Division of Environmental Remediation

## VOLUNTARY CLEANUP PROGRAM GUIDE

#### **DRAFT**



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New York State Department of Environmental Conservation
GEORGE E. PATAKI, Governor
ERIN M. CROTTY, Commissioner

### PROPOSED VOLUNTARY CLEANUP PROGRAM GUIDE SUBMITTING COMMENTS

The New York State Department of Environmental Conservation is accepting comments on this draft guidance document from all interested parties until June 28, 2002. Written comments may be submitted to the Department at the following address:

NYS Department of Environmental Conservation Attn. Andrew English 625 Broadway Albany, New York 12233-7017

Phone: 518-402-9671 Fax: 518-402-9679

Written comments may also be sent via email to ajenglis@gw.dec.state.ny.us

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#### **NOTICE**

This reference document is not a statute or regulation, and it does not create legally binding obligations on any person, including employees of New York State, nor does it create a waiver for any person from any obligations created by applicable state and/or federal law. This guidance may be subject to change at the discretion of the Department.

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#### SECTION 1 PURPOSE AND GOALS OF PROGRAM

New York established its Voluntary Cleanup Program (VCP) to address the environmental, legal, and financial barriers that often hinder the redevelopment and reuse of contaminated properties. The VCP was developed to enhance private sector cleanups and to reduce the development pressures on "Greenfield" sites. This Program Guide has been prepared to help prospective Volunteers and other interested parties understand the goals and requirements of New York's VCP and to have a reference document that explains the process for completing a voluntary cleanup project.

New York's VCP is a cooperative approach among the New York State Department of Environmental Conservation (the Department), the New York State Department of Health (NYSDOH), and Volunteers to investigate and/or remediate contaminated sites and return these sites to productive use. Under the VCP, a Volunteer enters into a Voluntary Cleanup Agreement (VCA) with the Department and thereafter submits one or more work plans to investigate and/or remediate a site.

The goal under the VCP is to remediate the site to a level that is protective of public health and the environment for the Contemplated Use of the property (see §3.4). When the Volunteer completes remediation, the Department provides a release from the Department for remedial liability for the work done and the contaminants addressed, with standard reservations (see §4.4). If the investigation completed under Department oversight and pursuant to a VCA indicates that no remediation is needed to meet the remedial goal of the VCR a release will also be issued. All activities performed under the VCA are carried out under the oversight of the Department. The Volunteer pays the State's oversight costs.

Currently, the Department's ability to administer the VCP is based on the authority found in several parts of New York's Environmental Conservation Law (the "ECL") and Navigation Law ("NL"). These laws differ regarding the treatment of petroleum and hazardous wastes/substances. In particular, hazardous wastes and hazardous substances are managed somewhat differently under the ECL when contrasted with petroleum issues under the NL. These distinctions are described below and are analyzed by the Department's staff during the application process.

The Department has delegated responsibility for managing the VCP to staff in the Divisions of Environmental Remediation (DER) and Environmental Enforcement (DEE). Other program divisions may manage voluntary cleanup projects consistent with these procedures. The NYSDOH is responsible for determining that work completed under VCAs at voluntary cleanup sites is protective of public health and appropriate for the Contemplated Use of the property. Regional staff are typically assigned as Project Managers for the sites and serve as the main contacts for Volunteers and the public. Central Office staff are responsible for providing guidance and oversight to promote statewide consistency in the program. In some cases, staff from Central Office will be assigned to manage a specific voluntary cleanup project.

Information regarding various aspects of the program can be obtained from the Department contacts listed in Appendix A. A list of abbreviations used in this document is given in Appendix F. In this document, the term "VCA" is intended to refer to both agreements and orders.

#### SECTION 2 GENERAL

#### 2.1 Definitions

The following definitions are program-specific and apply only to the VCP as described in this guidance. The decision about whether a Volunteer is a PRP, innocent owner, or innocent non-owner is made by the Department's Project Attorney.

- 2.1.1 "Hazardous Substance Site" one that contains any kind of hazardous waste, hazardous substance (including manufactured gas plant constituents), solid waste, or a <u>mixture</u> of petroleum with either hazardous waste, hazardous substances, or solid waste.
- 2.1.2 "Petroleum Site" one that contains only petroleum contamination.
- 2.1.3 "PRP" Potentially Responsible Party a party, other than an "innocent owner" or "innocent non-owner" as defined below, responsible under law to remediate contamination disposed on, or released from, a property, including a discharger of petroleum.
- 2.1.4 "Innocent Owner" An owner who meets <u>all</u> of the following criteria:
  - a. Acquired title to the property in an already contaminated condition after the cessation of the disposal or discharge of the contamination.
  - b. Did not participate in the operation of the facility from which contamination was released;
  - c. Has not by its own actions caused a release of contaminants into the environment at the site:
  - d. Is not responsible under law to remediate contamination disposed on or released from a property other than as a result of ownership subsequent to the cessation of the disposal or discharge of the contamination.
- 2.1.5 "Innocent non-Owner" someone who is not a PRP under the law and has not acquired title to the property prior to entering into the VCP.

#### 2.2 Eligibility

- 2.2.1 "Eligible Sites" All sites are eligible for the VCP except the following:
  - a. Sites listed as Class 1 in the New York State Registry of Inactive Hazardous Waste Disposal Sites as referenced in 6 NYCRR Part 375-1.8;
  - b. Sites on the United States Environmental Protection Agency's (USEPA) National Priorities List (NPL), other than Onondaga Lake NPL Subsites, as noted on the USEPA's website at http://www.epa.gov/superfund/sites;
  - c. Hazardous waste management sites regulated pursuant to ECL Article 27, Title 9 and the 6 NYCRR Part 370 regulations promulgated pursuant thereto;
  - d. Sites that are currently subject to a Department or USEPA enforcement action may be deemed ineligible by the NYSDEC Project Attorney.

#### 2.2.2 "Eligible Parties" - Any party is eligible to become a Volunteer except those listed below:

- a. A discharger, as defined by law, at a petroleum site other than one who has purchased the site after the cessation of petroleum discharge;
- b. A PRP, other than an "innocent owner" as defined herein, at a Class 2 site listed on the New York State Registry of Inactive Hazardous Waste Disposal Sites;
- A PRP subject to any "enforcement action" requiring the PRP to remove or remediate at the site a hazardous substance. For this purpose, an "enforcement action" commences against a PRP:
  - (i) Under <u>State</u> law: upon issuance of a notification of violation or upon commencement of enforcement under ECL, Article 71 or upon issuance of an accusatory instrument under the Criminal Procedure law;
  - (ii) Under <u>federal</u> law: upon issuance of any notification pursuant to federal law that commences an administrative or judicial proceeding seeking to require the removal or remediation of hazardous substances.

Questions regarding eligibility should be directed to the Department's Project Attorney.

#### 2.3 Permits

At its discretion, the Department may exempt Volunteers from having to obtain permits issued by the New York State Department of Environmental Conservation. All Volunteers must comply with the substantive requirements of the Department's permit programs, but they may not be subject to the procedural requirements of those permit programs. This requires the Volunteer to follow the application process, but no formal permit is issued. The Volunteer must obtain all permits not issued by this Department including federal permits and permits issued by other New York State agencies and local authorities (e.g., the United States Army Corps of Engineers, the New York Department of State, etc.).

#### 2.4 State Environmental Quality Review Act

The following paragraph describes when a voluntary cleanup project is subject to the requirements of the State Environmental Quality Review Act (SEQRA). Regulations on the State Environmental Quality Review (SEQRA) process can be found in 6 NYCRR Part 617.

All <u>investigation activities</u> under the VCP, regardless of the contaminants involved, are exempt from a SEQRA analysis. <u>Remedial activities</u> are subject to SEQRA. Agreements and orders with PRPs and innocent owners under the VCP are considered to fall within the SEQRA exemptions for civil or criminal enforcement proceedings from review. Therefore, only innocent non-owners must complete SEQRA reviews unless the cleanup is part of a project (e.g., a shopping center) that requires State or local review under the SEQRA independent of the VCP. If the issuance of a Negative Declaration is appropriate, it will be issued before the approval of a Remedial Action Work Plan. Fulfilling the SEQRA requirements for a Positive Declaration or Type I project is handled on a case-by-case basis.

#### 2.5 Cost Recovery

Department oversight of VCP projects is required and the Volunteer is responsible for payment of these costs. This also includes any oversight performed by the NYSDOH. The Department, along with the NYSDOH, will review the investigation and remediation reports and determine if the project has been completed satisfactorily. Billing of oversight costs will occur after the work for each phase has been approved. Invoices will be sent to the Volunteer according to the terms specified in the Voluntary Cleanup Agreement (VCA). If past costs are included in the VCA, a bill for these services may be prepared before issuance of the completion letter. The amount of past costs and the duration of the scope of work in the VCA will determine if a separate bill for past costs will be sent to the Volunteer as opposed to sending one invoice which combines both past and oversight costs.

#### 2.6 Operation, Monitoring and Maintenance

- 2.6.1 The need for operation, monitoring, and maintenance (OM&M) at a VCP site is dependent upon site-specific issues. Often, remediation consists solely of a removal action that does not require OM&M beyond the completion of the field work. For projects where the protectiveness of the remedy is dependent on continued OM&M, there must be a formal OM&M Plan with specific requirements including reporting. This includes cases where the effectiveness of the remedy depends upon the use of engineering or institutional controls. The Assignable Release, described in §4.4, is issued contingent upon satisfactory completion of the OM&M Plan OM&M Plans are approved using the same procedure as an investigation work plan (see §6.7). A draft of the OM&M Plan (or an outline for large projects) should be submitted/included at the time of the draft-Remedial Action Work Plan and is typically finalized subsequent to the construction of the remedy.
- 2.6.2 VCAs require that when applicable, Volunteers must submit to the Department an annual certification that institutional or engineering controls required for the remedy are still in place, have not been altered, and are still effective.

#### SECTION 3 APPLICATION PROCESS

#### 3.1 Submission of Applications

Applicants must submit site-specific applications. VCAs will not be executed by the Department without complete applications. See Appendix A for the VCP Application Form, instructions, and contact persons.

- 3.1.1 Two copies of the application with all of the accompanying attachments, including one with original signatures, should be submitted to the Brownfields/Voluntary Cleanup Section (B/VCS), New York State Department of Environmental Conservation, Division of Environmental Remediation, 625 Broadway, Albany, New York 12233-7012.
- 3.1.2 Two copies of the application with all of the accompanying attachments, including one with original signatures, should be submitted to the appropriate Department Regional VCP Coordinator (see Appendix A). If the application will be submitted with large attachments,

additional copies of the attachments may be needed (confirm with Regional VCP Coordinator).

#### 3.2 Site Identification Numbers

3.2.1 The Department will assign an official site name and site identification number upon receipt of the application. The official site name and number should be used on all site correspondence and reports. The site number consists of the alpha "V," a five-digit numeric, and a one-digit region number (e.g., V00123-8).

#### 3.3 Sites with Multiple Contaminants

As indicated by the definitions given in §2.1, projects that are managed as hazardous substance sites include a wide range of contaminant types including hazardous wastes, hazardous substances, solid wastes, and various mixtures. For hazardous substance sites that also have petroleum contamination, they are to be managed as follows:

- 3.3.1 If the petroleum and hazardous substance contamination is distinct (i.e., can be investigated/remediated separately) and the Volunteer is the discharger, the "site" should be defined as the non-petroleum portion of the property only. The petroleum contamination is then managed as a separate project under a stipulation with the Department.
- 3.3.2 If the contamination is distinct but the Volunteer is not the discharger, the petroleum and hazardous substances should be addressed as one hazardous substance project.
- 3.3.3 If the contaminants are not distinct, the site should be managed as a hazardous substance project.

#### 3.4 Contemplated Use

Under the VCP, cleanups must be protective of public health and the environment under the conditions of the Contemplated Use of the site. In the VCP application, the Volunteer is required to specify the Contemplated Use of the site. The VCA or Order shall specify one of four different site use categories, as follows:

- 3.4.1 **Unrestricted** To qualify for the unrestricted use category, site conditions after remediation must be such that no engineering controls, use restrictions, or any other institutional controls are needed to make the site protective of public health and the environment under any use. This also applies to sites where a no further action decision has been made after the site investigation.
- 3.4.2 **Restricted Residential** Residential uses such as homes, apartments, mobile home parks, dormitories, schools, and day-care facilities are allowed but require engineering and/or institutional controls for the use to be protective.
- 3.4.3 **Restricted Commercial** Residential uses are not allowed in this category. Commercial uses are allowed but require engineering controls and/or institutional controls. Some types

- of "commercial" uses that could create "residential" types of exposures are excluded such as day-care and health care facilities.
- 3.4.4 **Restricted Industrial** Residential and commercial uses are not allowed. Industrial uses are allowed but they require the use of engineering controls and/or institutional controls.

#### 3.5 Application Response Letter

The Department's Project Attorney will determine if the site and the Volunteer are eligible for the program. The Department uses best efforts to send an application response letter within 45 days of receipt of a complete application stating if the applicant is eligible to participate in the program. If eligible, the application response letter will include three (3) copies of a VCA for signature by the Volunteer with a request to return the signed agreements within 15 days. If an application is deemed incomplete, the Project Attorney will notify the applicant of the deficiency and request a resubmittal within 15 days.

#### SECTION 4 AGREEMENTS AND CONSENT ORDERS

#### 4.1 General

The Department's Project Attorney provides the Volunteer with a legally enforceable document which in most cases will be a VCA. Occasionally, the Volunteer of the Volunteer stattorney may request that the document be described and written as an "Order," due to various legal, cost recovery, and tax ramifications.

Each VCA generally contains the following paragraphs:

- 4.1.1 Definitions: All VCAs include definitions of the following <u>site-specific</u> terms: Contemplated Use of the site (see §3.4), existing contamination (see §4.3), site description, and Volunteer.
- 4.1.2 Development, Performance and Reporting of Work Plans: This paragraph details the process of submitting and approving work plans, annual reports, and final reports. The process for issuing an assignable release is also described.
- 4.1.3 Progress Reports: This paragraph requires that status reports be submitted (usually on a monthly basis) during the implementation of the work plans and specifies the information that should be contained in the reports.
- 4.1.4 Enforcement: This paragraph states that the VCA is enforceable as a contract and provides a force majeure defense under limited circumstances. The exception to this would be if the instrument is an Order and if so, it would be enforceable like any other Commissioner's Order.
- 4.1.5 Entry upon Site: This paragraph provides the Department with access to the site and site records given reasonable notice. It also gives the Department the right to take samples and make measurements.

4.1.6 Payment of State Costs: The Volunteer commits to reimburse the State as follows:

<u>Volunteer</u>	Reimbursement
•	st costs and all costs associated with negotiating and
imp	plementing the VCA including future oversight costs
Other	All costs associated with negotiating and implementing the VCA including future oversight costs

- 4.1.7 Reservation of Rights: This paragraph reserves rights for the Department with respect to investigation and remediation, summary abatement, and noncompliance. The Volunteer also reserves rights with respect to assertions of remedial liability, due process, and contribution protection under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
- 4.1.8 Indemnification: This paragraph requires the Volunteer to indemnify the State and the Department for all claims except those caused by the State's gross negligence or willful and wanton reckless acts or omissions.
- 4.1.9 Public Notice: This paragraph requires the Volunteer to file a notice with the County Clerk regarding the Volunteer's participation in the VCP. A form notice is attached to the VCA. The Volunteer must also notify the Department of ownership of the site is to be conveyed to a different party.
- 4.1.10 Declaration of Covenants and Restrictions: Within 30 Days after the Department's approval of a Remedial Action Work Plan which relies upon one or more institutional controls, or within 30 Days of the Department's determination that additional remediation is not needed based upon use restrictions, the Volunteer must submit for Department approval a Declaration of Covenants and Restrictions to run with the land which provides for covenants and restrictions consistent with the Work Plan. The Volunteer must file the instrument within 30 Days of the Department's approval of such instrument. The Volunteer must provide the Department with a copy of the instrument certified by the County Clerk (or the City Register) within 30 Days of recording. Restrictions are not required in every case. A form declaration is attached to the VCA. Assignable Releases (see §4.4) are not issued by the Department until it has received proof that an acceptable restriction has been put into place.
- 4.1.11 Communications: This paragraph sets forth the parties who are to receive notices, correspondence, and copies of work plans under the terms of the VCA.
- 4.1.12 Termination of Agreement: The process for terminating a VCA by either the Volunteer (for any reason or no reason) or the Department (only for cause) is explained in this section.
- 4.1.13 Dispute Resolution: A process is established for resolving disputes.

4.1.14 Miscellaneous: This paragraph sets out various terms which are not detailed in the previous paragraphs.

#### 4.2 Preparation of Agreements

The VCA is drafted by the Project Attorney and executed first by the Volunteer and then the Department at the start of the project. Work plans are developed after the Department executes the VCA.

#### 4.3 Existing Contamination

One of the steps involved in creating a site-specific VCA is to develop a definition of "existing contamination." Existing contamination includes contamination known to exist at the site as of the effective date of the VCA and contamination found, or more sufficiently characterized, during implementation of the VCA. The distinction between existing contamination and "covered contamination" is that covered contamination is that which remains on the site as of the date the Department's liability release is issued.

The amount of information available about the nature and extent of existing contamination varies significantly from project to project. To the extent that information is available, the definition of existing contamination should include the following:

- 4.3.1 A list of the class/classes of contaminants such as volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); metals; PCBs; polycyclic aromatic hydrocarbons (PAHs); pesticides; herbicides; petroleum compounds; cyanides; which are present at the site when the VCA is drafted;
- 4.3.2 If the list is limited or there are predominant contaminants, specific contaminants can be listed after the corresponding contaminant class (e.g., "volatile organic compounds (VOCs) including but not limited to trichloroethene (TCE) and vinyl chloride and metals including lead and chromium");
- 4.3.3 A list of the titles, dates, and authors of relevant investigation reports that provide specific information regarding the contaminants listed;
- 4.3.4 In some cases, it is appropriate to include what is known regarding the location of the contamination. This may be needed to clarify and limit the scope of the investigation, remediation, and the area of "covered contamination."

#### 4.4 Assignable Releases

As discussed below, to qualify for an Assignable Release (the Release) under the VCP, the Volunteer must perform substantive work to make the site protective of public health and the environment for the Contemplated Use.

The Department will issue a Release once the Department agrees that the Volunteer has successfully carried out the Remedial Action Work Plan or that no remediation is necessary following an

investigation under the VCP. The Release declares that the Department releases, covenants not to sue, and forebears from bringing any action, proceeding, or suit against the Volunteer, including further investigation or remediation, subject to the reservations set forth below. A Natural Resources Damage (NRD) release will be provided to all Volunteers except PRPs.

A Volunteer must perform substantive work under a VCA to receive a Release from the Department. Work done without Department oversight and approval may not be usable under this program (see §6.3.1) and may not be sufficient to warrant a release from the Department. This includes data from previous investigations, the submission of confirmatory sampling and analytical data after remediation has been performed, as well as the imposition of use restrictions in lieu of investigation and remediation.

The Release is subject to the following reservations for further investigation or remediation the Department deems necessary due to:

- 4.4.1 off-site migration of petroleum (and, if the Volunteer is a PRP, migration off-Site of contaminants resulting in impacts that are not inconsequential to environmental resources, to human health, or to other biota);
- 4.4.2 environmental conditions or information related to the Site which were unknown at the time the Release and Covenant not to Sue is issued and which indicate that the Contemplated Use cannot be implemented with sufficient protection of human health and the environment;
- 4.4.3 Volunteer's failure to implement the VCA to the Department's satisfaction (e.g., not completing OM&M, not paying State costs, not maintaining use restrictions, etc.);
- 4.4.4 fraud committed by the Volunteer in entering into or implementing the VCA;
- 4.4.5 a release or threat of release at the Site of any hazardous substance (as that term is defined at 42 USC 9601[14]) or petroleum (as that term is defined in Navigation Law § 172[15]), other than Covered Contamination; or
- 4.4.6 causing or allowing the use of the Site to change from the Contemplated Use to one requiring a lower level of residual contamination before that use can be implemented with sufficient protection of human health and the environment.

The Release does not affect the Commissioner's summary abatement powers. The Release does not apply to the New York State Department of Law (the Office of the Attorney General), the Spill Fund, or any other State agency. Note that the Attorney General has independent legal enforcement authorities regarding contaminated sites that are separate and distinct from the Department's. If applicable, the topic of obtaining liability releases from the other State agencies should be raised with the Department's Project Attorney or the respective State Agency.

#### 4.5 Signature of Agreement

Once the VCA is in final form, it is executed as follows:

- 4.5.1 The Volunteer signs a minimum of three original copies of the final VCA and submits them to the Department's Project Attorney.
- 4.5.2 The Project Attorney will mail one original copy of the VCA to the Volunteer once it is executed by the Commissioner.

#### SECTION 5 CITIZEN PARTICIPATION

The general requirements for public notice and comment are listed below. However, more extensive citizen participation activities may be undertaken by the Department for sites which have significant public interest. All citizen participation activities are conducted by the Department in cooperation with the NYSDOH. Input is accepted from the Volunteer, when appropriate.

#### 5.1 Investigations

- 5.1.1 A fact sheet will be sent to persons on a mailing list before the start of field work except as set forth in \$511.2. The fact sheet will be sent to adjacent property owners, elected officials, any relevant community groups, and local media. The Department's Project Manager is responsible for developing the mailing list. The fact sheet will describe the site, provide a summary of the purpose and goals of the investigation, include the project schedule and milestones, and list sources of additional information.
- 5.1.2 For Class 2 sites on the Registry of Inactive Hazardous Waste Disposal Sites, the Citizen Participation provisions required in 6 NYCRR Part 375 must be followed. For more information, please consult Part 375 and DER's citizen participation guidance document entitled, Citizen Participation in New York's Hazardous Waste Site Remediation Program: A Guidebook, dated June 1998 or the most recent version.

#### 5.2 Remediation

- 5.2.1 Once a Remedial Action Work Plan is approvable, the Project Manager will issue a notice of the availability of the work plan for review and comment in the Environmental Notice Bulletin (ENB). The notice will provide for a 30-day comment period during which written comments may be submitted to the Department. The Project Manager will be listed as the contact person in the notice.
- 5.2.2 Notice that the Remedial Action Work Plan is available for review will be provided by the Project Manager to each municipality within which the site is located, as appropriate:

County	County Executive
Town	Supervisor
City (if applicable)	Mayor

Village	(if applicable)	Mayo

- 5.2.3 A fact sheet, similar to that described in §5.1.1, will be developed which specifies the start and end dates of the public comment period, where to find and review the project documents, and how to submit comments. A document repository will be established where interested citizens can conveniently review the project work plans.
- 5.2.4 For non-Registry sites, no formal response from the Department is required for comments received. The Project Manager will send an acknowledgment for any written comments received. However, the Department may make revisions to the work plans if appropriate.
- 5.2.5 For sites listed on the Registry of Inactive Hazardous Waste Disposal Sites as Class 2, the Citizen Participation requirements in 6 NYCRR Part 375 will be followed. In addition to the ENB Notice and fact sheet described above, a Proposed Remedial Action Plan (PRAP) and Record of Decision (ROD) must be issued before remediation begins. The start of the public comment period for the PRAP should coincide with the start of the 30-day comment period noticed in the ENB. A public meeting must be held, typically in the middle of the public comment period. After the close of the comment period, a responsiveness summary is prepared and attached to the ROD. The ROD is completed and issued by the Department following established procedures.

#### 5.3 Interim Remedial Measures

- 5.3.1 If a decision is made to implement an Interim Remedial Measure (IRM, see also §7.7), the extent of citizen participation activities to be completed depends upon the scope of the IRM as follows:
  - a. If the scope of the IRM could be all or most of the final remedy for the site, the citizen participation activities should be the same as for a Remedial Action Work Plan (see §5.2).
  - b. If the scope of the IRM will not cover all or most of the final remedy, the fact sheet for the investigation should also describe the IRM activities. If a decision is made to complete an IRM after the investigation fact sheet has been issued, another fact sheet should be issued using the same procedures as for an investigation work plan (see §5.1).

#### 5.4 Waivers

- 5.4.1 The public participation provisions may be waived in instances where the Department has approved the Volunteer's request to take the necessary actions to mitigate a release or a threat of release of contaminants which may be an immediate threat to life, health, property or natural resources.
- 5.4.2 The citizen participation activities outlined above do not preclude the Department from conducting more public outreach that is appropriate for the circumstances. For example, the Department may decide to hold informational sessions with the public to discuss issues regarding a particular site.

#### SECTION 6 INVESTIGATION WORK PLANS

#### 6.1 Goals and Requirements

Volunteers commit to completing the specific activities set forth in the Investigation Work Plan. All Volunteers must complete on-site investigations to define the nature and extent of contamination at the site. In some cases, off-site investigation is needed to provide information needed for the qualitative exposure assessment (see §6.6). PRP Volunteers and Volunteers at petroleum sites are required to complete both on-site and off-site investigations (see also Chart 4).

If hazardous waste has been disposed at the site and the site presents a significant threat (§375-1.4), the Department would normally list the site on the Registry of Inactive Hazardous Waste Disposal Sites (the "Registry"). If a site is being investigated and remediated satisfactorily under the VCP, this listing process is deferred. The deferral is lifted and the site listed on the Registry if the Volunteer elects to terminate the VCA or if the project is not adequately addressing the significant threats in a timely manner. Projects completed satisfactorily will eliminate or mitigate all significant threats removing the need to list the site on the Registry.

Innocent parties are not required to investigate or remediate off-site contamination. If there is a significant threat and off-site investigation and remediation is needed to address the threat, the site will be listed on the Registry. In this case the Department proceeds with the off-site work either with a responsible party or under the State Superfund. Innocent parties may, however, elect to complete an off-site investigation and the remediation of all significant threats associated with the site contamination themselves. In this case, the listing of the site would be deferred as described above.

The main goals of voluntary cleanup investigations include but are not limited to the following:

- 6.1.1 Defining the nature and extent of contamination, both areally and vertically, both on site and, as appropriate (i.e., for PRPs), off site;
- 6.1.2 Identifying contaminant source areas;
- 6.1.3 Producing data of sufficient quantity and quality to support the development of an acceptable Remedial Action Work Plan.

The Volunteer must develop an Investigation Work Plan that directs a systematic investigation of the site including all appropriate media at and around the site as well as any existing structures. The data requirements are site-specific and will be dependent upon many factors including site history, geology, hydrogeology, topography, existence of structures, contaminant type and volume, methods of waste disposal, and past remedial actions. At some sites, existing contamination presents actual or potential threats to fish and wildlife resources. In these cases, the Investigation Work Plan, or subsequent work, must include an evaluation of these impacts or the potential impacts after completion of the remedy.

Work plans must be submitted for review by the Department and the NYSDOH. Once an application to enter the VCP is signed, no investigative work should commence until the Department approvals are obtained.

#### 6.2 Investigation Work Plan Contents

In general, the Investigation Work Plan should include:

- 1. Introduction and Purpose
- 2. Site History and Description
- 3. Objectives, Scope, and Rationale
- 4. Field Activities Plan
- 5. QA/QC Plan
- 6. Health and Safety Plans
- 7. Reporting and Schedule

Appendix E provides additional guidance regarding the contents of the Investigation Work Plan.

#### 6.3 Previous Investigations and Evaluations

- As noted in §4.4, the Volunteer may have performed site investigations at the site before participating in the VCP. For the Department to accept analytical data generated without Department oversight, the Volunteer must show that the results are valid and useable. This is best shown through the submittal of validation reports or Data Usability Summary Reports (DUSRs). The amount of documentation needed to show that the data is usable under the VCP is dependent upon many site-related factors and is determined by the Department's Project Manager.
- 6.3.2 Survey data used to define site boundaries and features or to provide data used for interpreting groundwater conditions must also be shown to be reliable. This may come through the submittal of a certification by a New York State licensed and registered land surveyor, through an agreement to confirm the data under the VCA, or by other methods approved by the Department.
- 6.3.3 The Project Manager may require that any interpretive reports that are submitted in support of the project and were prepared before the drafting of the VCA be supplied with appropriate certifications. The need for and type of certifications is also case-specific.

#### 6.4 Source Areas

Source areas are portions of a site, typically soil or groundwater, that have the potential to release significant amounts of contaminants to the environment. In most cases under the VCP, source areas are treated or removed. In certain instances, source areas are contained rather than removed or treated due to technical or economic factors. Source removal prevents continuing releases of contaminants and reduces the long-term potential for significant exposures to the public and the environment. To identify source areas, the investigation should focus on both a careful review of the site history including any chemical or industrial processes performed, waste disposal practices, drainage structures, chemical storage units, and on-site investigations. The nature and extent of each source area should be carefully defined so that appropriate remedial technologies can be evaluated.

#### 6.5 Quality Assurance/Quality Control (QA/QC)

Analytical data submitted for VCP projects must be shown to be of adequate quality and useable for characterizing the site and selecting a remedy. Minimum requirements for the development of QA/QC plans and for preparing Data Usability Summary Reports (DUSRs) are summarized in Appendix B.

#### 6.6 Qualitative Exposure Assessments

All Volunteers are required to complete qualitative on-site and off-site public health exposure assessments. The purpose of the human health exposure assessments is to qualitatively determine the route, intensity, frequency, and duration of actual or potential exposures of humans to chemicals. It also describes the nature and size of the population exposed to the contaminants that are present at or migrating from a site. A qualitative exposure assessment consists of characterizing the exposure setting, identifying exposure pathways, and evaluating contaminant fate and transport. Some off-site investigation may be required to support the exposure assessment. Guidance on how to complete qualitative public health exposure assessments is provided in Appendix C.

#### 6.7 Approval of Investigation Work Plans

The Regional VCP Coordinator or designee is responsible for the approval of Investigation Work Plans. The approval sequence is as follows:

- 6.7.1 Work plan development between the Department and the Volunteer;
- 6.7.2 Department and NYSDOH review and approve work plan;
- 6.7.3 Regional VCP Coordinator (or designee) sends work plan approval letter to Volunteer.

#### 6.8 Field Oversight

Department Project Managers are responsible for the oversight of field investigations to ensure that investigations are completed according to the Investigation Work Plan. The Project Manager must provide sufficient oversight in order to conclude that the requirements of the VCA and associated work plan(s) have been met. The Project Manager is also responsible for maintaining adequate records to document that the oversight has occurred. This includes ensuring that any data collected during the work is acceptable to form the basis for developing a remedy for the site, if needed.

#### SECTION 7 REMEDY SELECTION

#### 7.1 Goals

7.1.1 The goal of the remedy selection process in the VCP is to remediate the site to a level that is protective of public health and the environment under the conditions of the site's Contemplated Use. As described in §3.4, there are four categories of Contemplated Use; unrestricted, and restricted forms of residential, commercial, and industrial uses. Since the potential for exposure to contaminated media varies under the different site use scenarios,

the levels and location of contamination that can remain at a site depends upon several factors. Examples include potential exposure pathways, potential contaminant release mechanisms, the types and reliability of institutional or engineering controls to be used, and other site-specific factors. As described in §6.4, source areas should generally be removed or treated rather than contained.

- 7.1.2 Once the investigation is complete and if a determination is made by the Department that remediation is necessary, the Volunteer elects to either terminate the VCA or works with the Department's Project Manager to develop an acceptable Remedial Action Work Plan.
- 7.1.3 Decisions regarding the investigation and remediation of the site and off-site areas have implications regarding the site's status on the Registry. These implications are described in § 6.1.
- 7.1.4 The process for selecting and documenting a remedy at a Voluntary Cleanup site is generally described below. See Chart 5 for a discussion of the differing requirements for PRP and non-PRP Volunteers. The remediation of Class 2 sites on the Registry of Inactive Hazardous Waste Disposal sites must meet all of the administrative and regulatory requirements for these sites. In most cases, Remedial Action Work Plans will identify cleanup levels to be attained or the process to be used to determine the cleanup levels. The Remedial Action Work Plan will describe the basis for concluding that the results of the remediation will be protective of public health and the environment.
- 7.1.5 All Remedial Design and Remedial Action Work Plan documents must be signed and sealed by a licensed professional engineer registered in New York State except for certain petroleum tank removals closed in accordance with Department requirements. Section 7.4 describes the engineering evaluation that must be completed.

#### 7.2 Remedial Design vs. Remedial Action Work Plans

As discussed in §7.4, except for Class 2 sites, it is not necessary to submit a feasibility study for a project in the VCP. Also, remedies completed under the VCP do not generally require the preparation of biddable-quality plans and specifications. For simple remedial actions, an approved Remedial Action Work Plan will provide sufficient documentation and control for the project. On a case-by-case basis, the Project Manager may determine that the complexity or sensitivity of the project requires the submittal of a full Remedial Design. Full-scale Remedial Designs may be appropriate when, for example, one or more of the following factors apply:

- 7.2.1 The proposed remedy includes treatment systems where the performance of the remedy is dependent upon the careful specification of sizes, capacities, process control, etc.
- 7.2.2 Implementing the remedy requires specialized engineering or specialized construction (e.g., a barrier wall).
- 7.2.3 Excavations will occur near sensitive environmental receptors (e.g., wetlands) making it necessary to have plan sheets that provide careful vertical and horizontal control; or

7.2.4 Specialized materials of construction need to be used (e.g., seamed geomembrane).

If a full-scale remedial design is needed, it is recommended that a concept-level document be prepared that summarizes the proposed remedy and provides an engineering evaluation of the remedy as described in §7.4 below. The contents of this summary document should be the same as for a Remedial Action Work Plan (see §7.3 below) except that the sections describing the field work, health and safety plans, and QA/QC plans will provide a scope of work rather than a complete description of the activities and requirements. This process allows the Volunteer to obtain Department approval of the approach before investing the resources needed to prepare a full-scale Remedial Design.

#### Remedial Action Work Plan Contents

In general, the contents of a Remedial Action Work Plan should include:

- 1. Introduction and Purpose
  - a. Site Description
  - b. Site History
  - **Previous Investigations** c.
  - d. Summary of Environmental Conditions
  - e. Summary of Remedy
- f. Contemplated Use
  Engineering Evaluation of the Remedy

  Specifications 2.
- 3. Institutional Controls 4.
- 5. Health and Safety Plans
- 6. QA/QC Plan
- 7. Schedule
- 8. Reporting
- 9. **Project Organization**

Health and Safety Plans for site remediation must also address community health and safety issues associated with completing the remedy. One aspect of community health and safety is air monitoring. Appendix D provides guidance on preparing Community Air Monitoring Plans.

Appendix E provides a checklist that provides additional guidance regarding the elements of the Remedial Action Work Plan.

#### Remedial Action Selection (RAS) Report

Except for Class 2 sites, it is not necessary to submit a feasibility study to support a proposed remedy in the VCP. In the VCP, the Volunteer must submit a report that demonstrates through an engineering analysis that the remedy can achieve the cleanup goals for the site. This demonstration also includes an evaluation of the remedy against the factors given in 6 NYCRR 375-1.10(c) (see §7.4.1and following). It is not necessary to evaluate cost effectiveness or community acceptance in this evaluation. Community acceptance is evaluated by the Department. If the Volunteer has information regarding community acceptance for the project, it should be provided in this report.

The results of the engineering analysis is documented in a "Remedial Action Selection" (RAS) Report. The report must be certified by a professional engineer registered in New York State. It can be incorporated into the Remedial Action Work Plan or it may be submitted separately. It is not necessary to submit an RAS for the closure of certain underground storage tanks closed in accordance with approved Department procedures.

For some complex sites (e.g., manufactured gas plants) where the strengths and weaknesses of several alternatives need to be evaluated before selecting a remedy, a "Remedial Alternatives Report" (RAR) should be prepared and submitted in support of a proposed remedy. An RAR is similar to a focused feasibility study and helps both the Volunteer and the Department to identify the best cleanup plan for more complicated sites. The need to complete an RAR is determined on a case-by-case basis by the Department's Project Manager.

The RAS (or RAR when appropriate) must explain **how** the remedy would be protective of public health and the environment. The following sections identify the minimum issues that these engineering evaluations must address.

#### 7.4.1 Protection of Human Health and the Environment

- a. Does the proposed remedy achieve each of the remedial action objectives (RAOs)? Describe.
- b. Identify any special issues regarding protection of human health and the environment not addressed in §7.41.a

#### 7.4.2 Standards, Criteria, & Guidance (SCG)

- a. List all of the major SCGs for the site
- b. Does the proposed remedy comply with all of the SCGs? If not, identify, describe, and discuss.

#### 7.4.3 Short-term Effectiveness & Impacts

- a. Identify the risks to the community, workers, and environment that would result from implementing the proposed remedy.
- b. How will these risks be controlled?
- c. How effective/reliable are the controls?
- d. Will the proposed remedy achieve the RAOs in less than two years? If not, how long will it take?

#### 7.4.4 Long-term Effectiveness & Permanence

- a. Is the proposed remedy permanent or does it rely upon containment?
- b. Will the ability of the remedy to achieve RAOs lessen over time? If there is uncertainty, describe the factors involved.
- c. After completion, will there be any significant threats, exposure pathways, or risks to the public or environment from remaining wastes or treated residuals?

#### 7.4.5 Reduction of Toxicity, Mobility, or Volume

- a. How much of the contamination will be treated for each media (e.g. soil, groundwater, sediment, etc.);
- b. Will the process be complete or partial (quantify)? Is the treatment process reversible?
- c. Will the mobility of contaminants be reduced? Describe any uncertainties.

#### 7.4.6 Implementability

- a. Are there any potential construction and O&M difficulties?
- b. How would these difficulties be overcome?
- c. Are services and materials readily available (consider long-term OM&M also)?
- d. Any there any problems coordinating with other agencies such as obtaining approvals or permits?

#### 7.5 Approval of Remedial Action Work Plans

The approval sequence for Remedial Action Work Plans is as follows:

- 7.5.1 Work plan is developed between the Department and the Volunteer;
- 7.5.2 Department and NYSDOH review and approve work plan;
- 7.5.3 Regional VCP Coordinator (or designee) issues work plan approval letter to Volunteer.

#### 7.6 Construction Oversight

The Department observes construction to ensure that remedies are built and operated according to the Remedial Action Work Plan or remedial design. Although full-time oversight is not required, the Department's Project Manager must provide sufficient oversight to document that the requirements of the VCA and associated work plan(s) have been met. The Project Manager provides a recommendation regarding the issuance of the Release to the Volunteer and is also responsible for maintaining records that serve as the basis for a recommendation regarding the issuance of a Release.

#### 7.7 Interim Remedial Measures (IRMs)

In some cases, site conditions make it appropriate to complete Interim Remedial Measures (IRMs). An IRM is a discrete set of activities which can be undertaken without extensive investigation and evaluation, to prevent, mitigate, or remedy site contamination. Its purpose is to address obvious issues quickly, often in conjunction with site investigation. The process for reviewing, approving, and implementing VCP IRMs is as follows:

7.7.1 IRM work plans are to be developed and submitted to the Department's Project Manager in accordance with the procedures and requirements given in the VCA.

- 7.7.2 If the Project Manager determines that the proposed IRM may constitute all or a significant portion of the final remedy for the site, the review and approval of the IRM work plan will be completed using the same procedures as for a Remedial Action Work Plan, including citizen participation (see §5.2) and having the work plan certified by a professional engineer registered in New York State (see §7.4).
- 7.7.3 If the scope of the IRM is not significant in comparison to the likely remedy for the site, the process for approving, implementing, and documenting an IRM will be the same as for an Investigation Work Plan, including citizen participation (see §5.1).

#### SECTION 8 PROJECT COMPLETIONS, APPROVALS, AND RELEASE LETTERS

#### 8.1 Investigation Reports

A final report must be submitted at the conclusion of the investigation phase of a VCP project. The final report should provide a summary of the work done, the resulting analytical data, engineering and geological interpretations of the data, and the overall conclusions regarding the nature and extent of contamination at the site. Site data should be compared with the Standards, Criteria and Guidelines (SCGs) and/or action levels selected specifically for the site during the work plan development process.

- 8.1.1 The Department's Project Manager determines if the technical requirements of the Investigation Work Plan have been satisfied after reviewing the final investigation report.
- 8.1.2 Based upon information generated during the completion of the investigation, issues regarding the site's status in the Registry of Inactive Hazardous Waste Sites must be reconsidered by the Department, when applicable
- 8.1.3 If an off-site exposure assessment indicates that there may be exposures of concern, the Department will determine a course of action after evaluating the specific circumstances involved.

#### 8.2 Investigation Approvals

Depending upon the need for remediation, two types of approvals can occur after the completion of investigation.

- 8.2.1 For projects where the Department has determined that remediation is necessary, the Regional VCP Coordinator or designee will issue an investigation approval letter to the Volunteer and request the submittal of a Remedial Action Work Plan. If remediation is required and the Volunteer declines to proceed with the cleanup, the investigation report may be approved but the Release will not be issued.
- 8.2.2 If an investigation is completed satisfactorily and the Department concludes that no remediation is needed, the Volunteer will be eligible to receive the Release issued by Department legal staff.

#### 8.3 Remediation Reports

8.3.1 Within 90 days after completion of remediation, the Volunteer should submit a final engineering report and "as-built" drawings that include all changes made to the final design during construction and an OM&M Plan, if appropriate. Except for certain petroleum tank removals, the report, drawings, and certification must be prepared, signed, and sealed by a professional engineer. The certification should include the following language: "I certify that the Remedial Action Work Plan (or Remedial Design) was implemented and that all construction activities were completed substantially in accordance with the Department-approved Remedial Action Work Plan (or Remedial Design) and were personally witnessed by me (or "by a person under my direct supervision")."

#### 8.4 Remediation Approvals

- 8.4.1 The Project Manager will verify that the technical requirements of the VCA and work plan(s) have been satisfied. The issuance of a Release by the Department's legal staff occurs after the final reports are approved.
- 8.4.2 If operation, maintenance, and monitoring (OM&M) of the remedy is needed, a Release will be issued after construction is completed even though the remedial goals have not been fully achieved. If needed, OM&M Plans are approved before the Department issues a Release. As stated in the VCA, the release is issued contingent upon satisfactory completion of any needed OM&M.
- 8.4.3 As required by the VCA, the Volunteer must file an appropriate use restriction (if needed) after the Department's approval of a Remedial Action Work Plan or a determination that no remediation is needed beyond the imposition of site use restrictions. Final remediation reports cannot be approved without evidence that the use restriction has been filed. Failure to maintain the use restriction will void the Release.

## 9

#### Appendix A: VCP Application Form

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

#### **VOLUNTARY CLEANUP PROGRAM APPLICATION**

**Application Instructions** 

The New York State Department of Environmental Conservation's Voluntary Cleanup Program (VCP) application has five sections. Section I asks for information about the site's location; Section II asks for information about the site's current owner and operator; Section III asks for information about the Volunteer; Section IV asks for information about the site's environmental history over the past 50 years; and Section V asks for information on the Contemplated Use of the cleaned-up site.

The application form is designed to be self explanatory, with the following exceptions:

- Leave the "NYSDEC Site No." space blank. This is for Department use only.
- The Certification must be signed by the Volunteer-rather than a representative (e.g., consultant, attorney).
- TYPE OF CONTAMINANTS: Indicate by checking-off the appropriate box(es) whether the known or suspected site contaminants are associated with petroleum only, hazardous substances (including hazardous wastes), manufactured gas-plant-(MGP) waste, or "other" (e.g., construction and demolition debris). If more than one type is present, check as many boxes as necessary to indicate the contaminant types involved. Clarifications about what is known regarding contaminant types can be provided in Section IV.
- Section I. Site Location. The Voluntary Cleanup Agreement between the Volunteer and the Department needs to contain a clear and legally defensible definition of the "Site." Please provide as much information as needed (e.g., tax map identifiers, area map, site plan, survey drawings, metes and bounds, etc.) to create an unambiguous description of the site boundaries. Regarding the "Street or Route No.", if a precise street address is unavailable, enter a brief direction narrative (e.g., ½ mi. North of US Rte. 5 & Wolf Road).

#### Action on the Application

The Department will use the information provided on the VCP application form and from the Department's files to determine an applicant's eligibility for participation in the Program. It also serves as an initial summary of site conditions.

Applicants should prepare four copies of the application with all attachments, two with original signatures. Two sets, one with original signatures should be sent to Chief, Brownfields/Voluntary Cleanup Section, New York State Department of Environmental Conservation, Division of Environmental Remediation, 625 Broadway, Albany, NY 12233-7012. The other two sets (one with original signatures) should be sent to the appropriate DEC Regional VCP Coordinator (see the Regional Office Map included with these instructions).

(rev. 3/02)

The Department will attempt to notify applicants whether or not they are eligible to participate in the program within 45 days of receipt of a <u>complete</u> application. If an application is deemed incomplete, the applicant will be notified of the deficiency and may submit the additional information.

Please note that under certain circumstances, a proposal to remediate a site may require an environmental review under the State Environmental Quality Review Act (SEQRA).

## REVIEW COPY ONLY

# DIRECTORY OF REGIONAL AND CENTRAL OFFICES VOLUNTARY CLEANUP PROGRAM

# NYSDEC CENTRAL OFFICE

Brownfields and Voluntary Cleanup Section Bureau of Program Management Albany, NY 12233-7012 Christine Costopoulos (518) 402-9711 625 Broadway

#### (Herkimer, Jefferson, Lewis Watertown, NY 13601 Oneida, St. Lawrence) State Office Building 317 Washington St. Darrell Sweredoski (315) 785-2513 REGION 6

## S 0 ဖ

## REGION 5

Fulton, Hamilton, Saratoga, (Clinton, Essex, Franklin, Ray Brook, NY 12977 (518) 897-1242 Warren, Washington) Mike McLean Route 86

## REGION 4

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(Albany, Columbia, Delaware, Greene, Montgomery, Otsego, 1150 North Westcott Road Rensselaer, Schenectady, Schenectady, NY 12306 (518) 357-2373 Eric Hamilton Schoharie)

## REGION 3

Sullivan, Ulster, Westchester) (Dutchess, Orange, Putnam, 21 South Putt Corners Rd. New Paltz, NY 12561 (845) 256-3146 Ram Pergadia Rockland,

## (Allegany, Cattaraugus, REGION 9

270 Michigan Avenue Niagara, Wyoming) Buffalo, NY 14203 Chautauqua, Erie, 716) 851-7220 Peter Buechi

## REGION 8

(Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates) 6274 E. Avon-Lima Rd. Avon, NY 14414 585)226-2466 Bart Putzig

Madison, Ouverson Oswego, Tioga, Tompkins)

Syracuse, NY 13204 615 Erie Boulevard

(315) 426-7551

Chenango, Cortland, Madison, Onondaga

Broome, Cayuga,

REGION 7

## New York City) REGION 2

Long Island City, NY 11101 I Hunters Point Plaza Dennis Wolterding (718) 482-4995

## (Nassau, Suffolk) Walter Parish REGION 1

SUNY Campus Building 40 Stony Brook, NY 11790 (631) 444-0240

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#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



#### **VOLUNTARY CLEANUP PROGRAM APPLICATION**

STATEMENT OF CERTIFICATION  I,	(rev. 5/02)
Program application, including any attachments, is, to the best of my knowledge and belief, accurate and complete; and applicant has the necessary funds to undertake the activities proposed to be implemented under this application, if appro    Date	
TYPE OF CONTAMINANTS:	that the
I. SITE NAME AND LOCATION SITE NAME (legal common or descriptive):	
SITE NAME (legal_common_or_descriptive):	er
SITE NAME (legal, common, or descriptive):  SITE LOCATION: Street or Route No.:  CITY/TOWN: COUNTY: ZIP:	
SITE SIZE: (ACRES)  SITE BOUNDARIES: Please attach maps and figures (and survey data if needed) to show the location and boundaries ite.  Do the site boundaries correspond to Tax Map metes and bounds? Yes	es of the
III. VOLUNTEER IDENTIFICATION	
Volunteer's name, address, and phone and fax nos.:  Volunteer's contact's name, address, and phone and fax	x nos.:
Describe Volunteer's relationship, if any, to current owner and current operator (subsidiary, shareholder, partner, etc.). If relationship, put "none":	f no

#### IV. PROPERTY'S ENVIRONMENTAL HISTORY OVER PAST 50 YEARS

- A. To the extent that existing information/studies/reports are readily available to the applicant, attach:
  - a description of the environmental history of the site that includes previous uses of the property, types of operation, chemicals used on the property, by-products or wastes produced by previous activities on-site, and a list of any orders, decrees, or other legal documents regarding violations of the Environmental Conservation Law or equivalent federal environmental statutes;

- a list of previous operators with names, last known addresses and telephone numbers (describe Volunteer's relationship, if any, to each previous operator listed. If no relationship, put "none"). YES \_\_\_\_ NO \_\_\_ B. Is/was the site listed in New York State's Registry of Inactive Hazardous Waste Sites? If yes, the Registry Site Code is/was C. Is the site listed as Class 1 or 2 in New York State's Registry of Inactive Hazardous Waste Sites? YES \_\_\_\_ NO \_\_\_\_ D. Did the Volunteer generate, transport or dispose of, arrange for or cause the generation, YES \_\_\_\_ NO \_\_\_\_ transportation or disposal of hazardous substance on the property? E. Is the site a treatment, storage, or disposal facility (TSDF) subject to corrective action or closure YES \_\_\_\_NO \_\_\_ under permit or order issued under the Department's hazardous waste management regulatory ("RCRA") program? F. Is the site a TSDF operating under interim status under the RCRA program that is subject to YES NO enforcement action leading to the issuance of an order containing a corrective action schedule? G. Have there been any spills or other releases of petroleum at the site that have been reported YES \_\_\_\_NO \_\_\_ to the Department? H. Are any enforcement actions pending against the Volunteer or against the site? YES NO NO YES \_\_\_\_ NO \_\_\_\_ Is the Volunteer or the site the subject of any active consent I. United States Environmental Protection Agency? Briefly describe below the Contemplated Use of the site following cleanup.

- a list of previous owners with names, last known addresses and telephone numbers (describe Volunteer's relationship, if

any, to each previous owner listed. If no relationship, put "none"); and

#### Appendix B: Minimum Requirements for QA/QC

#### Guidance for the Development of Quality Assurance Plans and Data Usability Summary Reports (DUSR)

#### I. General Discussion

- A. Data Quality Assurance/Quality Control: A separate Quality Assurance Project Plan (QAPjP) is not required when the following quality assurance points are included in the Work Plan:
  - 1. <u>Project description and project goals</u> Include the site environmental history and project goals.
  - 2. <u>Project organization</u> Include designation of the Project Manager, Quality Assurance Officer and Field Analyst, if field analysis is planned. These resumes must be included as a Work Plan Appendix.
  - 3. <u>Sampling procedure and equipment decontamination procedures</u> Include a sampling chart that specifies the sample matrix, number of samples, analysis methods and data reporting level. EPA or Department Analytical Services Protocol (ASP) methods are acceptable. Also include a site map that shows proposed sampling sites and previous sampling locations and results.
  - 4. Proposed laboratory. The proposed laboratory must be identified in the Work Plan and it must be NYSDOH-ELAP-certified for the planned laboratory analyses. Ten (10) percent of field screening analyses are to be confirmed by an ELAP certified laboratory. In most cases, the investigation and cleanup confirmation sample analysis reporting level will be DEC ASP Category B deliverables in order to fully evaluate and document the project. This reporting level gives the necessary documentation that will be reviewed to evaluate the usability of the data. It also gives calibration data needed to verify "not-detected" analytes that are possible compounds of concern, as indicated by site history or previous screening level data. Detection limits must be low enough to be compared to applicable standards.

When Category B deliverables are required, the laboratory must be NYSDOH ELAP CLP-certified, since the CLP certification program evaluates the proficiency of the laboratory in the quality control parameters required by the analytical methods and the reporting format for the Category B deliverables package. For sites where the Department already has valid and usable investigative data verified by Category B deliverables, intermediate samples (SPDES, interim remedial measures, construction, and operation and maintenance samples) usually only require a standard, one page analysis report done by an ELAP- certified laboratory.

- 5. <u>Standard Operating Procedures (SOPs)</u> Include SOPs for well construction, sample collection, decontamination procedures, field instruments and field screening methods.
- 6. <u>Data validation</u> While not required, the data should be evaluated according to the Division of Environmental Remediation (DER) Data Usability Summary Report (DUSR) guidelines.

#### II. Data Usability Summary Reports

- A. Background: The Data Usability Summary Report (DUSR) provides a thorough evaluation of analytical data without the costly and time consuming process of third party data validation. The primary objective of a DUSR is to determine whether or not the data, as presented, meets the site/project specific criteria for data quality and data use.
   The development of the DUSR must be carried out by an experienced environmental scientist, such as the project Quality Assurance Officer, who is fully capable of conducting a full data validation.
   Furthermore, the DUSR is developed from a full New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP) Category B or a United States Environmental Protection Agency Contract Laboratory Protocol (USEPA CLP) deliverables package.
- **B.** Review: If the DUSR and the data deliverables package indicates significant problems with some or all of the data in the package, the data should be either rejected or validated to determine if it can be used. This decision will be based upon several factors and should be made with advice from a qualified person in the Department's Quality Assurance Unit. In some cases, the data may be usable for screening purposes only.
- C. Personnel Requirements: The Environmental Scientist preparing the DUSR must hold a Bachelors Degree in a relevant natural or physical science or field of engineering and must submit a resume to the Division's Quality Assurance Unit documenting experience in environmental sampling, analysis and data review.
- **D.** Preparation of a DUSR. The DUSR is developed by reviewing and evaluating the analytical data package. During the course of this review the following questions must be asked and answered:
  - 1. Is the data package complete as defined under the requirements for the NYSDEC ASP Category B or USEPA CLP deliverables?
  - 2. Have all holding times been met?
  - 3. Do all the QC data (i.e., blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data) fall within the protocol required limits and specifications?
  - 4. Have all of the data been generated using established and agreed upon analytical protocols?
  - 5. Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?
  - 6. Have the correct data qualifiers been used?

Once the data package has been reviewed and the questions given above have been answered, the DUSR proceeds to describe the samples and the analytical parameters. Data deficiencies, analytical protocol deviations, and quality control problems are identified and their effect on the data is discussed. The DUSR shall also include recommendations on resampling and/or reanalysis. All data qualifications must be documented following the latest NYSDEC ASP guidelines.

**E. Questions:** Contact the Department's Division of Environmental Remediation Quality Assurance Group with any questions on the preparation of a DUSR.

#### III. Quality Assurance Officer Guidelines

#### A. QAO Description and Requirements

- 1. The Quality Assurance Officer (QAO) is an employee of the same consulting firm generating the work plan and acts in conjunction with the project manager to develop a site-specific quality assurance plan. The QAO must not have another position on the project, such as a project or task manager, that involves project productivity or profitability as a job performance criteria.
- 2. The project QAO must have a minimum of a bachelors degree in chemistry or natural science with a minimum of 20 hours in chemistry.
- 3. The QAO must be proficient in analytical methodology, data interpretation and validation, the development of sampling plans, quality control procedures, and auditing techniques.
- 4. The QAO will assist the project manager in the development of the sampling and analytical portion of the Quality Assurance Project Plan. The QAO or his/her designee shall conduct periodic field and sampling audits, interface with the analytical laboratory to make requests and resolve problems, interface with the data validator, and develop a project specific data usability report. Because on site work may be necessary, verification of completion of the 40-hour OSHA safety training course and 8-hour refresher is required.



#### Appendix C: Qualitative Human Health Exposure Assessments

A qualitative exposure assessment consists of characterizing the exposure setting (including the physical environment and potentially exposed human populations), identifying exposure pathways, evaluating contaminant fate and transport.

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: (1) a contaminant source; (2) contaminant release and transport mechanisms; (3) a point of exposure; (4) a route of exposure; and (5) a receptor population. The source of contamination is the source of contaminant release to the environment (any waste disposal area or point of discharge). If the original source is unknown, it is the environmental medium (soil, air, biota, water) at the point of exposure. Contaminant release and transport mechanisms carry contaminants from the source to points where people may be exposed. The exposure point is a location where actual or potential human contact with a contaminated medium may occur. The route of exposure is the manner in which a contaminant actually enters or contacts the body (i.e., ingestion, inhalation, dermal absorption). The receptor population is the people who are or may be exposed to contaminants at a point of exposure.

An exposure pathway is complete when all five elements of an exposure pathway are documented. A potential exposure pathway exists when any one or more of the five elements comprising an exposure pathway is not documented. An exposure pathway may be eliminated from further evaluation when any one of the five elements comprising an exposure pathway has not existed in the past, does not exist in the present, and will never exist in the future.

To perform a qualitative exposure assessment, site conditions are characterized to evaluate whether a site poses an existing or potential hazard to the exposed of potentially exposed population. Site characterization involves a review of sampling data for environmental media (e.g. soil, surface water, groundwater, air), both onsite and off-site, and an evaluation of the physical conditions of the contaminant sources or physical hazards near the site which may pose an additional health risk to the community. Site contaminants are reviewed, and those selected for further evaluation are identified based upon consideration of the following factors:

- Concentrations of contaminants in environmental media both on-site and off-site;
- Field data quality, laboratory data quality and sampling design; and,
- Comparison of on-site and off-site contaminant concentrations in environmental media with typical background levels.

#### Appendix D: Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

#### Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during <u>non-intrusive</u> activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

#### **VOC Monitoring, Response Levels, and Actions**

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less but in no case less than 20 feet is below 5 ppm over background for the 15 minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
- All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

#### Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

• If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m³ above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration.
- All readings must be recorded and be available for State (DEC and DOH) personnel to review.

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This checklist provides additional guidance regarding the general contents of investigation and remediation work plans for typical VCP sites. This list is not intended to address each issue that may be relevant at specific sites. The Department reserves its right to request additional information in accordance with the Voluntary Agreement.

ok?		<u>Item</u>	<u>Notes</u>		
	Investigation Work Plans				
	•	Have the prior uses/contamination been described?	The Volunteer should identify the prior uses of the site and any specific processes or chemicals that were used. This greatly assists in developing and confirming the scope of work.		
	•	Have the surrounding land uses been described?	This information is needed to support the exposure assessments and the site investigation. It can also influence the types of site use restrictions or controls that may be needed.		
	•	Is the scope adequate to define the nature and extent of contamination?	All investigations must contain reliable information that adequately defines the nature and extent of site contamination and, if applicable, threats to fish and wildlife resources.		
	•	Are adequate methods of investigation proposed?	The methods used to acquire and handle environmental samples and data must be specified (in Standard Operating Procedures, (SOPs)).		
	•	Is there adequate QA/QC?	At a minimum, each work plan must provide sufficient QA/QC procedures (see Appendix B) so that the environmental data acquired during the project will be reproducible, accurate, representative, comparable, and complete.		
	•	Have the source areas been defined?	The scope of the investigation must be sufficient to determine if the site contains "source areas" (see §6.4), and if so, to define their extent.		
	•	Have on & off-site exposure assessments been performed?	All Volunteers must complete on-site and off-site exposure assessments. The work plan should give enough detail to document that the assessment will adequately characterize all actual/potential public health and environmental exposures due to site contamination.		
	•	Have off-site issues been adequately addressed? If not, provide explanation.	Depending upon the Volunteer's status, off-site issues range from completing qualitative exposure assessments to full investigation and remediation. The off-site scope of work must be appropriate for the type of Volunteer and site conditions.		

ok?	k? <u>Item</u>		<u>Notes</u>		
	•	Is a risk assessment needed?	If the results of the exposure assessments will not be sufficient to define site-specific remedial goals, a quantitative risk assessment may be needed.		
	•	Does the work plan provide for adequate documentation and reporting?	The work plan should specify the information that will be included in the final report to ensure that the information supplied will be sufficient for making remedial decisions.		
	•	Is a fish & wildlife impact analysis needed?	A decision must be made by the Department if a site-specific fish and wildlife impact analysis is needed and if so, if the scope given in the work plan is adequate.		
	•	Is there an adequate worker Health and Safety Plan (HASP)?	The Volunteer's consultant is responsible for preparing a worker HASP that meets all regulatory requirements (e.g., OSHA).		
			Investigation Final Report		
	•	Did the investigation substantially comply with the work plan?	This is an overall evaluation of the adequacy of the investigation. If unexpected conditions makes it necessary to do additional work, another work plan should be developed to characterize the new conditions.		
	•	Are any deviations from the work plan sufficiently described?	The significance of any omissions or problems should be evaluated to determine if more work is needed.		
	•	Did the investigation adequately define the nature and extent of the contamination and identify source areas?	The final report should clearly define the contaminants of concern, impacted media, volumes and limits of contamination, concentration ranges, and additional information as needed to define the nature and extent of contamination.		
	•	Does the report include an on-and offsite exposure assessment?	The results of the exposure assessments should be presented with clear conclusions about actual or potentially complete exposure pathways.		
	•	Was a DUSR included with the report?	The DUSR must be complete and indicate if the data is useable.  Problems with the data must be identified and resolved.		
	Remedial Action Work Plan				
	•	Are there adequate remedial goals?	Unambiguous remedial goals for each media must be specified in the work plan which clearly indicate the cleanup standard to be achieved before a final release could be issued to the Volunteer. The basis and/or source of the cleanup standards must be specified.		

ok?		<u>Item</u>	<u>Notes</u>	
	•	Has the remedy been assessed by a PE against the factors listed in §375-1.10(c)(1-6)?	Although a feasibility study is not required for most VCP sites, the Volunteer must support the proposed remedy by showing how the remedy would achieve the objectives as compared against the evaluation factors in 6 NYCRR Part 375 (except cost effectiveness and community acceptance). This should be documented in a report that is prepared and sealed by a professional engineer. Class 2 sites must go through the typical PRAP/ROD process.	
	•	Will the remedy mitigate threats on site and off site?	The Remedial Action Work Plan should identify the threats posed to public health and the environment and explain how the remedy would mitigate those threats.	
	•	Has the obvious contamination been addressed?	Every remedy should halt or prevent significant health and environmental exposures resulting from the release of contaminants.	
	•	Is source control necessary?	If source areas exist at the site, in most cases they should be removed or treated rather than contained.	
	•	Is there adequate OM&M?	If the protectiveness of the remedy relies upon continuing OM&M, there must be a plan that specifies the actions, inspections, and reporting that will occur to ensure that the remedy continues to remain protective.	
	•	Are there adequate site use restrictions?	If the protectiveness of the remedy depends upon site use restrictions such as groundwater or property use restrictions, they must be clearly identified and placed in an enforceable instrument.	
	•	Has adequate post- remediation verification sampling been performed with the appropriate QA/QC?	With some exceptions, post-remediation verification samples are required to demonstrate that the remedial action objectives have been met. Data used to show compliance with the RAOs must be part of a DUSR.	
	•	Adequate worker and community HASPs?	If the remedy could create exposures to the community, a CHASP must be in place. Documentation air monitoring may be necessary. HASPs must be prepared by a competent person.	
		R	emedial Action Final Report	
	•	Did the remediation substantially comply with the work plan?	This is an overall evaluation of the completeness of the remedy in comparison to the requirements of the RAWP.	

ok?	<u>Item</u>	<u>Notes</u>	
	Are any deviations from the work plan sufficiently described?	Any changes from the RAWP must be documented.	
	Were the remedial goals clearly met?	The Report must provide enough information for the Department to determine if the goals have been obtained.	
	Was a DUSR included with the report?	The DUSR must be complete and indicate if the data is useable.  Problems with the data must be identified and resolved.	
	Was the report     certified by a NYS     P.E.? Correct     language?	The report must be certified by an individual/firm (in compliance with the State Education Law). The certification should include the exact language from §7.3.	
	Has the Department received proof of institutional controls?	Evidence that institutional controls are in place must be submitted within 30 days of the Department's approval of the instrument.	
	Does the report contain adequate as- builts?	The Report should contain as-builts as necessary to document the extent and location of the remedial activities.	
	Does the report     contain an adequate     OM&M Plan (if     applicable)?	For remedies that include ongoing OM&M, the report should contain a complete and approvable OM&M Plan.	

Appendix F: List of Abbreviations and Acronyms

-		
B/VCS	Brownfields/Voluntary Cleanup Section	
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	
CFR	Code of Federal Regulations	
CHASP	Community Health and Safety Plan	
The Department	New York State Department of Environmental Conservation	
DEE	Division of Environmental Enforcement	
DER	Division of Environmental Remediation	
DUSR	Data Usability and Summary Report	
ECL	Environmental Conservation Law	
EIS	Environmental Impact Statement	
ENB	Environmental Notice Bulletin	
FS	Feasibility Study	
HASP	Health and Safety Plan	
IRM	Interim Remedial Measure	
MGP	Manufactured Gas Plant	
NL	Navigation Law	
NPL	National Priorities List	
NRD	Natural Resources Damage	
NYSDEC	New York State Department of Environmental Conservation	
NYSDOH	New York State Department of Health	
OM&M	Operation, Monitoring, and Maintenance	
P	Potential	
PAHs	Polycyclic aromatic hydrocarbons	

PRAP	Proposed Remedial Action Plan
PRP	Potentially Responsible Party
QAO	Quality Assurance Officer
QA/QC	Quality Assurance/Quality Control
RA	Remedial Action
RAO	Remedial Action Objectives
RAR	Remedial Alternatives Report
RAS	Remedial Action Selection
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
The Release	Assignable Release
RODY	Record of Decision
SCGs/	Standards, Criteria, & Guidance
SEQR	State Environmental Quality Review
'SEQRA	State Environmental Quality Review Act
SPDES	State Pollution Discharge Elimination System
SOP	Standard Operating Procedure
SVOCs	Semi-volatile Organic Compounds
TCE	Trichloroethene
TSDF	Treatment, storage, and disposal facility
USEPA	United States Environmental Protection Agency
VCA	Voluntary Cleanup Agreement/Order
VCP	Voluntary Cleanup Program
VOCs	Volatile Organic Compounds

Chart No. 1: Definitions

V	Voluntary Cleanup Program Definitions		
HAZARDOUS SUBSTANCE SITE	A site that contains any kind of hazardous waste, hazardous substance (including manufactured gas plant constituents), solid waste, or a <u>mixture</u> of petroleum with either hazardous waste, hazardous substances, or solid waste.		
PETROLEUM SITE	A site that contains <b>only</b> petroleum contamination.		
INNOCENT NON-OWNER	Someone who is not a PRP under the law and has not acquired title to the property prior to entering into the VCP.		

Chart No. 2: Eligibility

Voluntary Cleanup Program-Eligibility Requirements			
ELIGIBLE SITES	All sites except:  1. Sites listed on the Registry as Class 1  2. Sites on the USEPA's NPL, other than Onondaga Lake NPL Subsites  3. Sites regulated pursuant to ECL Article 27, Title 9 and 6 NYCRR Part 370.  4. Sites subject to Department or USEPA enforcement action may not be eligible.		
ELIGIBLE VOLUNTEER	Any party is eligible to become a Volunteer except:  1. A discharger, as defined by law, at a petroleum site other than one who has purchased the site after the design of petroleum discharge.  2. A RRP, other than an "innocent owner" or "innocent non-owner" as defined below, at a Class 2 site listed on the New York State Registry of Inactive Hazardous Waste Disposal Sites.  3. A PRP subject to any "enforcement action" requiring the PRP to remove or remediate at the site a hazardous substance. For this purpose, an "enforcement action" commences against a PRP.  a. Under State law: upon issuance of a notification of violation or upon commencement of enforcement under ECL, Article 71 or upon issuance of an accusatory instrument under the Criminal Procedure Law.  b. Under federal law: upon issuance of any notification pursuant to federal law that commences an administrative or judicial proceeding seeking to require the removal or remediation of hazardous substances.		

Chart No. 3: Permit Requirements

Voluntary Cleanup Program Permit Requirements — All Sites		
All Volunteers	1. At its discretion, the Department may exempt Volunteers from having to obtain permits issued by the Department.	
	2.	All Volunteers must comply with all substantive requirements of the Department's permit programs even though they need not comply with the procedural requirements.
	3.	The Volunteer must obtain all permits not issued by this Department, e.g., federal permits and permits issued by other NYS Agencies.
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Chart No. 4: Investigation Requirements

Voluntary Cleanup ProgramInvestigation* Requirements			
	Hazardous Substances	Petroleum	
PRP	On-site & Off-site Investigation	Not eligible to participate in the program.	
INNOCENT- OWNER	On-site Investigation	On-site & Off-site Investigation	
INNOCENT NON-OWNER			

Note: See §6.1 for a discussion of how the extent of the investigation and remediation of the site impacts the site's status regarding the Registry of Inactive Hazardous Disposal Sites.

\* All investigations include on-site and off-site exposure assessments (see §5.5). Some off-site investigation may be needed to support the exposure assessment.



Chart No. 5: Remediation Requirements

Volun	tary Cleanup Program–Remed	liation Requirements
	Hazardous Substances	Petroleum
PRP (except for a Class 2 site)	<ol> <li>Clean up the site to a level considered protective based on the Contemplated Use</li> <li>Eliminate off-site impacts from on-site sources</li> <li>Remediate all significant off-site threats to human health and the environment attributable to site contamination.</li> </ol>	Not eligible to participate in the program.
INNOCENT- OWNER	level considered protective based on the Contemplated Use 2. Eliminate off-site impacts from on-site sources	1. Clean up the site to a level considered protective based on the Contemplated Use 2. Eliminate off-site impacts from on-site sources 3. Remediate all significant off-site threats to human health and the environment attributable to site contamination.
INNOCENT NON- OWNER		Same as <b>Petroleum Innocent-Owner</b> above, unless benefit to Oil Spill Fund is demonstrated*.

Note: All obvious contamination should be removed and all source areas should be remediated.

<sup>\*</sup> Consult with the Project Attorney to determine how a benefit to the Oil Spill Fund is demonstrated.

Chart No. 6: Release and Covenant not to Sue

Voluntary Cleanup Program Release and Covenant not to Sue				
Hazardous Substances				
Non-PRP (Innocent Owner and Innocent Non- Owner)	The Volunteer and its non-PRP successors and assigns (including in title) receive a DEC release from:  1. Liability to further investigate or remediate "covered contamination" subject to the following reservations:  A. off-site migration of petroleum (and, if the Volunteer is a PRP, migration off-Site of contaminants resulting in impacts that are not inconsequential to environmental resources, to human health, or to other biota);  B. environmental conditions or information related to the Site which were unknown at the time the Release and Covenant not to Sue is issued and which indicate that the Contemplated Use cannot be implemented with sufficient protection of human health and the environment;  C. Volunteer's failure to implement the VCA to the Department's satisfaction (e.g., not completing OM&M, not paying State costs, not maintaining use restrictions, etc.);  D. fraud committed by Volunteer in entering into or implementing the VCA,  E. a release or threat of release at the Site of any hazardous substance (as that term is defined at 42 USC 9601[14]) or petroleum (as that term is defined in Navigation Law § 1/72[15]), other than Covered Contamination; by  F. causing of allowing the use of the Site to change from the Contemplated Use to one requiring a lower level of residual contamination before that use can be implemented with sufficient protection of human health and the environment.  2. Natural Resource damages  Note: revoking the release under 1.E affects the Volunteer, successor or assign who owns the site and those following in the chain of title.			
PRP	Same as above except the reservation under 1.A above is for any contamination migrating off-site whereby the PRP would not receive the Natural Resource Damages Release.			
Petroleum				
Non-PRP (Innocent Owner and Innocent Non- Owner)	Same as Hazardous Substances Non-PRP.			
PRP	Not Eligible to Participate in Program			

Chart No. 7: SEQR

Does SEQR Apply to the Remedial Action? <sup>1</sup>		
	PROJECT WHICH IS OTHERWISE SUBJECT TO SEQR	PROJECT WHICH IS <b>NOT</b> OTHERWISE SUBJECT TO SEQR
$PRP^2$	YES <sup>3</sup>	NO
INNOCENT OWNER	YES <sup>3</sup>	NO
INNOCENT NON-OWNER	$\mathrm{YES}^3$	YES

Note (1): VCP Investigations are exempt from SEQR.

Note (2): Dischargers at sites contaminated with petroleum are not eligible for the VCP.

Note (3): SEQR compliance is required as part of the overall project analysis.



Chart No. 8: Citizen Participation

Voluntary Cleanup Program-Citizen Participation All Contaminants		
Investigation	Preparation and mailing of a fact sheet to adjacent property owners, elected officials, community groups and local media	
Remediation Non-Class 2 site	<ol> <li>Preparation and mailing of a fact sheet to adjacent property owners, elected officials, community groups and local media</li> <li>ENB notice and 30 day comment period</li> <li>Significant comments may result in a revision to the Work Plan</li> <li>An ENB Notice is required for an IRM Work Plan if the IRM could become the final remedy.</li> </ol>	
Remediation In addition to the same activities as Remediation at a		
Class 2 site	Non-Class 2 site:  1. A PRAP must be prepared and released for public comment.	
	2. A 30 day public comment period on the PRAP during which a public meeting is held.	
	3. A summary of all comments received and their responses provided to interested parties and	
	included in ROD.	

All citizen participation activities are to be carried out by Department staff, not the Volunteer. However, the Volunteer can assist, as appropriate.

Chart No. 9: Cost Recovery

Voluntary Cleanup Program-Recovery of State Costs		
	Hazardous Substances or Petroleum	
INNOCENT OWNER and INNOCENT NON-OWNER	<ol> <li>Reimburse the State for all costs in negotiating the VCA; and</li> <li>Reimburse the State for all oversight costs</li> </ol>	
PRP	<ol> <li>Same as above; and</li> <li>All costs associated with the site prior to VCA</li> </ol>	

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