.

**E. Post-Excavation/Confirmatory Sampling:** The work plan must detail the post-excavation sampling plan and sampling procedures for verifying the successful removal of each area of contaminated soil. A minimum of five (5) post-confirmatory/excavation soil samples (i.e. grab samples) must be collected from each excavated area, one sample from each sidewall and one sample from the base of the excavation. Further excavation must be conducted in areas where post-excavation samples exceed the approved cleanup levels. This iterative approach should continue until post-excavation sampling results confirm that the cleanup level has been achieved.

**F. Soil Management & Disposal:** Describe handling procedures for contaminated material pending the results of post excavation analyses, backfilling activities, and plans for the disposal of the contaminated material.

*Stockpiled Soil:* Soil from each excavation shall be stockpiled separately and secured within the property boundary on six (6) millimeter plastic, completely covered with six (6) millimeter plastic, and anchored to prevent the elements (i.e. weather conditions) and trespassers from disturbing the excavated soils. Proper sediment control measures shall also be implemented. Stockpiled soil shall remain on-site until waste characterization has been completed.

*Staging Areas:* Identify the temporary staging area for each soil stockpile on a site map.

*Waste Characterization:* Describe waste characterization procedures for each stockpile. Prior to reuse or disposal, stockpiles must be characterized by collecting an appropriate number of composite or grab samples, depending on the volume of soil in each stockpile. Each composite soil sample will be composed of three individual grab samples, homogenized according to acceptable field quality

assurance and quality control procedures, and sent to a fixed laboratory for analysis. TCLP analysis must be performed on each sample collected from a contaminated area. The receiving soil disposal facility may require additional laboratory analyses.

The number of samples and the analytical methods required for waste characterization must be specified in the IRM work plan. Based on the results of waste characterization, identify an appropriate hazardous or non-hazardous disposal facility for the transport and disposal of excavated soil. Prior to off-site disposal of contaminated soils, the applicant shall submit the required analytical parameters and the number and type of soil samples required for disposal to the Department for review the proposed disposal facility. The disposal criteria of the proposed receiving facility must be submitted to the Department on the facility's letterhead.

*Disposal of Excavated Material:* All excavated material must be disposed in accordance with applicable local, State and federal laws and regulations.

**G. Backfill Material:** The work plan must document the source of all proposed fill material to be used in the excavated areas on the property. Soil sampling and analytical testing of proposed fill materials may be required to confirm that the fill material meets the applicable IRM cleanup levels.

**H. Decontamination Procedures:** Because the primary objective of the decontamination process is to prevent cross-contamination, the work plan must describe the protocol for decontaminating heavy machinery, reusable sampling materials, field equipment and PPE. The plan shall also include a discussion of the disposable procedures for all sampling materials, field equipment and PPE.

**I. Reporting Requirements:** Upon completion of the IRM, the applicant must provide a final detailed report of all IRM activities. All analytical reports and documentation generated as a result of the performance of the approved IRM must be submitted to MDE for review. This includes manifests for contaminated material (solid, non-hazardous or hazardous) disposed off-site and analytical laboratory reports.

**J. Permits, Notifications, and Contingencies:** The participant shall comply with all local, State, and federal laws and regulations by obtaining all necessary approvals and permits to conduct the activities pursuant to an approved IRM.

- MDE must be notified immediately of any previously undiscovered contamination, changes to the IRM schedule, previously undiscovered storage tanks and other oil-related issues, and citations from regulatory entities related to health and safety practices.
- The work plan must outline procedures for amending the IRM in the event of unexpected conditions such as the discovery of free product or buried tanks.

**K. Schedule:** The work plan must outline a detailed schedule of all the work necessary to implement and complete the approved IRM. Field activities shall be promptly implemented following MDE approval of the IRM work plan. The schedule must specify the dates and time frames for implementing and completing each phase of the IRM work plan and MDE shall be notified of any changes to the implementation schedule. Below is an example of an IRM schedule:

<b>Task</b>	<b>Date</b>
IRM Excavation activities (Contaminated Areas 1 & 2)	Month/Day/Year
Post-confirmatory sampling data	Month/Day/Year
Backfilling activities	Month/Day/Year
Waste characterization sampling data received	Month/Day/Year
Transportation of stockpiled soil off-site for disposal	Month/Day/Year
Submittal of IRM Completion Report	Month/Day/Year

## Frequently Asked Questions on the VCP

### IP Status:

#### **If I purchase a property from a responsible person, either before or after completing the VCP, do I maintain inculpable person status?**

A purchaser becomes an RP if they do not request and receive confirmation of IP status and approval from the VCP or obtain approval of the VCP application including confirmation of IP status prior to taking title to the property.

To obtain expedited IP approval prior to purchasing a property from a RP, the prospective purchaser must file a written request and submit a \$2,000 fee to the VCP.

#### **Once an application has been submitted, how do I obtain an IP status letter?**

The applicant must request an IP status letter in writing and submit an IP affidavit and a chain of title with the application package.

#### **How quickly can I obtain an IP approval letter?**

The VCP must submit a written request for an expedited IP status letter within 5 business days. The fee for expedited IP approval is \$2,000.

#### **How do I request an expedited IP approval?**

The applicant must submit a request letter, a signed inculpable person affidavit, a chain of title for the property, and the \$2,000 fee directly to the Chief of the Voluntary Cleanup Program. The expedited IP approval will stipulate that the IP approval will expire if an application is not submitted within six months following approval.

### Applying the to VCP

#### **Are the RAP public notice requirements, the only public notification requirements for the VCP?**

No. The October 1, 2004 revisions to the statute require the posting of a sign at the property upon submittal of the application. The sign must be posted at the property for a minimum of 30 days. Acceptable language for the sign is available in the guidance document. The application cannot be approved until the sign has been posted and the public comment period has expired.

### Sample Collection

#### **Do we need to collect QA/QC samples?**

The VCP recommends collection of QA/QC samples.