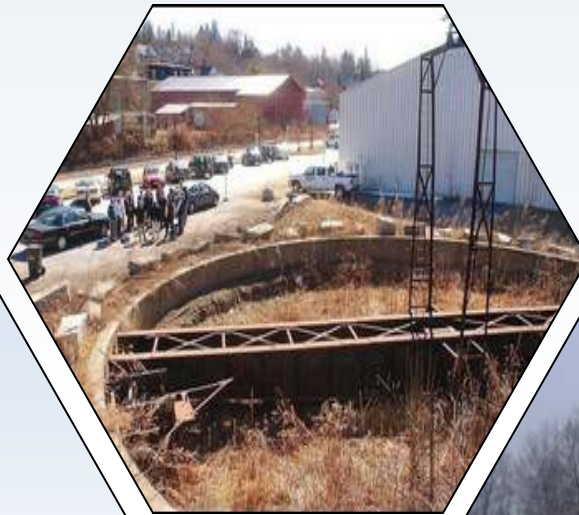


THE VERMONT BROWNFIELDS HANDBOOK

**A Guide to
Navigating
Brownfield
Redevelopment
Projects**



Redeveloping a brownfield can be a daunting task. No two projects are exactly alike, and each project presents unique challenges. This Handbook is intended to help guide developers, property owners, and communities through the brownfield process.



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INTRODUCTION TO BROWNFIELDS REDEVELOPMENT

What is a Brownfield?

The Vermont statutes define a brownfield as **“real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.”** Traditionally, people have used the term “brownfield” to refer to underutilized or vacant industrial/commercial properties, although in reality any property can be a brownfield, just as any brownfield has the potential to be a valuable resource within a community. In addition to mitigating potential threats to human health and the environment, the redevelopment of a brownfield can bring new jobs and services to a community and increase the local tax base. Redeveloping previously utilized properties also discourages new businesses from seeking pristine, undeveloped land, which ultimately helps to prevent urban sprawl.

Benefits of Brownfield Redevelopments

Brownfield redevelopment can provide a number of benefits not only for the surrounding community, but for the property owner and/or developer, as well. These benefits include:

- Reduced property price
- Tax incentives
- Reuse of existing infrastructure (transportation, electric, water/sewer).
- Incentives for solar development projects
- Favorable zoning/land use provisions
- Public support
- Community revitalization/economic vitality

A History of Vermont Brownfields

Strict liability laws related to contaminated property discouraged development on contaminated properties. The Redevelopment of Contaminated Properties Program (RCPP) was established in 1995 to aid developers in acquiring property while providing liability protection from past releases. This program was enhanced in 2007 and is now established under the Brownfields Reuse and Environmental Liability Limitation Act (BRELLA).

In 2002, US Congress passed the Small Business Liability Relief and Brownfields Revitalization Act. This act allows for a defense from the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and encourages brownfield redevelopment. With this act, Congress established grant programs to support and encourage brownfield programs. The VT DEC Brownfields Program was funded in 2002 and has received \$9 Million and has cleaned up over 1,400 acres of land for reuse.

In 2004 the legislature created the Brownfields Revitalization Fund (BRF) and used \$400,000 of state funds as seed money. Funds within the BRF are intended to be used to implement cleanup at brownfield sites. As of 2023, the BRF is still an integral source of cleanup funding throughout the state.

Recent data shows that every dollar of federal funding invested in Vermont leverages approximately \$28 of private investments or other funding for brownfield redevelopment.

In 2021, \$25 Million in new state funding was allocated to the Vermont Brownfields Program, a significant milestone, marking the first substantial investment of state funding to brownfield sites. An additional \$6 Million in state funding was awarded in 2022.

About this Handbook

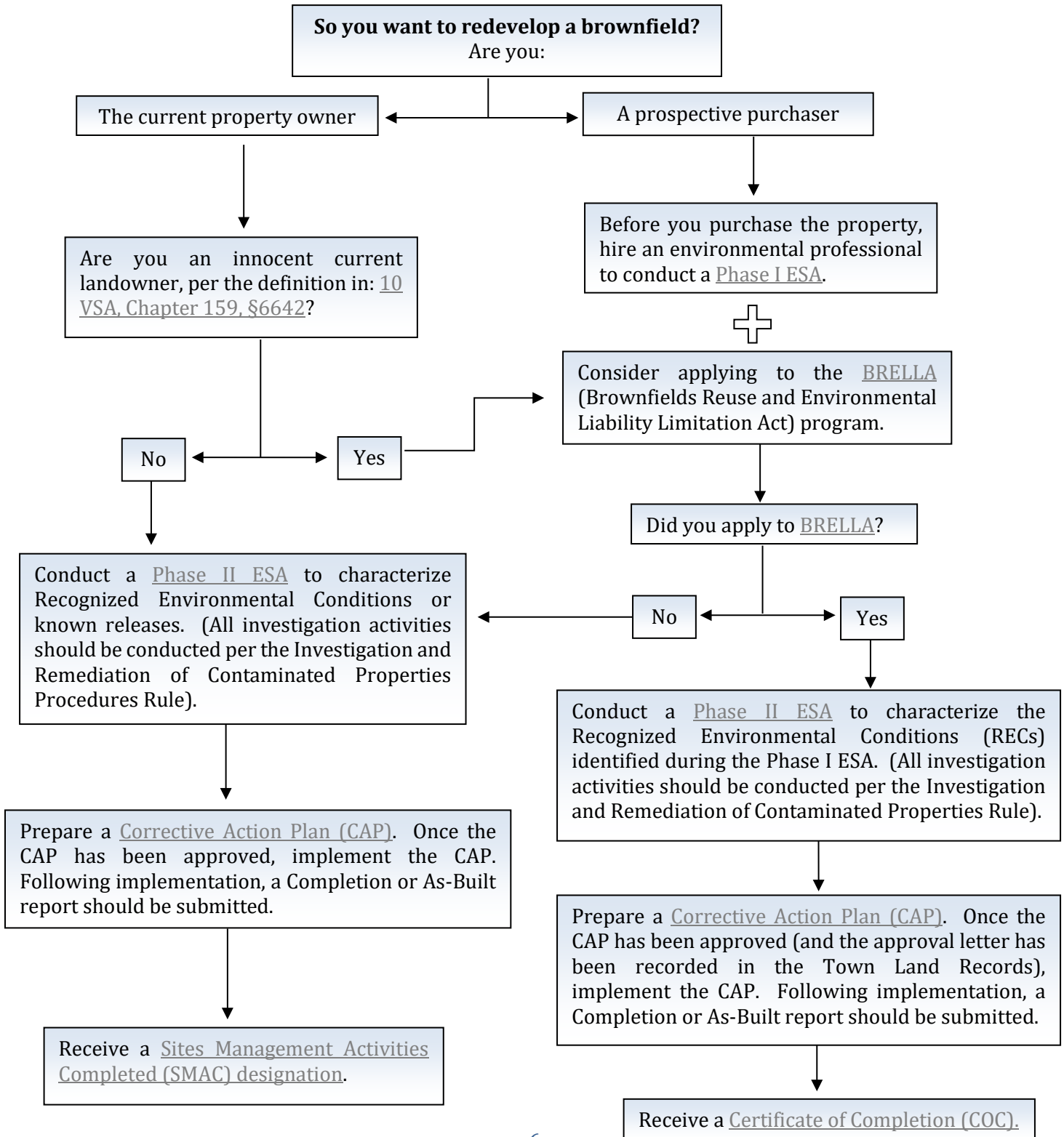
The Vermont Brownfields Program is part of the Vermont Department of Environmental Conservation (VT DEC) Waste Management and Prevention Division (WMPD) Sites Management Section (SMS). VT DEC is the primary regulatory entity responsible for the oversight for site assessment and cleanup of brownfield sites. This Handbook was created by VT DEC as a resource for stakeholders involved in brownfield redevelopment, including property owners, developers, and planning entities.

This Handbook outlines the process for assessment and cleanup at a brownfield, while presenting the resources that will help make the redevelopment vision a success. For example, the liability that comes with taking ownership of potentially contaminated property can be daunting. This handbook describes the process for completing due diligence at a property and how to participate in the State's Brownfields Reuse and Environmental Liability Limitation Act (BRELLA) program.

In addition to working with VT DEC, several other stakeholders may be involved in the process, either for technical assistance or for providing financial resources. Possible partnerships, including the Environmental Protection Agency (EPA), the Agency of Commerce and Community Development (ACCD), municipalities, or one of Vermont's eleven regional planning commissions (RPCs), are discussed later in the document. Initiating such partnerships early in the process will help accomplish goals and achieve milestones in brownfields redevelopment.

Moving Through the Brownfields Program

The VT DEC Sites Management Section recognizes that every brownfield redevelopment project will be unique. However, the process depicted in the flowchart below can be considered a general guideline for moving through the Brownfields Program. Further details are provided later in this document.



BROWNFIELDS AND LIABILITY

If you fall within the chain of ownership for a site, you may be held liable for the remediation of contamination **even if you did not cause or contribute to the contamination in any way**. The chain of ownership also applies to lessees, operators, and generators, both past and present. The only way to protect yourself from strict liability in the State of Vermont is through participation in the Brownfields Reuse and Environmental Liability Limitation Act (BRELLA) program, which is discussed later in the handbook. As noted below, you will need to consider both **federal liability** and **state liability** when approaching a brownfields redevelopment project. While there is a specific program for obtaining state liability protection, property owners need to create a defense to federal liability by conducting the appropriate due diligence and continuing obligations.

Federal Liability

The Small Business Liability Relief and Brownfields Revitalization Act, sometimes referred to as the “federal brownfields law” was passed in 2002 and amended the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to provide federal liability protection for certain landowners and prospective purchasers. Liability protections under CERCLA are typically granted for individuals who are:

- **Innocent landowners.** An innocent landowner must be able to demonstrate that they “did not know and had no reason to know” about any releases or threatened releases of a hazardous substance on the property. Additional criteria are detailed in [CERCLA §101\(40\)](#).
- **Contiguous property owners.** An individual or entity who owns property that is contiguous (or otherwise similarly situated) to and that is, or may be, contaminated by a release or threatened release of hazardous materials originating from a contaminated property that is not owned by the same individual or entity. Additional criteria can be found in [CERCLA §107\(q\)\(1\)\(A\)](#).
- **Bona fide prospective purchasers.** The property must have been purchased after January 11, 2002, and meet the criteria listed in [CERCLA §101\(40\)](#).
- **Involuntary Acquisition.** Government entity that acquired the property involuntarily through bankruptcy, tax delinquency, or abandonment, or by exercising its power of eminent domain.

To qualify as an innocent landowner, contiguous property owner, or bona fide prospective purchaser (BFPP), an individual or entity must conduct an All Appropriate Inquiries (AAI) prior to acquiring a property, AND comply with all Continuing Obligations after acquiring the property.

The standards and practices that comprise AAI are set forth in regulations promulgated in 40 CFR Part 312. EPA recognizes two ASTM International Standards as compliant with the AAI requirements: ASTM E1527-21 “*Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*” and E2247-16 “*Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property*.”

An AAI must be conducted or updated within **one year** prior to acquiring ownership of a property. Certain aspects or provisions of an AAI (i.e., interviews of current and past owners, the government records review, the on-site visual inspection, and searches for environmental cleanup liens) must be conducted or updated within **180 days** prior to acquiring ownership of a property. This means that if you have your Phase I ESA completed but do not purchase the property within six months, you will need to have the Phase I updated before purchase.

After acquisition of the property, landowners **MUST** comply with “continuing obligations” during their property ownership in order to maintain federal liability protections. Continuing obligations include:

1. Provide all legally required notices with respect to the discovery or release of a hazardous substance (report releases to VT DEC);
2. Exercise appropriate care with respect to the hazardous substances by taking reasonable steps to stop or prevent continuing or threatened future release and exposures (RECs), and prevent or limit human and environmental exposure to previous releases (conduct Phase II and corrective action);
3. Provide full cooperation, assistance, and access to persons authorized to conduct response actions or natural resource restoration;
4. Comply with land use restrictions and not impede the effectiveness or institutional controls; and
5. Comply with information requests and subpoenas.

State Liability

Liability protections under Vermont Statute are typically granted for individuals who are:

- **Innocent landowners.** An innocent landowner must be able to demonstrate that they “did not know and had no reason to know” about any releases or threatened releases of hazardous substances on the property. This can be accomplished by conducting a diligent and appropriate investigation of the facility in conformance with the requirements detailed in 10 V.S.A. §6615a. This includes conducting a Phase I ESA.
- **Secured Lender.** This defense to liability is detailed in [10 V.S.A. §6615 \(g\)\(1\)\(2\)](#).
- **Impacted Third Party.** There is no liability for any person who can establish by a preponderance of evidence that a release or threatened release of hazardous material on, under, or from that person’s property and the resulting damages were caused solely by the migration of a release of hazardous materials that did not originate on that person’s property.

In Vermont, the only way to be protected from strict liability is by participating in the **Brownfields Reuse and Environmental Liability Limitation Act (BRELLA) program**. The Brownfields Reuse and Environmental Liability Limitation Act (BRELLA) was established under 10 V.S.A §6641 - §6656. The BRELLA Program is intended to provide participants protection from certain environmental liabilities specified in 10 V.S.A §6615.

Ultimately, the goals of the BRELLA Program are to:

- Reduce the state legal liabilities associated with brownfields for parties that are willing to assume responsibility for the remediation of the property.
- Reuse historically productive properties in an effort to revitalize communities and address the effects of economic shifts, while also maintaining and enhancing existing infrastructure.

- Reduce or eliminate threats to human health and the environment, as caused by contamination originating from hazardous materials.
- Establish cleanup goals for a property, including the development of risk-based restrictions on the future uses of the property.
- Establish a partnership with either the innocent current landowner or prospective purchaser of a brownfield to investigate and remediate a contaminated property.
- Utilize public investments and technical assistance resources to promote successful redevelopment projects.

Participation in the BRELLA Program is open to all prospective purchasers, as well existing property owners that have not contributed to or caused contamination on their property, or otherwise worsened existing contamination. As necessary, participants must be willing to conduct a corrective action in support of their redevelopment and allow the VT DEC Sites Management Section to oversee all work plans for investigation, abatement, removals, remediation, or monitoring efforts. They must also be willing to follow the general obligations pursuant to [10 V.S.A §6644](#).

Benefits of the BRELLA Program

Certain incentives are provided to encourage enrollment in the BRELLA program. They include:

Certificate of Completion (COC). A COC protects BRELLA participants from changes in regulatory standards, additions of new regulated substances, and releases that are not new but were also not identified during the Phase II ESA or during CAP implementation. A COC also provides protection against contribution claims from past owners and offers the applicant a release from liability. A COC is transferable to subsequent property owners. If a Corrective Action Plan does not perform as expected (but has been approved, implemented and COC issued) the state can request any liable person, EXCEPT the person or successor of the person that completed the CAP, to complete the required work; or complete the work with state funds.

Access to funds. Enrollment in the BRELLA program provides access to the Brownfields Revitalization Fund administered by ACCD, offering low interest loans and grants for the implementation of Corrective Action Plans. BRELLA participants will have an advantage when applying for other funding options, as well, including EPA Cleanup Grants and VT DEC Technical Assistance Grants.

Protection from enforcement action. The State may not bring action against an enrollee based on liability pursuant to 10 V.S.A. §6615, provided that the enrollee is working *in good faith** toward meeting the obligations pursuant to 10 V.S.A. §6641 - §6656.

Exemption from the Hazardous Waste Tax. Hazardous Wastes that must be shipped off-site as a result of any Corrective Action activities are not subject to the standard Hazardous Waste Tax.

Release from Natural Resource Damages. BRELLA applicants who have obtained a COC will not be subject to the Natural Resource Damages Assessment (NRDA) Restoration Program.

Some additional benefits apply only when an applicant enters the BRELLA program *before* purchasing a property. Additional benefits for **prospective purchasers** include:

COC upon “Substantial Completion”. A COC can be issued upon substantial completion of the Corrective Action Plan. This means that if the CAP has been implemented, but long-term groundwater monitoring is required, the COC can be issued prior to completion of this activity.

30% cost cap on Corrective Action Plan amendments. A BRELLA participant who entered the program as a prospective purchaser will not be responsible for CAP amendments that increase the costs of completion by more than 30% of the estimated costs.

Early program withdrawal. All BRELLA participant may withdraw from the program at any time, provided they have stabilized the site and continue to comply with the general obligations outlined in 10 V.S.A §6644. If a Corrective Action Plan has already been approved, a participant who enrolled as a Prospective Purchaser may receive personal liability protection from the Secretary of the Vermont Agency of Natural Resources (ANR). Personal liability protection cannot be transferred to subsequent owners.

Contribution protection upon approval of a CAP. A BRELLA participant who entered the program as a prospective purchaser will receive protection against contribution claims from past owners when their Corrective Action Plan is approved.

*The VT DEC generally considers a BRELLA applicant to be working in *good faith* if said applicant is working within the confines of the schedule provided in their program application. If, due to extenuating circumstances, an applicant cannot meet the deadlines established in their application, the VT DEC is willing to accept a revised schedule.

BRELLA Application

Persons who are interested in applying to the BRELLA Program must attend a pre-application meeting. This requirement is intended to provide applicants with information about the BRELLA program, and the Department’s expectations. It also gives applicants an opportunity to discuss their project and get answers to questions they may have about the process of reusing your brownfield.

A non-refundable \$500 application fee is due with the completed application. Applications will be reviewed by the site project manager, and applicants will receive an eligibility determination within 30 days.

An applicant must provide the public with notice of its intent to apply to the Program. The public notice requirement is satisfied by posting a notice in the Town Clerk’s office and by publishing the notice in a newspaper with a general circulation in the community where the brownfield property is located.

The BRELLA Application and Public Notice Form can be found online at <http://dec.vermont.gov/waste-management/contaminated-sites/brownfields/BRELLA>.

Liability Exemptions

RPC/RDC/Municipality Exemption (Voluntary Acquisition)

As established under 10 V.S.A. §6615(d)(4), regional planning commissions (RPCs) and regional development corporations (RDCs), that acquire contaminated property may be exempt from liability. The provisions, documented in Act No. 55 of the 2013 Session (Adj. Session), allow an RDC or RPC to acquire property voluntarily, to market the property for sale to a subsequent purchaser/developer, and to remain in a position outside of the comprehensive liability system that applies to owners of contaminated property. In 2022, Act No. 170 extended this exemption to include municipalities (10 V.S.A. §6615(d)(3)).

To ensure that the liability protections are maintained, the RPC, RDC, or municipality must enter into an agreement with the Secretary of the Agency of Natural Resources (ANR) and Secretary of the Agency of Commerce and Community Development (ACCD) prior to acquiring the property. This may be accomplished by completing the Exemption from Liability Form and submitting it to ANR and ACCD for approval.

Entering into this agreement allows the RPC, RDC, or municipality to take charge of finding a prospective purchaser for the contaminated property after assessing environmental conditions through a site investigation and, if necessary, conducting a cleanup. This information can be furnished to prospective developers and acts as further incentive to redevelop previously utilized properties. The RPC/RDC/Municipality Exemption document specifies the environmental assessment and/or remediation activities required in order to protect a threat to human health or the environment and may also include those activities that the applicant considers necessary to successfully market the property. The applicant must also consult with ACCD on a proposed plan to market the property. Only after implementing a site investigation and taking reasonable steps to market the property can the applicant claim a defense to liability as owner of the site.

Municipality Exemption (Involuntary Acquisition)

A municipality may acquire property involuntarily, through tax delinquency, abandonment, or similar circumstances, and remain in a position outside of the comprehensive liability system that applies to owners of contaminated property. As established under 10 V.S.A. §6615 (d)(3)(C), a municipality must enter an agreement with the Secretary of ANR (before they acquire the property), conduct appropriate investigation or remediation, and subsequently sell the property to a developer. Statutory provisions established under 32 V.S.A. §5259 and §5260 also allow a municipality to access the property during the redemption period in order to conduct a Phase I/II ESA, or cleanup activities, and to also recover any funds spent for these activities if the delinquent property owner tries to redeem the property. Municipalities that wish to enter into an agreement with the Secretary of ANR for an involuntary acquisition must also complete the Exemption from Liability Form.

BROWNFIELDS ASSESSMENT AND CLEANUP PROCESS

Conduct a Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) evaluates the *potential* for contamination to be present on a property. Phase I ESAs are conducted to satisfy the federal All Appropriate Inquiry (AAI) requirements and Vermont Innocent Current Landowner defenses and must be conducted in accordance with the standard practices issued by ASTM International. Phase I ESAs generally consist of the following main components:

- **Records review.** Intended to encompass both current and historical documents pertaining to the property, the records review should identify possible sources of contamination originating from both on and off-site activities. It is especially critical that this review covers documents from the entirety of the historical record for the property, and when possible should include Town Land Records, Manning's City Directories, Sanborn Fire Insurance Maps, and other relevant historic documents. The VT ANR [Natural Resources Atlas](#) online mapping tool is also an important resource. More information on how to utilize these resources is included later in this document.
- **Site reconnaissance.** A visual inspection of both the interior and the exterior of the subject property, conducted by an environmental professional. In particular, the presence of any hazardous materials, underground and aboveground storage tanks, stains, stressed vegetation, odors, sumps and floor drains, heating and cooling systems, and electrical transformers will be noted. General conditions of the site and surrounding properties, including the presence of surface water bodies and other geographic features may be noted as well.
- **Interviews.** At least one individual who is knowledgeable about the property, as well as relevant state and local regulatory officials, are interviewed regarding the site history.

Based on the results of the records review, site reconnaissance, and interviews, a series of **Recognized Environmental Conditions (RECs)** will likely be identified.

ASTM E1527 defines a **REC** as “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property”.

The ASTM standard further specifies that “the term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimus* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimus* are not recognized environmental conditions.” The final Phase I ESA report will include recommendations regarding the steps, if any, that must be taken to address the RECs identified during the course of the Phase I ESA. This information should help assist you in determining your level of comfort moving forward with a redevelopment project on a property.

Once a Phase I ESA has been conducted for the property in question, **a copy of the report should be submitted to the VT DEC Sites Management Section for review.** VT DEC will help you evaluate your Phase I ESA to ensure that it meets the current ASTM standards and will therefore be a suitable prerequisite for certain liability protections and forms of funding assistance. VT DEC will also evaluate the recommendations presented by your qualified environmental professional and discuss next steps.

Conduct a Phase II Environmental Site Assessment

The purpose of a Phase II Environmental Site Assessment (ESA) is to assess the degree and extent of contamination, or lack thereof, on a site. Phase II ESA's will vary by site and the RECs identified during the Phase I ESA. Samples will be collected from potentially contaminated media and submitted for laboratory analysis to confirm the presence of hazardous materials. Materials that are commonly sampled during the course of a Phase II ESA include the following:

- Surficial and subsurface soils
- Shallow or deep soil gas
- Indoor air
- Surface water and sediments
- Groundwater
- Sediments in dry wells, floor drains, and catch basins

Please note that this is not a comprehensive list. For example, indoor air sampling may be conducted if there has been a known indoor air quality issue on the property in the past. Other common activities associated with Phase II ESA's include the completion of geophysical surveys to identify possible buried structures (drums, Underground Storage Tanks, etc.), and hazardous waste inventories.



An example of a Direct Push Technology drilling rig used for collecting subsurface soil samples. www.geoprobe.com



A typical canister used to collect indoor air or soil vapor samples. www.itrcweb.org

Prior to conducting the Phase II ESA, a work plan outlining the proposed investigatory activities must be submitted to VT DEC for review. If funds originating from EPA will be used to complete any portion of Phase II ESA activities involving sampling, the proposed work must be documented in a Quality Assurance Project Plan (QAPP). All QAPPs must be submitted to VT DEC *and* US EPA for review; expect VT DEC and EPA review to take approximately 30 days.

Once your work plan or QAPP has been approved, Phase II ESA activities may be initiated. Following the completion of the Phase II ESA related sampling activities, a report should be prepared for submittal to VT DEC in accordance with the [Investigation and Remediation of Contaminated Properties Rule \(IRule\)](#). Based on the sampling results, this report should include recommendations, as applicable, concerning the need for additional investigatory work and/or potential remedial options. Please refer to Subchapter 3 of the IRule for more information regarding the components of a Phase II ESA/site investigation report that is required by VT DEC*.

*HUD requires a Phase II Environmental Site Assessment (Phase II ESA), conducted in accordance with the most current ASTM standard intended to determine the degree and extent of potential contamination.

Building Materials

In addition to considering remedial alternatives for contaminated environmental media, it is necessary to consider the fact that building materials in on-site structures may be contaminated with Asbestos Containing Materials (ACM), Polychlorinated Biphenyls (PCBs), Lead-Based Paint (LBP), and/or Guano. Buildings constructed or renovated before 1980 have the potential for PCBs to be present in building materials. Buildings constructed before 1978 are likely to contain lead-based paint. If the presence of potentially contaminated building materials was noted during the Phase I ESA, in-depth inventory and sampling of hazardous building materials or indoor air may be required to understand potential liability, risk to building occupants, or to plan for building renovation or demolition.

Many people choose to conduct, as necessary, ACM, PCB, LBP, and/or Guano surveys of building materials concurrently with Phase II ESA activities. If contaminated building materials are present, the removal and/or remediation of these materials will need to be considered prior to building redevelopment, or if a risk to human health is identified.

The Sites Management Section does not regulate contaminated building materials. If ACM and/or lead are discovered on the property, or if asbestos or LBP contaminants are detected in soil, you should contact the VT Department of Health (VDH) Asbestos and Lead Regulatory Program. If PCBs are discovered in building materials or transformers, you should contact the US EPA Region 1 PCB coordinator. The VT DEC Solid Waste Management Program can provide you with guidance regarding disposal options for all other building materials. Please see the applicable contact information below:

Vermont Department of Health (VDH) Asbestos and Lead Regulatory Program

[phone] 802.863.7220 or 800.439.8550 (toll-free within VT)

[web] <http://healthvermont.gov/enviro/asbestos/asbestos.aspx>

US EPA Polychlorinated Biphenyl (PCB) Section

Contact: Kate Woodward (Woodward.Katherine@epa.gov)

[web] <https://www.epa.gov/pcbs>

VT DEC Solid Waste Management Program

[phone] (802)828-1138

[web] <http://dec.vermont.gov/waste-management/solid>

Corrective Action and Redevelopment Planning

Once the degree, and extent of contamination has been defined for a property, it is time to evaluate remedial options. If the results of your Phase II indicate that a corrective action is necessary, you must develop a **Corrective Action Plan (CAP)** in accordance with the IRule. This is also the time to consider how remedial options will best fit your redevelopment plan.

The goals of corrective action are to prevent and eliminate unacceptable risk to human health and the environment caused by the release of hazardous materials into the environment. The most common types of corrective action are remediation by removal of contaminated soil, groundwater remediation, or the mitigation of impacts to a receptor by implementing engineering controls such as covering the contaminated area with a geotextile fabric and clean soil cap. Remedial technologies can often be integrated with redevelopment features, so having a clear design plan and open communication between qualified environmental professionals, planners, and developers is essential. For example, it may be possible to incorporate design features such as parking lots and landscaping with soil capping requirements in contaminated areas.

Depending on the risk to receptors, the IRule may require an **Evaluation of Corrective Action Alternatives (ECAA)** to determine the most appropriate remedial technologies and methods to utilize in order to achieve the required level of site cleanup. An ECAA may include pilot-testing, additional sampling intended to address data gaps in the Phase II ESA, and a general review of all remedial options potentially capable of achieving comparable corrective action objectives. Prior to implementing an ECAA, a work plan must be submitted to VT DEC for review. As with the Phase II ESA, a QAPP must be submitted to the VT DEC and EPA if the ECAA will include sampling and will be conducted utilizing funds originating from the EPA. Additional information concerning ECAA can be found in Subchapter 5 §35-503 of the IRule. **The ECAA document also satisfies the requirements of an EPA Alternatives Based Corrective Action (ABCA) document.**

A **Corrective Action Plan (CAP)** must clearly communicate the basis and details of a proposed cleanup strategy to the VT DEC such that site managers can ensure technical feasibility of the plan, effective engineering design, reasonable cost, public participation, compliance with applicable standards, and protection of human health and the environment. Aside from initial work, a CAP must also include necessary system operations and maintenance of remedial systems, and any required pre- or post-implementation sampling. A full list of all required elements for a CAP can be found in Subchapter 5, §35-505 of the IRule.

Once a CAP has been submitted to VT DEC, it will be reviewed for completeness and content. Following the review and draft approval, a public comment period will be held for 30 days. Any person can request a public informational meeting within 14 days of the date of the notice. Any public comments will be considered prior to the final CAP approval. **If EPA funds are being used to implement the CAP, a public relations plan and public meeting will also be required and should be coordinated with the public comment period.**

Implement the Corrective Action Plan

Following receipt of your CAP approval letter, implementation of remedial activities can begin. For sites in BRELLA, the CAP approval letter must be recorded in the Town Land Records within 15 days of receipt of the approval letter. Depending on the scope of your project, time to implement a CAP may range from weeks to upwards of a year. At this point, any alterations to your property redevelopment plan may dictate a change to corrective action activities. It is also possible that previously undiscovered contamination may be encountered

during CAP implementation. If either of these scenarios necessitates a significant change to the approved CAP, an amendment must be submitted to and approved by VT DEC.

Following completion of all remedial activities, and demonstration that any remedial systems are operating successfully, your qualified environmental professional will prepare a **Corrective Action Construction Completion Report**. The report must document the completion of all CAP elements, including remedial system details and site restoration activities. A full list of all required elements for a Corrective Action Construction Completion Report can be found in Subchapter 5, §35-507 of the IRule.

Establish Institutional Controls

Frequently, a brownfield redevelopment will necessitate a certain amount of post-remedial, long-term management. This is generally required at sites where continual management of contaminated environmental media is necessary to protect human health and the environment. Generally, this is accomplished primarily through the installation of physical or engineered controls during the course of corrective action activities. However, engineered controls frequently require long term maintenance and monitoring; the mechanism to ensure that this long-term maintenance occurs is through institutional controls.

Institutional controls generally consist of administrative or legal controls intended to help minimize potential future human exposure to residual contamination, and to ensure that the integrity of the selected remedies is maintained. These controls provide notification of residual on-site contamination and identify any engineered controls that are in place and intended to limit exposure to residual on-site contamination. If ongoing maintenance of engineered controls will be required, this information will also be included in the CAP. Effectively, institutional controls function to minimize human exposure to residual contamination by restricting land and/or resource use by providing information intended to guide activities conducted on properties where residual contamination may exist and pose a threat if the remedies installed during CAP implementation are not managed and maintained.

In Vermont, an institutional control will typically take one of the three following forms*:

- **Certificate of Completion.** For properties enrolled in the BRELLA program, the Certificate of Completion (COC) acts as an easement without the State acquiring interests in the property. The process to include an easement on a property is embedded into the closure documents.
- **Notice to the Land Record.** Recorded in the Town Land Record for a property, a Notice to the Land Record is an acceptable institutional control when corrective actions have addressed any exposure pathways to a sensitive receptor but residual contamination above applicable environmental media standards may be present on site. The minimum elements required for a Notice to the Land Records are described in Subchapter 6, §35-602 of the of the IRule. Furthermore, all Sites Management Activities Completed (SMAC) letters shall be recorded as a Notice to the Land Record.
- **Deed Restriction/Environmental Easement.** A legal restriction on a property, a deed restriction grants an easement to the State of Vermont. The easement is recorded in the Book of Deeds and grants the ANR the right to enforce maintenance, monitoring, or other property restriction requirements that are applicable to the contaminated portion of the property. Easements dictated within a deed restriction cannot be removed without concurrent approval from both the ANR and the property owner.

The CAP will dictate the type of Land Use Restriction that will be necessary upon site closure and any long-term monitoring that might be required. Typically, long-term monitoring requirements will be in place where engineered controls exist to limit human exposure to residual on-site contamination, and when it is necessary to ensure that said controls remain protective over time. The degree and extent of contamination, particularly in groundwater, may also be considered when determining the type of institutional control that is most suitable for a property.

Properties with institutional or engineering controls associated with a land use restriction are required to submit an annual inspection to VT DEC, due each year by the first of October, or as dictated by the deed restriction/easement or COC.

The inspection is completed by the property owner or manager, and the form is available here: https://dec.vermont.gov/sites/dec/files/wmp/Sites/LUR.annual.inspection.checklist.frm_.pdf

* Institutional controls may also take the form of zoning ordinances, water ordinances, groundwater reclassification, and judicially approved controls. For more information regarding institutional controls, please refer to Subchapter 9 of the IRule.

Receive “Site Closure”

A Certificate of Completion (COC) is issued following the identification, characterization, and if necessary, remediation of all recognized environmental conditions under the state brownfield program (BRELLA) codified at 10 V.S.A §6641, or BRELLA. The COC is recorded in the land records of the property and may include land use restrictions.

COC Liability Protection Language:

“The rights, obligations, covenants, and restrictions granted in this certificate of completion shall run with the land, and any portion thereof, and shall be binding on the Agency of Natural Resources and successor Agency, and shall inure to the benefit of “Applicant” and its authorized representatives, successors and assigns. All required assessment and corrective action has been completed at this site and no further work is required. This Certificate of Completion shall be recorded in the “Town” land records for this property. Once recording is complete, protection from liability pursuant to subsection 6653(a) of this title is in effect.”

A Certificate of Completion differs from a Sites Management Activities Completed (SMAC) designation, which is the typical form of site closure provided by VT DEC after all required activities are completed at a hazardous waste site. A SMAC designation indicates that no additional work related to the identified release or releases is required at the time the designation is issued. Closure with a SMAC designation does not guarantee that a site will remain closed in light of a change in environmental media standards, identification of new or emerging contaminants of concern that require additional responses, or new information or a change in site conditions that demonstrates sensitive receptors are at risk from the release. A SMAC designation does not release the potentially responsible party or parties from any past or future liability associated with the release or releases identified as a part of the response, or from any contamination discovered after the site receives a SMAC designation. SMAC designations are granted for a specific release that has been assessed, and do not typically pertain to an entire property (see more information in Subchapter 10 of the IRule).

SMAC Language:

*“Based on the above, it appears that this site does not pose an unacceptable risk to human health or the environment. Therefore, the SMS is assigning the site a Sites Management Activities Completed (SMAC) designation. **The SMAC designation does not release [RP NAME] from any past or future liability associated with the [CONTAMINATION TYPE] contamination at this site.** It does, however, mean the SMS is not requesting any additional work in response to the [RELEASE] at this time”*

As mentioned previously, participants that entered the BRELLA program as a Prospective Purchaser may receive a COC upon substantial completion of their CAP. A COC upon substantial completion may be granted when the only elements of the corrective action that remain incomplete at the time the COC is filed are long-term monitoring or operation of an active remediation system. These elements must be completed prior to site closure with a SMAC designation, or BRELLA sites where the participant entered the program as an innocent current landowner.

TECHNICAL RESOURCES

The Vermont Department of Environmental Conservation's Sites Management Section

The Vermont Department of Environmental Conservation's Sites Management Section provides regulatory oversight and technical assistance to individuals and entities with a desire to redevelop a contaminated property. VT DEC helps developers navigate State regulations pertaining to remediation of contaminated properties and provides review for all environmental technical documents.

[contact] Sarah Bartlett – Environmental Program Manager

[email] sarah.bartlett@vermont.gov

[phone] 802.249.5641

[web] <http://dec.vermont.gov/waste-management/contaminated-sites/brownfields>

The Vermont Agency of Commerce and Community Development

The Agency of Commerce and Community Development manages the Brownfields Revitalization Fund and Community Development Block Grant (CDBG) which can be used to implement corrective action at brownfield sites as well as the Brownfields Tax Credit.

[contact] Kristie Farnham – Director of Business Support

[email] kristie.farnham@vermont.gov

[phone] 802.461.9353

[web] <http://accd.vermont.gov/economic-development/funding-incentives/brownfields>

EPA Region 1 Brownfields Program

The US EPA Region 1 Brownfield Program provides funds and technical assistance to New England states, tribal nations, communities, and other stakeholders to encourage the assessment, safe and sustainable cleanup, and economic redevelopment of Brownfields.

[contact] Jim Byrne – Brownfields Coordinator

[email] byrne.james@epa.gov

[phone] 617.918.1389

[web] <http://www.epa.gov/region1/brownfields/index.html>

The University of Connecticut Technical Assistance to Brownfields Communities Program

Funded by a grant issued by the US EPA, the University of Connecticut Technical Assistance to Brownfields Community (UConn TAB) program serves as an independent resource to communities and non-profit organizations attempting to cleanup and reclaim brownfields.

[email] uconn-tab@uconn.edu

[web] <https://tab.program.uconn.edu/#>

Vermont Regional Planning Commissions

Vermont has eleven regional planning districts, each with a [Regional Planning Commission](#) (RPC) that can provide assistance in the redevelopment of brownfields. Vermont's RPCs have all, at one point, been the recipient of EPA Brownfield Grants. The RPCs can help fund assessment and cleanup planning at brownfield sites as well as be a resource for local and state permit requirements and other funding sources. Several RPCs also manage revolving loan funds that can be used to implement cleanup. Contact information for each of the eleven RPCs is below. See www.vapda.org for a list of towns served by each RPC.

Addison County Regional Planning Commission (ACRPC) [phone] 802-388-3141 [web] http://acrpc.org/
Bennington County Regional Commission (BCRC) [phone] 802-442-0713 ext. 4 [web] http://www.bcrcvt.com/
Central Vermont Regional Planning Commission (CVRPC) [phone] 802-229-0389 [web] http://centralvtplanning.org/programs/brownfields/
Chittenden County Regional Planning Commission (CCRPC) [phone] 802-846-4490 ext. 29 [web] http://www.ccrpcvt.org/
Lamoille County Planning Commission (LCPC) [phone] 802-888-4548 [web] http://www.lcpcvt.org/
Northeastern Vermont Development Association (NVDA) [phone] 802-424-1419 [web] http://www.nvda.net/
Northwest Regional Planning Commission (NRPC) [phone] 802-524-5958 [web] https://www.nrpcvt.com/brownfields
Rutland Regional Planning Commission (RRPC) [phone] 802-775-1766 [web] https://www.rutlandrpc.org/pages/brownfields-redevelopment/4/
Mount Ascutney Regional Commission (MARC) [phone] 802-674-9201 [web] https://www.marcv.org/
Two Rivers-Ottawaquechee Regional Commission (TRORC) [phone] 802-457-3188 ext. 24 [web] http://www.trorc.org/programs/brownfields/
Windham Regional Commission (WRC) [phone] 802.257-4547 ext. 114 [web] http://windhamregional.org/brownfields

Online Resources

Hazardous Waste Clean-Up Information (CLU-IN) <https://clu-in.org/>

Sponsored by the U.S. EPA Office of Superfund Remediation and Technology Innovation, CLU-IN provides information about innovative treatment and site characterization technologies to the hazardous waste remediation community.

Interstate Technology Regulatory Council (ITRC) <http://www.itrcweb.org/>

ITRC is a state-led coalition that produces guidance documents and training courses that broaden and deepen technical knowledge and expedite quality regulatory decision making.

FINANCIAL RESOURCES

Note: The list of potential funding options below is not an exhaustive list. If you are seeking funding for your project, please contact the VTDEC and ACCD to identify any and all potential options.

The United States Environmental Protection Agency

EPA Assessment Grants

Assessment Grants can be utilized to inventory, characterize, assess, conduct planning (including cleanup planning), and promote community involvement relating to brownfield sites. Eligible entities include state, local, and tribal governments; regional councils and planning commissions; redevelopment agencies; and nonprofit organizations. Applicants must complete a grant proposal based on the Proposal Guidelines published by EPA each year. Eligible entities may apply for **Site-specific** or **Community-wide** assessment grants. EPA's website should be referenced for the most up to date information as available grants and requirements may change: <https://www.epa.gov/brownfields/brownfields-assessment-grants>.

Petroleum Eligibility

Petroleum-contaminated properties must meet certain requirements to be eligible for brownfield funding. Petroleum is defined under CERCLA as "crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under that section." For a petroleum-contaminated property that otherwise meets the definition of a brownfield property to be eligible for funding, EPA or the state must determine:

- There is no viable responsible party.
- The property will not be assessed, investigated, or cleaned up by a person that is potentially liable for cleaning up the property.
- The property must not be subject to a corrective action order under the Resource Conservation and Recovery Act (RCRA) §9003(h).

The Petroleum Eligibility form is available on the SMS webpage [here](#).

Additional information on EPA assessment grants can be found online here:
<https://www.epa.gov/brownfields/types-brownfields-grant-funding>.

EPA Cleanup Grants

Cleanup Grants can be utilized to conduct remediation activities at sites contaminated with hazardous substances or petroleum. As with assessment grants, entities eligible to apply for cleanup grants include state, local, and tribal governments; regional councils and planning commissions; redevelopment agencies; and nonprofit organizations. Applicants must complete a grant proposal based on the Proposal Guidelines published by EPA each year. The entity applying for the grant must own the property in question at the time of application. EPA's website should be referenced for the most up to date information as available grants and requirements may change: <https://www.epa.gov/brownfields/types-brownfields-grant-funding>.

Brownfield Multipurpose Grants

Multipurpose Grants can provide funding to carry out a range of eligible assessment and cleanup activities within a proposed target area, including brownfields planning and inventory. An applicant must be the sole owner of at least one brownfield within the target area where cleanup activities will be conducted. For more information, see: <https://www.epa.gov/brownfields/brownfields-multipurpose-grants>.

More information on all types of EPA Brownfield Grants can be found online here:
<https://www.epa.gov/brownfields/types-brownfields-grant-funding>.

The Vermont Department of Environmental Conservation

Technical Assistance Program

The Vermont Department of Environmental Conservation provides technical and financial assistance with environmental site assessment, corrective action planning, and cleanup. All work is paid for by VT DEC through State brownfields funding or US EPA 128(a) grants, and all work is performed by pre-qualified contractors. Assistance is available to prospective purchasers and innocent current owners of contaminated property. Applicants can have neither caused nor contributed to the contamination nor be connected to any person or organization that has caused or contributed to the contamination. Funding requests are accepted on a rolling basis. Eligible candidates must submit an application to VT DEC to be considered for this grant of services. VT DEC selects projects based on available funding, how soon the projects can start work, and how well they meet statewide community and economic development goals. **Projects enrolled in the BRELLA Program have an advantage when applying for these funds.**

The VT DEC Brownfields Funding Application can be found online here:

<https://dec.vermont.gov/waste-management/contaminated-sites/brownfields/apply/technical-assistance-program>

Small Technical Assistance Grants

In recent years VT DEC has been awarded small technical assistance grants (\$20,000 each) to provide brownfields planning resources to municipalities. In 2019, VT DEC used this funding to assist St. Johnsbury with planning work to evaluate options for an armory building with hazardous building materials. The planning efforts helped St. Johnsbury refine their vision for redevelopment of the building, garner public support, and successfully apply for cleanup funding. A 2020 grant was awarded to Bennington to conduct a feasibility and market study for the Energizer Degreaser facility. Municipalities interested in these planning grants should contact VT DEC about their project ideas and grant availability.

The Vermont Petroleum Cleanup Fund (PCF)

Subject to available resources, the PCF provides reimbursement for certain uninsured costs relating to the cleanup and restoration of environmental media contaminated as the result of a release of petroleum from Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs). Once a release from a UST or AST has been identified, additional investigation and remediation work may be eligible for PCF reimbursement, after a deductible is met. All work must be pre-approved and follow the PCF procedures. Details can be found in the "[Procedures for Reimbursement from the Petroleum Cleanup Fund](#)" document.

The Vermont Agency of Commerce and Community Development (ACCD)

The Brownfield Revitalization Fund – Federal Program

The Brownfield Revitalization Fund (BRF) offers federal grants and loans for the remediation of brownfield properties. Grants and loans are available to eligible municipalities and non-profit organizations, and private developers may apply for loans. To receive these Federal funds, **applicants must be a BFPP, have an approved CAP, and be enrolled in BRELLA.** Cleanup grants are available to eligible nonprofit organizations and municipalities, up to \$200,000 per project. Cleanup loans are available in varying amounts depending on project need and the borrower's ability to repay. There is no limit on the size of a loan; it depends on the amount of capital available in the fund. Loan terms are 2% fixed for up to 15 years. Loans may be subordinated, and repayment may be deferred to allow time for project to generate revenue. More information can be found

on the ACCD Department of Economic Development Brownfields website.: <https://accd.vermont.gov/economic-development/funding-incentives/brownfields>

The Brownfield Revitalization Fund – State Program

In 2021, \$10 Million was awarded to ACCD to enhance the cleanup of BRELLA enrolled sites. The funding must be used to implement approved Corrective Action Plans. In contrast to the BRF - Federal Program, this program can provide grant funds for remediation work to private developers. Additionally, applicants can apply for any amount of support; they are not capped at the current State statutory max of \$200,000 per parcel. Applicants must generally be able to demonstrate the ability to meet a 10% match. For more information, and the application visit: <https://accd.vermont.gov/economic-development/funding-incentives/brownfieldrevitalizationfundstateprogram>

Vermont Community Development Program

The Vermont Community Development Program (VCDP) administers Community Development Block Grant Funding allocated to the State of Vermont through the U.S. Department of Housing & Urban Development (HUD). The VCDP, through a competitive application process, provides grant funds to municipalities throughout Vermont (with the exception of the City of Burlington, which receives funds directly from HUD). VCDP funds can be retained by the municipality, or subgranted or loaned to non-profits or businesses to assist with the implementation of the project. VCDP funds targeted to Brownfields projects are only available for sites where there is a clear commitment to the reoccupation and reuse of the subject property. It should be noted that other primary sources of Brownfield funding are available and must be sought prior to application to the VCDP. Since the Brownfields Remediation Fund has been capitalized with U.S. Environmental Protection Agency and state funds, the VCDP does not have a dedicated Brownfield fund. Brownfield projects are funded through the competitive process for Implementation Grants. See VCDP's Program Guide for more information: <https://accd.vermont.gov/sites/accdnew/files/documents/CD-VCDP-Program-Guide.pdf>. Brownfield projects can be awarded up to \$300,000 (for public facilities projects) or \$1,000,000 (for all other project types that either support economic development projects that retain or create jobs or support housing projects where at least 51% of households served are considered to be of low-to-moderate income.). For more information, see the factsheet in Appendix A.

Tax Credits for Downtowns and Village Centers

The [Downtown and Village Center tax credit program](#) is managed through the Department of Housing and Community Development in ACCD. To be eligible for tax credits the property must be enrolled in the BRELLA program and have an approved CAP. The site must also be located in a state-designated downtown or village center and the reuse/redevelopment must involve the retention and rehabilitation of an existing structure on the property. The tax credits can be used toward 50% of the costs of implementing corrective action up to a maximum of \$50,000. Additional information may be found at: <http://accd.vermont.gov/historic-preservation/funding/tax-credits>.

Contact: Caitlin Corkins at caitlin.corkins@vermont.gov or 802-828-3047.

Tax Increment Financing

Tax Increment Financing (TIF) is a way to provide revenue, beyond normal municipal budgets and debt, to develop public infrastructure that will encourage private sector development and/or redevelopment. Public infrastructure improvements that can be financed in this way include brownfield remediation and redevelopment. A municipality must receive approval for the established TIF district (based on specific criteria) and receive voter approval to incur debt for the infrastructure/improvements. TIFs are based on the assumption that property tax revenues will increase following redevelopment. Once the debt is incurred, the

municipality retains a portion of the property tax revenue growth to finance the infrastructure investment. During the tax retention period, up to 20 years, the portion of the property tax revenue growth which the municipality retains pays for the infrastructure debt. For more information, see: <http://accd.vermont.gov/community-development/funding-incentives/tif>.

Vermont Regional Planning Commissions

Environmental Assessment Grants

Vermont's Regional Planning Commissions (RPC's) provide technical and financial assistance for environmental site assessment and cleanup planning to eligible brownfield projects within each region. Work is paid for by the RPC and performed by pre-qualified environmental professionals with the Department's project oversight. Vermont has eleven Regional Planning Commissions that receive funding from EPA's Brownfields Assessment Grant Program and, as of 2021, one-time State funding (see previous section for the full list of contacts). Funds can be used for Phase I and Phase II Environmental Site Assessments, Evaluation of Cleanup Alternatives, and for developing Corrective Action Plans, but not for implementing site cleanup. See <http://vapda.org/> to find your regional office and find out if they currently have assessment funding.

Cleanup Grants and Loans

Windham Regional Planning Commission, Mount Ascutney Regional Commission, and Northwest Regional Planning Commission all manage Revolving Loan Funds that operate in a similar capacity as the BRF discussed above. Contact the RPC for further information on their RLF.

Vermont Economic Development Authority

As a Brownfields Reuse Initiative partner, Vermont Economic Development Authority (VEDA) provides financial review and loan closing services for all loans processed through the Brownfields Revitalization Fund. VEDA also manages a wide range of low-cost lending programs for businesses of all sizes and has provided over \$1.3 billion in financing assistance to Vermont businesses and entrepreneurs. See <http://www.veda.org/> for more information.

Northern Border Regional Commission

The Northern Border Regional Commission (NBRC) is a Federal-State partnership for economic and community development that was created by Congress in 2008 and has been Federally funded since 2010. The NBRC supports projects in eligible distressed counties in northern Maine, New Hampshire, Vermont, and New York. All grants are in the form of reimbursement for previously paid and eligible expenses. For more information regarding what types projects are eligible, visit www.nbrc.gov.

Other Funding Incentives

New Market Tax Credits

The New Market Tax Credits (NMTC) Program was established to promote economic development in rural and urban low-income communities. This is a federal tax initiative administered by the Community Development Financial Institutions (CDFI) Fund of the U.S Department of the Treasury. Each year, tax credits allocated to qualifying community groups known as Community Development Entities (CDEs). Brownfields stakeholders can apply to existing CDEs to fund their projects or can apply for CDE certification themselves. For more information, see: <https://www.epa.gov/brownfields/supporting-brownfields-redevelopment-using-tax-incentives-and-credits-0>

Opportunity Zone Program

The Tax Cuts and Jobs Act of 2017 included the creation of a new tax-incentive aimed at increasing private investment in low income census tracts. Investors in these zones will receive preferential tax treatment when they invest in a newly created “Opportunity Fund.” This works by allowing developers investing in an Opportunity Zone to defer tax on capital gains. In Vermont, 25 census tracts in 17 communities have been designated as Opportunity Zones.

For more information, see: <https://accd.vermont.gov/OpportunityZones>, or contact Nick Grimley at nick.grimley@vermont.gov to learn more about how the Agency of Commerce and Community Development is working with Vermont communities to take full advantage of the Opportunity Zone program.

Requirements of Federal Funding

Quality Assurance Project Plan

The EPA requires that a Quality Assurance Project Plan (QAPP) be prepared to support all federally funded environmental projects involving the collection and use of environmental data. The benefits of a QAPP are to communicate, to all parties, the specifications for implementation of the project design and to ensure that the quality objectives are achieved for the project.

Qualified environmental professionals conducting work with EPA funding must have an approved Generic QAPP on file. Generic QAPPs are valid for five years with an annual review and update. In addition, a Site-Specific QAPP Addendum (SS-QAPP) is prepared as part of a work plan for each stage of site assessment or cleanup, when environmental media sampling is included. A thirty-day review period should be expected for SS-QAPP approval by EPA and the VT DEC.

More information regarding QAPP requirements can be found here:

<https://www.epa.gov/quality/quality-assurance-project-plan-development-tool>

EPA Cleanup Grants

Some additional tasks are required when receiving US EPA Cleanup Grants. An Analysis of Brownfields Cleanup Alternatives (ABCA) must be submitted as part of a CAP that provides an evaluation of cleanup alternatives based on effectiveness, implementability, and cost. If an ECAA is conducted at a site, the ECAA document meets the requirements of an ABCA, and the ECAA should be posted with the CAP during the public comment period. A Community Relations Plan (CRP), to be reviewed by EPA, must also be drafted. The CRP outlines steps to provide reasonable notice of cleanup, opportunity for involvement and public comment, and access to records. A CRP template can be requested from VT DEC. As part of this process, a 30-day public comment period and public meeting is required.

Historic Preservation

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires Federal agencies to consider the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. If federal funding is to be used, the responsible Federal agency first determines whether the site assessment, cleanup, or redevelopment could affect historic properties.

If a brownfield project involves federal or state funding, licenses, or permits, the Vermont State Historic Preservation Office (SHPO) must review the effects to historic and cultural resources. Project review consists of identifying a project's potential impacts to historic buildings and structures, historic districts, historic

landscapes and settings, and archaeological resources. More information can be found here:
<http://accd.vermont.gov/historic-preservation>.

UNDERSTANDING PHASE I RESOURCES

Knowing how to utilize and understand a few key resources can make a Phase I Environmental Site Assessment much easier to review and more valuable to the user. Sanborn Fire Insurance Maps and Manning's City Directories are incredibly helpful historical resources, and the ANR Atlas Online Tool can provide a wealth of information about a particular property.

Sanborn Fire Insurance Maps

Sanborn maps provide a layout of the streets and buildings in dozens of Vermont towns from the late 1800's to the 1970's. While the maps include the building construction materials and location of fire hydrants important to insurance companies, they also provide a record of fuel storage tank locations and denote major facility operations which are key to identifying potential contaminants of concern at a brownfield. Historical gas stations, dry cleaners, and automotive repair shops are just a few of the common businesses listed on these maps that can help direct a thorough site investigation effort. Many Sanborn maps are available through public or university libraries, or most comprehensively through the Library of Congress.



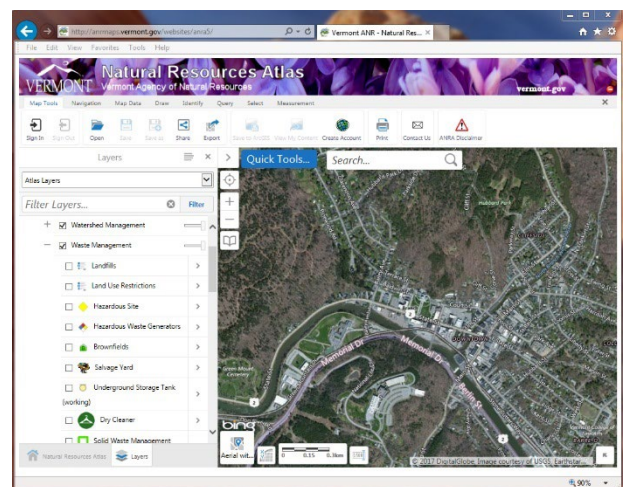
A sample of a 1915 Sanborn Map from Montpelier depicting a machine shop and foundry.

Manning's City Directories

The H. A. Manning Co. published several decades of directories of both residential and commercial occupants listed in order by street number. The street names are listed alphabetically, but cross streets are included within the list of addresses to denote their location. The directories also include business advertisements throughout. These listings are a useful tool to identify specific manufacturers or other businesses to piece together the historical uses of a specific property or surrounding properties.

Vermont Natural Resources Atlas

This online mapping tool has over 150 available layers from all departments in the Agency of Natural Resources. The Waste Management layers can be selected to populate a map with all the identified Hazardous Sites, Hazardous Waste Generators, Brownfields, Land Use Restrictions and more. Most recently, a layer of all historical dry cleaners in the state has been created by compiling a list from city directories. By selecting an individual feature on the map, additional site information can be found, and the Atlas can also direct users to the ANR [Environmental Research Tool](#), the online database of all Hazardous Sites, which includes a summary of the project status as well as site investigation reports.



<http://anrmaps.vermont.gov/websites/anra5/>

AREA-WIDE PLANNING

Brownfield Area-Wide Planning is an eligible use of brownfields assessment funding if the planning is focused on brownfields. The end result will be an area-wide plan and implementation strategy for key brownfield sites, which will help inform the assessment, cleanup and reuse of brownfield properties and promote area-wide revitalization. Funding is directed to specific areas, such as a neighborhood, downtown district, local commercial corridor, or city block, affected by a single, large site or multiple brownfield sites.

Recent planning efforts include those by the Town of Northfield (2016) and the City of St. Albans (2017).

- Northfield: <https://centralvtplanning.org/programs/brownfields/northfield-brownfields-area-wide-plan/>
- St. Albans: <https://anrweb.vt.gov/PubDocs/DEC/Hazsites/20174732.Final.AWP.Report.pdf>

Benefits of an Area-Wide Approach

- Allows a municipality to focus on an overall vision for improvement and implementation as a master plan instead of property by property. The area perspective is more effective than single site focus.
- Considers multiple community goals and encourages community involvement through a locally driven planning process.
- Many governmental agencies and local/regional partners working on related efforts means increased opportunities for coordination and combined efforts.



Elements of an Area-Wide Plan

- Evaluate existing environmental conditions
- Evaluate land use and features
- Identify key brownfield sites
- Encourage community involvement and identify priorities
- Market Studies
- Infrastructure and Energy Analyses
- Develop re-use scenarios
- Develop a brownfield AWP document
- Identify resources for implementation
- Develop an implementation strategy
- Creation of GIS database

St. Albans Area-Wide Plan (2017): Conceptual Redevelopment Plans on Catalyst Sites

BROWNFIELD CERTIFICATION FOR RENEWABLE ENERGY PROJECTS

What to submit for a Brownfield Certification Request

“Brownfield site” means real property, the expansion, redevelopment, or reuse of which may be complicated by the release or threatened release of a hazardous material. It does not include properties where there is a court ordered requirement to remediate the property.

In order for the Agency to certify a site as a Brownfield site, the property needs to fall into one of the following categories:

Category 1. The property is enrolled, will be enrolled, and/or has completed the statutory brownfields program (BRELLA).

- If the property is already enrolled in BRELLA please submit the Agency’s approval letter and the Site Number.
- If the applicant is planning to enroll in BRELLA please submit an administratively complete application form to the DEC Brownfields Program (contact the Brownfields Program for assistance at 802-249-5641 or sarah.bartlett@vermont.gov). See link to BRELLA Site: <http://dec.vermont.gov/waste-management/contaminated-sites/brownfields/BRELLA>
- If the applicant has completed the BRELLA Program, please submit the Site Number and a copy of the Certificate of Completion.

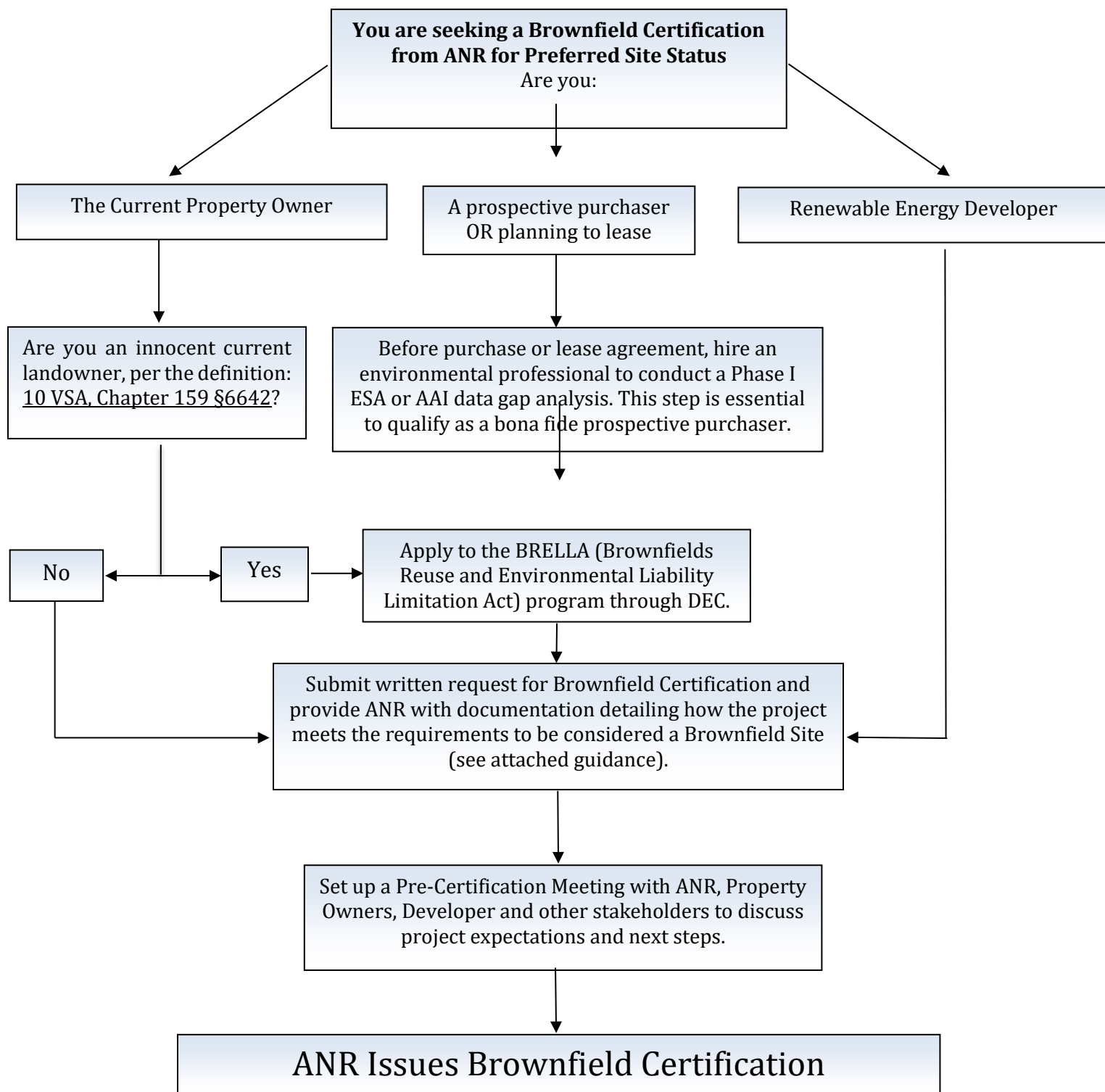
Category 2. The applicant demonstrates how the renewable energy project may be complicated by the release or threatened release of a hazardous material at the Brownfield.

- The Applicant shall submit a Phase I Environmental Site Assessment report.
- Applicant shall submit a project summary including a [draft] site plan showing the area of real or perceived contamination (Recognized Environmental Condition (REC)) and the location of the renewable energy project including all anticipated design features (i.e. solar panels, transformer or inverter locations, system control station, access roads, etc.). NOTE: The renewable energy project must be co-located, either in part or in whole, with a REC identified in the Phase 1 ESA report.

The applicant is required to demonstrate how the proposed project, either in whole or in part, may be complicated with respect to each of the following: (a) environmental liability concerns; (b) financial barriers to development; (c) cleanup considerations; and (d) reuse planning.

Category 3. The Brownfield property includes a renewable energy project that is a part of a larger development, and the development as a whole may be complicated by the release or threatened release of a hazardous material.

- The Applicant shall submit a Phase I Environmental Site Assessment report.
- Applicant shall submit a project summary that describes the site redevelopment plan and include a [draft] site plan showing the area of real or perceived contamination (REC) and all redevelopment features (i.e. current and/or proposed location of buildings, access roads, solar system, parking, etc.).
- The applicant is required to demonstrate how the site redevelopment as a whole may be complicated with respect to each of the following: (a) environmental liability concerns; (b) financial barriers to development; (c) cleanup considerations; and (d) reuse planning.



APPENDIX A – HUD and Brownfields Factsheet

HUD Projects and Brownfields

Environmental Reviews

An individual or entity who is seeking funds from the U.S. Department of Housing and Urban Development (HUD) operated by the Vermont Community Development Program (VCDP) of the State of Vermont Agency of Commerce and Community Development (ACCD) for a property, is required to conduct an Environmental Review (ER) in accordance with the National Environmental Policy Act (NEPA), 24 CFR Part 58 and Chapter 9 of HUD's Multifamily Accelerated Processing (MAP) Guide, Revised January 29, 2016. The ER must include an evaluation of Toxic Sites; it is at this point in which some HUD funded projects become involved with the Vermont DEC's Waste Management and Prevention Division's (WMPD) Sites Management Section (SMS) and Brownfields Response Program. Specifically:

All property proposed for use in HUD programs must be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of occupants or conflict with the intended utilization of the property (24 CFR 58.5(i)(2)). As part of the Toxic Sites evaluation of the Environmental Review, HUD requires that a Phase I Environmental Site Assessment (Phase I ESA) be conducted in accordance with the most current ASTM Phase I ESA standard and must be certified by an ASTM-defined environmental professional. If the Phase I ESA identifies any Recognized Environmental Conditions (RECs), HUD requires a Phase II Environmental Site Assessment (Phase II ESA), conducted in accordance with the most current ASTM standard, intended to determine the degree and extent of potential contamination.

Phase II Environmental Site Assessments

If RECs are identified during the course of a Phase I ESA, a Phase II ESA Work Plan should be drafted by the environmental professional that completed the Phase I ESA. ACCD's Environmental Officer will notify VT DEC, and an VT DEC Project Manager will review the Phase I ESA and the Phase II ESA Work Plan. ACCD's Environmental Officer may request a Phase II even if no RECs are identified. HUD only accepts Phase II's done in accordance and certified with the ASTM standard – Site Investigations done in accordance with the Investigation and Remediation of Contaminated Properties Rule (IRule) are not considered acceptable by HUD.

If, through sampling and analysis conducted during the Phase II, it is determined that environmental media (soil, groundwater, surface water, vapors) contain hazardous materials at concentrations in excess of state or federal standards, then the property is placed on the State's Hazardous Sites List and will be regulated by VT DEC. The presence of hazardous materials at concentrations in excess of standards represents a release of hazardous materials, which in turn triggers statutory requirements for additional site investigation and remediation. These statutory requirements are regulated by VT DEC.

FAQs

Is there a separate public comment process required for the HUD ER?

- Yes, once all the documentation required for the HUD ER has been prepared, a public notice stating the Finding of No Significant Impact (FONSI) is published, this initiates the start of an approximately 30-day public comment/objection period. This comment/objection period is for the entire HUD ER, not just the brownfields cleanup component. The ER Release is issued by VCDP/HUD after the full public comment/objection period has passed and any comments/objections have been formally responded to.

I haven't received my ER Release from VCDP/HUD and I'm being told I cannot move forward with certain activities, why?

- Per 24 CFR 58, certain activities are prohibited until the receipt of the ER Release. These activities are called "choice limiting activities." Engaging in these activities prior to the approval of the ER compromises the unbiased consideration of alternatives and is therefore disallowed. Choice-limiting activities include (but are not limited to): going out to bid for construction-related activities; signing a Purchase and Sales Agreement; signing an Option Agreement that does not allow the purchaser to elect to terminate the Option Agreement if the subject property is not desirable; acquisition of a property, leasing a property, or entering into a commitment or undertaking for repair, rehabilitation, construction, or demolition. A commitment is a legally binding contract or agreement. Therefore, signing contracts for these types of activities is prohibited until the ER Release is received. Even going out to bid is considered by HUD to be a choice limiting activity and must wait until after the ER Release is received. If you are unsure if a specific activity is "choice-limiting" you should consult with VCDP's [Environmental Officer](#).

I need my Environmental Release from the VCDP/HUD to move forward with "choice-limiting activities", what do I need to fulfill the Toxic Sites requirement?

- For the HUD ER documentation to be considered complete and allow for the publication of the FONSI notice, a final draft CAP that has been approved by VTDEC (following a 30 day required public comment period) must be included as part of the ER Record.. **Please Note:** Regardless of the date of the Draft CAP, the Phase I for the subject property must be up to date per ASTM standards at the time of the certification of the ER (this takes place 15-days after the publication of the FONSI), the clock starts from when work on the Phase I started. If the Phase I was conducted greater than 180 days but within a one-year period, an updated Phase I ESA is required. If it has been greater than one year, a new Phase I is required. For a brownfields project, it is very likely that the original Phase I will have reached the 180-day or year threshold. Plan and budget accordingly.

Your project has been awarded HUD funds, and now your project is on the State's Hazardous Sites list. What does this mean?

- You've completed a Phase II and contamination was identified. HUD will now defer to the VT DEC requirements for additional site characterization and remediation. The VT DEC will work with the ACCD's Environmental Officer so that everyone remains involved while addressing environmental issues. The statutory requirements to conduct additional site characterization and remediation fall to the person liable for the contamination, usually the property owner, which means that often the entity applying for HUD assistance is not liable for the contamination. In these cases, VT DEC will notify both parties, namely, the responsible party and the party applying for HUD assistance, about the additional site requirements, which usually entails hiring a qualified environmental professional to do more sampling and analysis, and ultimately to develop a plan for remediation of the site (see more in "[Develop a Corrective Action Plan](#)" section of this document). The Corrective Action Plan (CAP) then needs to be implemented by the qualified environmental professional. Due to the variability between sites and their respective environmental issues, this process can take several months or up to a year or more.

So, during this time that I'm doing site characterization and cleanup, what happens to my HUD funding?

- Your HUD funding shouldn't be affected. If there are environmental issues to be addressed, you may still receive an approved Environmental Review from HUD, but it will be an "Environmental Review Approved with Conditions". The "Conditions" will dictate that you must address the environmental issues via the approved Corrective Action Plan (CAP), as required by the VT DEC. Prior to receiving an Environmental Review Release from HUD, which is an award condition that must be satisfied before

HUD funds can be utilized, HUD also requires that you have a Draft CAP, approved by the VT DEC. As the Environmental Review Release is required prior to execution of the Grant Agreement (receiving funds), costs incurred from Phase I, Phase II and CAP development cannot be paid for by HUD funds directly, but are eligible as reimbursable program costs.

Are there additional funds which could help me with my contamination issues?

- Yes. If there is petroleum contamination identified which was released from an underground or aboveground petroleum storage tank, funding to conduct site investigation and cleanup may be available from the State's Petroleum Cleanup Fund (PCF).
- If a release has been discovered which is hampering redevelopment, you can apply for the BRELLA Program, which is overseen by the VT DEC Brownfields Program (see more under "[Consider Applying to the BRELLA Program](#)"). Entering the BRELLA Program allows you to apply for cleanup funds from ACCD's Brownfields Revolving Loan Fund.
- Other funding sources are also available, and further discussed in the "[Financial Resources](#)" section of this document.

How can I keep my HUD project moving smoothly through this process?

- Be patient. Know that finding contamination during a Phase II is very common. Having a CAP implemented will not put an end to your project. Your planned construction and redevelopment schedule may have to be slightly modified and/or extended, but both the ACCD's Environmental Officer and the VT DEC Project Manager will do what we can to keep your project moving as close to "on schedule" as possible. Maintaining communication with both the ACCD's Environmental Officer and the VT DEC Project Manager regarding any schedule changes, redevelopment plan modifications, or any other potential issues will help towards a smooth completion of your project.

Useful Links*

<http://accd.vermont.gov/community-development/funding-incentives/vcdp/env-review>

http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title24/24cfr58_main_02.tpl

<https://portal.hud.gov/hudportal/documents/huddoc?id=4430GHSGG.pdf>

*These links are embedded above in the factsheet