

Title: Brownfields Process Improvement Report

Year: 2025 Prime Contact: Patricia Coppolino

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and Housing, Senate Economic Development, Housing and General Affairs, Senate Natural

Resources and Energy

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The Agency of Natural Resources, Department of Environmental Conservation (DEC) is providing this report to the legislature that will include information on the current status and efficiencies of the brownfields program. This report also includes information from a survey of brownfield partners with a focus on housing and any suggestions for improvement. This report will also include an analysis of strengths and weaknesses of implementing a licensed site professional program (LSP) within the State and if this program would help improve efficiency with brownfield redevelopment or contaminated site management. Recommendations for enhancements or changes to current programming are also included in this report.

Recommendations

After an evaluation of programs in other states and the challenges facing Vermont's brownfield program, a licensed site professional program is not recommended currently. The following recommendations are proposed to improve the management of contaminated sites in Vermont (those requiring legislative action are highlighted):

- Adopt a consultant certification program to improve the quality of work coming to DEC, thereby reducing review times;
- Pilot a process that will allow consultants to have a "fast lane" or self-certification process based on the consultant certification (above) and the risk at the site. This would not be available for all steps in site cleanup.
- Updating data management to allow users to track submittals, upload documents, track timelines and provide reminders on deadlines, allow easy site data retrieval from the system;
- Develop additional guidance documents for consultants and staff to accompany the DEC rules for site cleanup;
- Regular outreach and educational meetings with environmental consultants to improve communication and consistency;



- Implementing review deadlines for DEC staff to follow;
- Implement late fees for developers or their consultants who fail to meet regulatory timelines;

The following additional recommendations are being made with respect to the brownfield program:

- Dedicate two DEC brownfields staff to the management of housing related project to establish stronger partnerships and encourage efficiency.
- Enhanced coordination and planning: As a condition of enrolling in the brownfields program, participants would need to present a budget and funding plan for the project. This should be updated throughout the process as new information becomes available. Require that the developer's full project team participate in brownfield project check-in meetings for coordination and updates.
- Expand training materials and opportunities on funding, environmental standards, and brownfield program obligations.

Licensed Site Professional Program

An LSP program is a regulatory framework used to manage contaminated sites that consists of three parts: an LSP board, LSPs, and a regulatory agency. The licensing board is responsible for the licensing of LSPs, continuing education credits, and disciplinary actions against LSPs if required. LSPs are authorized by the regulatory agency to work on behalf of responsible parties to oversee the assessment and cleanup of contamination consistent with relevant laws and regulations. The regulatory agency is responsible for preparing and maintaining rules and guidance documents that govern site assessment and cleanup, auditing LSPs, and enforcement. States that have adopted LSP Programs have done so to address an overwhelming backlog of contaminated sites. Additional states have since adopted an LSP program and framework including Connecticut and New Jersey.

In Vermont, the ANR oversees the assessment and cleanup of contaminated properties that is conducted by environmental professional on behalf of their clients. DEC staff focused on site cleanup consists of 20 project managers and four program managers. Together, they manage approximately 1,500 active contaminated properties. On average, one project manager is responsible for 76 contaminated properties. Project managers review and approve each deliverable prepared by an environmental professional prior to work occurring and in some cases review and approve invoices for payments. Vermont



does not currently have an LSP program or professional licensing for environmental cleanup consultants.

To understand how Vermont compares to other states that have implemented an LSP program, DEC looked at the average time that the investigation and cleanup process took for Vermont and two other states that have an LSP program. Additionally, in Vermont sites were broken out into two categories: Brownfields and non-Brownfields sites (Table 1). Table 1. Average Site Closure Time for Vermont, Massachusetts, and New Jersey.

	Average Time for Site Closure (years)
Vermont	
Brownfields	3.9
Non-Brownfields	6.4
Massachusetts	<6
New Jersey	5.8

Vermont currently closes sites at a rate of approximately 6.5 years, which is about the same rate as states with LSP programs. In Vermont, sites that enroll in the brownfields program closed approximately 4 years faster than non-brownfield sites.

ANR interviewed regulators in states where LSP programs have been implemented, current LSPs, licensing specialists, Vermont consultants and reviewed information about LSP programs strengths and weaknesses based on this data:

Strengths	Weaknesses
 Generate revenue to support program operation from licensing fees, renewals, and violations 	Does not improve site closure timeframes for complex sites
Creates database of consulting firms and individual environmental	 No liability protections for sites with less regulatory oversight
professionals	 Does not address bottlenecks that occur from other agencies
 Improve regulatory consistency between sites 	permitting process or issuing site closure documentation

Based on our review of other jurisdictions LSP programs we are not recommending adopting a LSP program in Vermont, however, we used this opportunity to review DEC's site investigation and cleanup process and are making several recommendations below.



Study on Challenges to the Brownfields Program

A brownfield is defined as a real property, "the expansion, redevelopment, or reuse of which may be complicated by the release or threatened release of a hazardous substance." Historically, the term "brownfield" has been utilized to refer to underutilized or vacant commercial/industrial properties but can used to describe any previously developed property impacted by human activities. Untouched, these properties can pose physical, health, and environmental hazards. However, redevelopment can transform these properties into community assets that provide jobs and services, utilize existing infrastructure, while also preserving greenfields and preventing urban sprawl.

Despite the many benefits, the brownfield redevelopment process is complex. Most successful brownfield projects involve numerous stakeholders (i.e. developers, environmental consultants, State and Federal environmental regulatory agencies, construction contractors, architects, engineers, and community members). The Brownfields Reuse and Environmental Liability Limitation Act (BRELLA) program provides a structured pathway for these stakeholders to address issues pertaining to environmental contamination and provides State liability protections at the end of the process.

In an effort to identify challenges facing the brownfields redevelopment community, particularly related to housing redevelopment projects, the ANR conducted an evaluation of the challenges facing the brownfield development community. This evaluation consisted of the following:

- 1. A survey of brownfield stakeholders.
- 2. Targeted interviews with frequent brownfield partners.
- 3. An evaluation of timeframes associated with BRELLA enrolled housing redevelopment projects.

A detailed report on the brownfields program and the outcome of the evaluation is attached to this document. The information provided below is a high-level overview of the three-part evaluation described above and the challenges that brownfield development community identified:

Stage One Results: Survey responses were collected from a broad array of brownfield project stakeholders including housing developers, regional planning and development organizations, and consultants. A common finding among the respondents is the adverse impact to the project timeline due to complex funding streams and related eligibility requirements. Often requirements for release of funds for a particular funding source, most commonly federal cleanup funds, are contingent upon completion of a separate task where there is no opportunity to complete these items in parallel with other state requirements.



A key contributor to efficient project timeframes is the extent to which a redevelopment has been planned prior to the initiation of the project. More experienced developers engage with environmental consultants earlier in the process, and often begin the process more detailed plans. Less experienced developers often wait to engage with consultants and DEC until later in the process, which can result in delays and added expenses. More effective collaboration between the consultant and developer can aid in meeting cleanup requirements while managing the overall scope of cleanup work.

Other common concerns raised by respondents include:

- The development environmental media standards, particularly soil standards. This was identified by both the housing development and consulting community respondents as a topic of particular interest. Soil standards outlined in the Investigation and Remediation of Contaminated Properties Rule are risk based and established by the Vermont Department of Health (VDH).
- The need for supplemental site investigation work (including offsite work) following the completion of a Phase II ESA. Consulting respondents expressed that additional site investigation work extends the overall project timeline. The potential need for supplemental site assessment can be avoided by developers instructing their consultants to conduct thorough Phase II ESAs, as well as by incorporating field analytical techniques.

Stage Two Results: It was clear from several of the interview responses that there are areas where a lack of understanding surrounding the brownfield redevelopment process is leading to unrealistic expectations within the development community. This was particularly notable on the topics of supplemental site assessment, Corrective Action Plan development and implementation, and contaminated soil management. Consistent themes and concerns are further detailed below. Specifically:

- Soil management and disposal present challenges due to high costs, limited disposal options, and lack of understanding of newer alternatives.
- Supplemental site assessment following Phase II ESAs creates timeline uncertainty, and additional guidance would be helpful to the development community to better understand why it is necessary.
- Brownfield redevelopment, especially for non-profit housing developers, requires significant upfront investment prior to property acquisition. This is a financial



liability to developers, particularly as some environmental costs may be fundable, but many other expenses are not.

 Non-profit housing developers face additional challenges while redeveloping brownfields due to the use of multiple federal funding sources with conflicting process requirements.

In addition to being evaluated to identify common themes in responses, the interview transcripts were reviewed to identify areas of strengths, weaknesses, and opportunities within the brownfield redevelopment community, particularly regarding the regulatory framework. This evaluation is summarized below.

Summary	Additional Details	
STRENGTHS		
Access to funding	State funding through DEC and ACCD does not come with the increased requirements associated w/federal brownfields funding.	
Liability protections	Offered through BRELLA program.	
Collaboration	DEC staff are accessible, knowledgeable, and pragmatic.	
	Early meetings for BRELLA enrollees and other project partners establish shared expectations.	
WEAKNESSES		
Complexity	Late involvement of any stakeholder (environmental consultant, developer, architect, etc) may lead to site design revisions, repeated work delays.	
	Funding complexity emerges when multiple sources are involved, and developers can struggle to coordinate multiple requirements and public comment periods with stacked funds. Private developers sometimes forgo state or federal funding entirely to avoid delays and requirements.	



Capacity/Resource Constraints	There are a limited number of consultants in Vermont that have the knowledge and expertise to successfully navigate the environmental requirements at Brownfield sites. Additionally, there are a limited number of subcontractors that consultants rely on to complete environmental work scopes, such as drillers, laboratories, and abatement contractors.
Market challenges	The average cost to build per unit of housing in Vermont is ~\$500,000, with construction costs for affordable units equaling roughly \$375/square foot in 2024 ² .
OPPORTUNITIES	
Increased funding allocation	Since 2021, State allocated cleanup funds have been utilized to fund 44 unique projects, supporting the development of 718 new housing units and cleaning up over 80 acres of land. For every \$1 spent in State cleanup funds, an additional \$18 was leveraged. Leveraged funds for projects covered with federal funding are more modest, equating to roughly \$7 leveraged for every \$1 of federal cleanup money advanced.)
Increased training	Additional training and targeted outreach to lender, developer, and real estate groups.
Tools and Guidance	Development of flowcharts, processes, procedures for how the Brownfields process intersects with other state environmental permitting, financing, planning considerations. In particular, an inter-departmental collaboration between DEC and Act 250 staff for flowchart(s), defining milestones for the 'Full Picture' and staff learning the duties of other programs.
Kick-off Call	Early integration of key roles is essential and establishing early communication and coordination could set projects up for success. Opportunity to revisit components of pre-BRELLA calls to address common misunderstandings early.



Post-Cleanup Closure	Potential for development of a service standard such as 30-days for review of closure documentation upon submittal and 90 days for finalization of COC once all site closure requirements are met.
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Stage Three Results: Of the sites selected, the average timeframe from start to finish (BRELLA enrollment to COC completion) was approximately 32 months. Two BRELLA sites did not require Corrective Action, and these completion times ranged from 11 months to 34 months, reflecting that site-specific conditions result in distinctly different timelines across projects. The unique conditions for each site, including contaminant type(s), degree and extent, and other factors including funding sources and overall preparedness of the development team, all contribute to a highly variable timeline to reach closure.

Conclusions: Brownfields redevelopments are not a "one size fits all" process, and this can inherently introduce an element of unpredictability to timeframes associated with these projects. Assessment needs are dictated by current site conditions in conjunction with historic and surrounding property uses, and cleanups must be tailored to suit the planned reuse of the property.

It is also important to note that overall timeframes for these projects are impacted by factors that fall outside of the scope of DEC's regulatory purview. This may include delays in the overall project planning, issues related to state and local permitting, redevelopment funding shortfalls, as well as issues with environmental consultant and construction contractor capacity.

As a result, DEC recommends that brownfields developers employ some best practices, including:

- Early coordination with DEC, ACCD, RPCs, and other critical project partners.
- Evaluate project financing early in the process. Include contingencies for environmental assessment and cleanup related work, as brownfield funding sources are competitive and inconsistently available.
- Directing their environmental consultants to conduct thorough Phase II ESAs
 (thereby reducing the chances that extensive and time-consuming supplemental
 site assessment work will be needed prior to proceeding to cleanup).



 Work with their environmental consultants to ensure that they are providing overall brownfields project management services, rather than focusing exclusively on environmental site work.

Additionally, it is critical to note that dedicated state funding for cleanup implementation has been a key driver in the success of housing redevelopment projects since 2021.

LICENSED SITE PROFESSIONAL REPORT

Research into Licensed Site Professional (LSP) Program in Vermont LSP Research Team:

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Date: October 20, 2025

The Licensed Site Professional (LSP) Research Team has put together this report to analyze the strengths and weaknesses of implementing an LSP program within the DEC. The report includes background information about the site cleanup program, background information about LSP programs, a description of the research process, an analysis of strengths and weaknesses of LSP programs, and recommendations.

Background: In February 2025, members of the LSP Research Team were selected to respond to a legislative request to evaluate an LSP program within the State and if this program would help improve efficiency with brownfield redevelopment or contaminated site management.

The legislative mandate specifically requires, "On or before November 1, 2025, the Secretary of Natural Resources shall report to the House Committees on Environment and on General and Housing and the Senate Committees on Economic Development, Housing and General Affairs and on Natural Resources and Energy with proposals to make the Program established pursuant to 10 V.S.A. chapter 159, subchapter 3 (brownfields reuse and liability limitation) substantially more efficient. At a minimum, the report shall include both of the following:



- (1) A survey of stakeholders in the brownfields program to identify areas that present challenges to the redevelopment of contaminated properties, with a focus on redevelopment for housing. The Secretary shall provide recommendations to resolve these challenges.
- (2) An analysis of strengths and weaknesses of implementing a licensed site professional program within the State. The Secretary shall make a recommendation on whether such a program should be implemented. If the Secretary recommends implementation, the report shall include any changes to statute or budget needed to implement this program."

The LSP research team prepared this report to respond to section (2) of the legislative mandate above.

How oversight of remediation of contamination currently operates: The Sites Management Section (SMS) is part of the Waste Management and Prevention Division at the Department of Environmental Conservation. The SMS consists of 20 Project Managers (PMs) and 4 Program Managers. Together, they oversee approximately 1,500 active hazardous sites across Vermont, each at different stages of investigation, cleanup, or long-term monitoring of contaminant releases. On average, one project manager manages approximately 76 sites. Many of these sites are also enrolled in the state's liability protection program, or Brownfields Reuse and Environmental Liability Limitation Act (BRELLA). The BRELLA program is voluntary and involves sites undergoing redevelopment or reuse projects on contaminated properties.

When a release of hazardous materials is reported to the DEC, as required by statute, the responsible party must hire an environmental consultant to investigate and remediate the release. Consultants submit work plans and reports to the assigned DEC project managers for review and approval before work begins. DEC project managers often provide comments and request modifications to ensure deliverables comply with the *Investigation and Remediation of Contaminated Properties Rule*. All deliverables must be certified by an environmental professional.

DEC project managers work closely with consultants and responsible parties to ensure that site work is implemented in compliance with the IRule. If unforeseen issues arise during implementation, DEC project managers are available to collaborate in real time to find practical, acceptable solutions. The cleanup program operates on a largely voluntary basis, with enforcement actions being rare. This flexible approach supports effective site management, as conditions and circumstances vary significantly across sites. Sites enrolled in BRELLA largely follow the same process described above, but generally with more collaboration and guidance from the SMS PM.

What is a Licensed Site Professional (LSP) Program?



An LSP program is a regulatory framework used to manage contaminated sites that consists of three parts: an LSP board, LSPs, and a regulatory agency. The licensing board is responsible for the licensing of LSPs, continuing education credits, and disciplinary actions against LSPs if required. LSPs are authorized by the regulatory agency to work on behalf of responsible parties to oversee the assessment and cleanup of contamination consistent with relevant laws and regulations. The regulatory agency is responsible for preparing and maintaining rules and guidance documents that govern site assessment and cleanup, auditing LSPs, and enforcement. States that have adopted LSP Programs have done so to address an overwhelming backlog of contaminated sites.

Process: The LSP Research team began evaluated states in the Northeast that have established LSP Programs and then expanded the evaluation once it was discovered that only a very few states in the Northeast have these programs. Research involved reviewing state websites, and reviewing specific materials provided by individual states. These states included:

- Connecticut
- Illinois
- Massachusetts
- Michigan
- North Carolina
- New Jersey
- Ohio
- Texas
- West Virgina

Several scheduled interviews with States were conducted to gather additional information on their programs. The Team met with representatives from the following states:

- Connecticut
- Illinois
- Massachusetts
- North Carolina
- New Jersey
- West Virginia

Each program was found to be unique with respect to program attributes including property eligibility, fees, licensing, and training requirements, as well as the degree of regulatory management. Commonalities between the programs include the ability of an LSP to follow prescribed rules on behalf of the regulating agency with oversight provided by an independent review board. Regulatory involvement is governed by site complexity. In general, the more complex a site is, the more involved state regulators are with managing the site. LSP programs generally allow for the expedited site investigation, cleanup, and re-



use of contaminated property because it eliminates the iterative review and approval process of the regulatory agency.

Two separate meetings were held with two consulting firms in Vermont, Stone Environmental and VHB. Stone Environmental is a consulting firm based in Vermont which has been in business since 1992. VHB is also a consulting firm with offices in 14 states, including three in Vermont. VHB employs several LSPs in states with LSP Programs. The goal of these meetings was to hear how consultant opinions about the possibility of implementing an LSP Program in Vermont and to hear from current LSPs working in Massachusetts and New Jersey.

Highlights and feedback from meetings with consultants:

Below is a list of feedback and comments we received from meetings with Stone and VHB on current issues and concerns about an LSP program.

- In general, both firms were wary of implementing an LSP Program for Vermont.
- Consulting firms are all struggling to hire qualified labor for their current workload.
 There is also a shortage of subcontractors, such as drillers and labs. This shortage causes project delays.
- Consultants did not believe an LSP Program would address other areas where there
 are bottlenecks, such as permitting requirements from other state agencies;
 specifically, stormwater, wetlands, Act 250. Funding source requirements were also
 identified as a project slowdown, specifically the issuing of purchase orders through
 the DEC business office was identified as having long wait times.
- Professional licensing and insurance costs would likely increase, which would increase the cost of doing business for the consultants. The consultants would charge higher rates to conduct work to cover the additional costs.
- Both NJ and MA have extremely prescriptive Rules and guidance for site management. Vermont's site cleanup rules would need to be rewritten to be more prescriptive.
- There is concern that unscrupulous LSPs will be able to cut corners without "getting caught", if there is an auditing component included in the program which would only review a small percentage of site work.
- Consultants do not want to lose collaboration with DEC, which is currently a healthy and efficient process.
- Consultants think that an LSP Program will allow them to take on more ownership of projects.
- There are other areas where improvements could be made to the current SMS
 program without an LSP Program including: requiring response timelines for SMS;
 improve quality/consistency of consultant reports by providing expectations and
 holding consultants accountable.



• A strong LSP Board would be required to enforce against non-compliance. After meeting with States and consultants, the LSP team compiled the strengths and weaknesses of an LSP Program. The following table presents the collective strengths and weaknesses identified for different aspects of Implementation of an LSP program.

LSP Program Implementatio	Strength	Weakness
n	Ottorigui	Weakings
Project Timelines	 Faster site closure timeframes for less complex sites Remove regulatory review time from project timeline 	 Brownfield sites are more complex and require more regulatory oversight. Would not improve closure timeframes for complex sites. Does not address bottlenecks that occur from other agencies permitting processes. Does not address delays in issuing site closure documentation.
Regulatory Involvement	 The less complex a site is, the less regulatory oversight is needed Regulatory involvement would be through auditing 	 No liability protections for sites with less regulatory oversight (brownfields) Auditing process only identifies violations at the end of the process. Eliminates the ability to address violations in real time. There would be less collaboration between LSPs and regulators
Revenue Generation	Generate revenue from licensing fees, renewals, and violations	 Regulated community may not be in favor of having to pay additional fees The Massachusetts LSP rate exceeds current allowable principal rate for coverage from the Petroleum Cleanup Fund (PCF). The principal rate is reserved for tasks that only comprise a small fraction of reimbursable work.

Consultant/LSP Capacity	 Create database of consulting firms and individual environmental professionals working in Vermont Less regulatory review steps in the assessment and cleanup process may allow consultants to schedule projects more efficiently 	 May decrease the number of consultants in Vermont because they do not want to go through the process of getting licensed. May limit out-of-state consultants from working in Vermont if licensing doesn't carry over from another state
LSP Program Implementatio n	Strength	Weakness
Enforcement	Establish a robust enforcement mechanism through board, enforcement officers, or both.	 If LSP program was established without robust enforcement mechanism, it could negatively impact human health and the environment Would make the SMS program a more enforcement driven program instead of a collaborative one Without enforcement there is no incentive to conduct work properly or on time. LSP states have shared that compliance inspections show that 100% of projects have active violations after work has been completed.
Work Product Quality	 Establish minimum quality standard Demonstrating that they can meet minimum quality standards would be part of the licensing process Program framework could provide more standardized work products 	LSP programs have not been shown to increase quality of work products

Rule/Guidance
Documents

 Creation of a more prescriptive rule would create more consistency across sites and project managers The creation of a more prescriptive rule decreases the flexibility site managers and consultants have to tailor remediation to specific site needs and challenges.

In addition to compiling a list of strengths and weakness, the LSP team compiled data from Massachusetts and New Jersey's LSP programs to compare to Vermont's current program. These states were selected for comparison due to availability of site data to compare and New Jersey used Massachusetts LSP program as a template for their program. The data we looked at included the number of open sites and the average time of site closure. The data is presented in the table below:

	Average Time for Site Closure (years)
Vermont	
Brownfields	3.9
Non-Brownfield	6.4
Massachusetts	<6
New Jersey	5.8

Notes:

MA site data downloaded from: https://eeaonline.eea.state.ma.us/portal/dep/wastesite/ NJ site data from 'Site Remediation Program Comprehensive Report, Traditional and LSRP Cases May 2024'

Vermont data from WMID on July 11, 2025

Based on the data above, Vermont average non-brownfield site reaches closure is approximately 6.4 years, which is similar to states with LSP programs. In Vermont, sites that enroll in the Brownfields program are closed approximately 4 years faster than non-Brownfield sites.

Considerations:

Before making a recommendation regarding the LSP Program and if it would help improve efficiencies with brownfield redevelopment of contaminated site management, the



research team identified and discussed several key issues which would influence our recommendation:

- Project Timelines: A comprehensive understanding of all aspects of project timelines for redevelopment projects is essential. This would help identify overlaps and potential conflicts among different agency requirements, recognizing that site management is just one component of the overall project.
- Real-Time Issue Detection: Interviews with other state programs revealed a common challenge: failing to identify issues in real time. If site closure is delayed because earlier work did not comply with state regulations, the project timeline will be delayed, and additional costs may be incurred to come into compliance.
- Fee Structures: Other states with LSP programs impose licensing fees, annual fees, expedited review fees, and costs for regulatory reviews. Introducing fees for services currently offered for free would represent a significant shift from the existing process and may not be well received by the regulated community.
- Limited Professional Pool: Vermont has a small pool of qualified environmental professionals. Implementing a licensing program could place additional pressure on the existing consultants. Additionally, it could cause a loss of consultants due to some choosing to retire instead of going through the licensing process.
- **Enforcement Capabilities:** Current enforcement activities are minimal within the SMS and DEC generally, compared to states with LSP programs. The existing enforcement framework is not equipped to effectively manage an LSP program.
- LSP Board Necessity: An LSP board is crucial for the success of the program.
 Establishing a dedicated board with members possessing specific technical expertise would be necessary.
- Guidance Documents: Feedback from consultants indicates a preference for collaborative brainstorming with site managers to achieve site goals. States with LSP programs have detailed and varied guidance documents. The SMS would need to develop numerous additional documents to support an effective program.
- **Timeframe:** any benefits from the creation of an LSP program wouldn't be realized for at least 10 years from implementation. The work to create an LSP program would take away from current staff capacity that is used to manage site work.

Recommendation:

Four of the five LSP Research Team members recommended against implementing an LSP Program in Vermont at this time.

Those team members who did not recommend the LSP program felt implementing an LSP program would significantly reduce DEC oversight during essential phases of hazardous material investigation and the planning and execution of corrective or remedial actions. Under the current structure, DEC project managers work directly with consultants and responsible parties to develop site-specific objectives and timelines within the framework



of applicable rules, statutes, and guidance. Vermont has a limited pool of qualified environmental professionals, who are currently struggling with a lack of qualified staff. Introducing a certification or licensing requirement could further strain this workforce, potentially reducing capacity and increasing project delays. It is unlikely a LSP program would be universally applicable to the diverse array of contaminated sites managed by DEC, including Brownfields, Petroleum Cleanup Fund (PCF) sites, Superfund sites, Voluntary Action sites, and spill responses. Many existing LSP programs in other states were created in response to substantial site management backlogs. While a backlog exists, the number of sites per capita is lower than in the states studied. This is largely attributable to Vermont's rural character and relatively limited industrial activity compared to neighboring states.

Additionally, the current DEC program in Vermont closes sites within the same timeframe or slightly faster than states that have implemented LSP programs. The team recommended against the implementation of an LSP program because the cost of implementing an LSP program did not outweigh the potential benefits from implementing one. Specifically, the implementation of an LSP program would not increase efficiency or decrease site closure times.

To develop an LSP Program in Vermont, a comprehensive overhaul of the existing site management process would be necessary. The costs associated with establishing an LSP Program are considerable and could reach upwards of \$1,200,000 over five years. The time required to create an LSP program with all its associated components would be at least five years. A hypothetical Vermont Program would involve several key components:

LSP Licensing Process:

- A third-party contractor would manage the licensing process, which would entail significant short-term costs.
- Regulations would need to be developed to outline the qualifications, code of conduct, licensing procedures, and fee structures. This includes fees for licensing, applications, exams, and license renewals.
- The development of an application process and an exam, including both its creation and administration, would be required.
- Training programs for consultants would need to be established.

LSP Board:

- A board consisting of approximately nine members would be formed, with appointments made by the Governor. The board would include:
 - A Chair, who would be the Commissioner of the Department of Environmental Conservation (DEC) or their designee.
 - o Three Licensed Site Professionals (LSPs).
 - o Representatives from two statewide environmental organizations.
 - One hydrogeologist or geologist.
 - o One representative from a labor organization.



- o One drilling contractor.
- The board would oversee the licensing of LSPs, administer exams, and set requirements for continuing education necessary for license renewal.
- It would also establish professional conduct rules, investigate complaints, and discipline LSPs for any violations, with significant involvement from the Attorney General's office or the DEC Legal team.
- Board members would be required to meet monthly.

Initial Setup of the LSP Program:

- Re-writing of the IRule would be required to include significantly more prescriptive requirements than are currently included in the IRule.
- A new database needs to be created to track site progress and allow for SMS auditing.
 The database would be needed for consultants to upload reports and documentation.
- Three dedicated staff members from the Site Management Section (SMS) would be assigned for three years to assist in establishing the LSP Board, defining LSP requirements, and developing the LSP exam and continuing education criteria.
- Staff duties would shift towards program administration, with ongoing reviews and revisions of LSP requirements, applications, and exams.
- The Enforcement Division would need to be prepared to address LSP violations and statutory or rule changes would be needed.

Ongoing Administration:

- Three dedicated staff members would focus solely on creating and updating technical guidance documents.
- A certain percentage of sites would be audited regularly to ensure compliance.
- Some categories of sites would not be managed under the LSP Program (Superfund, emergency spills) and would follow the current system of site management.
- Sites which are audited and found to be non-compliant and in violation would need to be corrected, which will involve significant staff resources.

The program aims to ensure that LSPs perform all work in compliance with the DEC rules and related guidance documents, facilitating the timely closure of sites. Although this approach appears to be an effective method for site management, feedback from other states suggests otherwise. Audits frequently revealed instances of non-compliance. In cases where redevelopment occurred without adhering to proper site investigation and cleanup standards, significant issues arose. Contamination exceeding acceptable levels was often found beneath newly constructed buildings, adversely affecting occupants, property owners, consultants, and other responsible parties.

Bottlenecks outside of the site cleanup process would remain, including but not limited to wetland and stormwater permitting, HUD Environmental Review requirements and Act 250 requirements.



An LSP Program could potentially expedite the closure of contaminated sites compared to the current process. However, this advantage would be limited to sites that are not subject to additional regulatory requirements. Staffing levels would likely remain unchanged, as other states have reported that while the number of staff needed did not decrease, their roles shifted from project management to overseeing various components of the LSP Program.

In the current regulatory environment of decreasing revenue and resources, the effort, time, and financial investment needed to develop and manage an effective LSP Program are not advantageous for either the regulated community or the DEC. The potential benefits do not justify the substantial resource commitment required.

The LSP team does not recommend the implementation of an LSP program in Vermont. However, there are other ways in which the site management process could be improved. These include, but are not limited to:

- Conducting a comprehensive evaluation of a consultant certification program to potentially elevate overall work standards;
- Updating the current database or creating a new database that allows users to track submittals, upload documents, and be able to easily retrieve site data from the system;
- Developing additional guidance documents to accompany the investigation and cleanup rules;
- Initiating regular one-on-one meetings with environmental consultants to improve communication and consistency;
- Implementing hard review deadlines for Department project managers to follow;
- Incorporating changes to our current database to include tracking deadlines and automatic reminders for staff;
- Implement financial penalties for responsible parties who do not meet statutory or regulatory deadlines;
- Work with other agencies that are involved with redevelopment process to see if there are ways that we can streamline the process;

Many of these improvements to the current regulatory process should be considered or piloted. Some of these would require legislative changes and have some associated costs but could create substantial efficiencies.



REPORT ON CURRENT STATUS AND EFFICIENCIES -BROWNFIELDS PROGRAM



Study on Challenges to the Redevelopment of Contaminated Properties

Study Team:

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Background: Between March and October 2025, select members of the VT DEC, Sites Management Section (SMS) Brownfields team conducted research in response to a legislative request for an evaluation of the challenges facing the brownfields redevelopment community. Specifically, the legislative mandate stipulates that "On or before November 1, 2025, the Secretary of Natural Resources shall report to the House Committees on Environment and on General Housing and the Senate Committees on Economic Development, Housing and General Affairs and on Natural Resources and Energy with proposals to make the Program established pursuant to 10 V.S.A. Chapter 159, Subchapter 3 (Brownfields Reuse and Liability Limitation) substantially more efficient. At a minimum, the report shall include both of the following:

- (1) A survey of stakeholders in the brownfields program to identify areas that present challenges to the redevelopment of contaminated properties, with a focus on redevelopment for housing. The Secretary shall provide recommendations to resolve these challenges.
- (2) An analysis of strengths and weaknesses of implementing a licensed site professional program within the State. The Secretary shall make a recommendation on whether such a program should be implemented. If the Secretary recommends implementation, the report shall include any changes to statute or budget needed to implement this program."

The brownfields team was responsible for responding to (1) of the above referenced legislation.



Brownfields Overview: Per 10 V.S.A. Chapter 159 § 6642, a brownfield is defined as a real property, "the expansion, redevelopment, or reuse of which may be complicated by the release or threatened release of a hazardous substance." Historically, the term "brownfield" has been used to refer to underutilized or vacant commercial/industrial properties, but in reality, any property has the potential to have been impacted by human activities and may be considered a brownfield.

Untouched, brownfields can be a source of blight in their communities, presenting physical, health, and environmental hazards. However, since the mid-90s, the development community has increasingly viewed brownfield properties as potential community assets. In addition to mitigating potential threats to human health and the environment, the redevelopment of a brownfield often brings new jobs and services to a community, increases the tax base, boosts property values, and plays a critical role in community revitalization efforts. Additionally, the redevelopment of previously utilized properties allows for the reuse of existing infrastructure (buildings, utilities, roads), and discourages businesses from seeking out pristine, undeveloped "greenfields." In Vermont, this can help prevent sprawl and assist in the preservation of our natural environment.

Successful brownfield redevelopment projects can provide a myriad of benefits to communities across Vermont. It is critical to note that the brownfield redevelopment process comes with a unique set of complications and can be daunting for developers to tackle. In addition to the challenges inherent with any new development (including meeting local zoning and building requirements, fire safety permitting, historical preservation requirements, and environmental permitting such as Act 250, stormwater, wetlands, and wastewater), brownfield redevelopments come with the added need to address contamination resulting from past use of the property and the associated liability (financial and legal). As a result, most brownfield redevelopment projects require the involvement of a wide array of project partners, including (but not limited to):

- Developers
- Environmental consultants
- State and federal regulatory agencies
- State and federal development agencies
- Regional planning entities
- Regional development corporations
- Lending institutions
- Real estate professionals
- Attorneys
- Architects
- Engineers



- General contractors
- Municipalities and community members

Additionally, there are state and federal liability concerns associated with taking ownership of a contaminated or potentially contaminated property. As a result, many developers opt to enroll their projects into the Brownfields Reuse and Environmental Liability Limitation Act (BRELLA) program. Established first in 1995 as the Redevelopment of Contaminated Properties Program and then codified as the current program in 2007, BRELLA provides an avenue for eligible applicants to work through the process of assessing, remediating, and redeveloping a brownfield property, with guaranteed state liability protections at the end of the process; this comes in the form of a Certificate of Completion (COC).

Brownfield Assessment, Cleanup, and Financing: Successfully guiding a project through the BRELLA process and redevelopment requires the integration of multiple, often disparate processes. For BRELLA enrolled projects, the goal is to coordinate these processes such that site remediation work can occur concurrently with the overall redevelopment of the property. Doing so can ensure that the most effective remedial strategy can be employed while also reducing the need for duplicative construction processes. An example of this is designing site parking to act as a cover for contaminated soil that will need to be capped in place.

However, as established in 10 V.S.A. § 6615b, and further detailed in Subchapter 3 of the Investigation and Remediation of Contaminated Properties Rule, before site cleanup can be implemented, the degree and extent of site contamination must be evaluated. This process is critical, especially for potentially contaminated properties that are being redeveloped into housing, and begins with the completion of a Phase I Environmental Site Assessment (ESA) to evaluate Recognized Environmental Conditions (REC). The RECs identified during the Phase I ESA serves as the basis for a Phase II ESA, and may be continued through additional assessments if the initial ESA was not sufficient to fully characterize contamination at the property.

To ensure maximum efficiency, DEC typically recommends that concurrent with the site assessment process, developers engage with their engineers, architects, and other partners to begin exploring redevelopment plans and understanding permitting needs. Once site characterization is complete, these redevelopment plans can be used to help inform the Evaluation of Corrective Action Alternatives (ECAA) and subsequent cleanup planning. (Refer to Appendix A for a flowchart outlining the typical assessment and cleanup process.)



It is also critical to evaluate project financing early in the process. Increased costs for real estate, construction, and other related expenses has necessitated that most projects, brownfields or not, will require multiple funding sources (that all have different requirements) throughout the redevelopment process. In recent years, commonly utilized funding sources for housing specific redevelopment have included (but are not limited to) the following:

- Northern Border Regional Commission (NBRC) funds
- Tax Increment Financing (TIF)
- New Market Tax Credits
- Community Development Block Grant (CDBG) funds
- Downtown Tax Credits
- Capital Investment Program
- Community Revitalization and Recovery Program (CRRP) funds
- Economic Development Administration grants
- United States Department of Agriculture (USDA) grants
- Preservation Trust of Vermont grants
- American Rescue Plan Act (ARPA)/Bipartisan Infrastructure Law (BIL) funds

All of these sources can play a critical role in the success of a redevelopment, but it is important to note that most of them cannot be applied to expenses related to environmental assessment and remediation work. For this, developers must turn to brownfield specific funding sources, including:

- Federal (US EPA) assessment funding distributed through RPCs
- State (ACCD) assessment funding distributed through RPCs
- State (DEC) assessment funding
- State (ACCD) cleanup funding
- Federal (US EPA) Revolving Loan Fund cleanup funding distributed through ACCD
- Federal (US EPA) Revolving Loan Fund cleanup funding distributed through RPCs
- Federal (US EPA) State & Tribal funding for assessment and cleanup distributed through DEC

None of these funding sources are permanently capitalized or large enough to capitalize the projected costs for future brownfields redevelopment. Without a dedicated brownfields specific funding source, receipt of grants and loans to complete environmental assessment and remediation work for these projects is never guaranteed. Each of the funding sources outlined above are available on a competitive, first-come first-served basis for projects that are enrolled or eligible to be enrolled in the BRELLA program, and each has their own application process and eligibility requirements that must be met for



each new phase of work. Additionally, work conducted utilizing federal grants and/or loans requires approvals and documentation that falls outside of the work required by DEC.

Brownfield Redevelopment and Housing: Since the inception of programs at both the State and Federal level, there has been an increased intersection of housing development and brownfields related cleanup work. This is due to a multitude of factors, including downtown and village center tax incentives for infill development, increased pressure for housing in downtowns areas, and other benefits derived from the reuse of existing structures and utilities. However, proximity to downtowns, former commercial/industrial areas, and other human activities increases the likelihood that past uses will have resulted in contaminant impacts to a property.

As a result, more non-profit and private developers are seeking benefits through enrollment in the BRELLA program. Since 2020, there has been a ~210% increase in average BRELLA enrollments per year when compared to average yearly enrollments between 2015 and 2019¹. In that same five-year period, projects with a housing component accounted for approximately 30% of all BRELLA enrollments. Of this 30%, many are redevelopments led by non-profit housing groups which rely heavily on funding from US Housing and Urban Development (HUD) to capitalize their projects.

HUD funded projects, in addition to meeting state environmental regulations, must also complete a National Environmental Policy Act (NEPA) Environmental Review, and receive a HUD environmental release prior to accessing funds or conducting a choice limiting actions. Choice limiting actions include signing a purchase and sales agreement, acquiring a property, leasing a property, or entering into a commitment for repair, rehabilitation, construction, or demolition. This can cause delays for developers and increase the upfront project costs due to the work required to meet all of the requirements of the environmental review before the applicant can even acquire the property.

The level of environmental review can vary depending on the size and scope of the project, but the general process includes assessing how the project will affect natural resources and determining if mitigation will be required. Specifically, applicants must make sure they are in compliance with historic preservation, floodplain management, wetland protection, Endangered Species Act, Wild and Scenic Rivers Act, farmland protection, explosive and flammable hazards, noise, toxic sites, and radon requirements. A project can be delayed while working through any one of these sections, and ensuring compliance with the toxic sites requirement can be complicated due to the number of steps in the process and the fact that remediation work can impact compliance with other sections such as wetlands, stormwater or floodplains.



If a state regulatory agency has determined that a property has been impacted by a contaminant release, certain steps must occur in order to comply with HUD's toxic sites requirement. This work does not typically need to be re-done if previously completed during the course of a BRELLA driven investigation, but the applicant <u>must</u> be able to demonstrate that the following steps have been completed:

- Complete Phase I Environmental Site Assessment (ESA) determine if there are Recognized Environmental Conditions (RECs). (This step does typically need to be re-done to ensure that the document is dated within 6 months of the planned property transfer.)
- Complete Phase II ESA determine if contamination is present based on the RECs identified during Phase I ESA.
- Complete Supplemental Site Investigations determine the extent and magnitude of the contamination. Sometimes multiple investigations are needed to characterize the contamination.
- Complete an Evaluation of Corrective Action Alternatives compare different options for remediating the site and choosing the best option.
- Corrective Action Plan (CAP) outlines the proposed corrective action at the site and includes a 30-day public comment period.

After the 30-day public comment period all comments must be addressed before the CAP can be finalized. Only after the CAP is finalized is the toxic sites requirement met for HUD environmental review process. Once all of the requirements of the environmental review process have been met, the environmental review then has an additional public comment period before the applicant can receive their environmental release. *Per HUD requirements, the public comment period for the CAP and the public comment period for the environmental release have to be two separate events and cannot run concurrently.*

Study process:

<u>Stage One</u> - To develop an initial understanding of how different stakeholder groups interact with brownfields redevelopment a written survey was developed to collect anonymous responses from developers, planners, consultants, and other stakeholders. Respondents answered a mix of multiple choice and open-ended questions in a survey designed to take approximately 12 to 15 minutes. Survey questions were divided into five sections: background information, planning & permitting, project funding, project implementation, and the BRELLA program. The survey was sent to 67 individuals and 26 survey responses



were received. Responses were used to inform the more targeted questions asked during the second stage of the study.

Stage Two - DEC brownfields staff requested interviews with common redevelopment partners to gather more specific information regarding their experiences working on brownfield redevelopment projects in Vermont. All interviews were conducted by an independent facilitator. Identifying details were redacted from the interview transcripts before they were provided to DEC brownfields staff for review. In total, interviews were requested from 16 frequent brownfield partners, and 10 interviews were conducted. Additionally, the facilitator interviewed one group consisting of representatives from six of the 11 Regional Planning Commissions.

Stage Three - This consisted of a review of randomly selected brownfield redevelopment projects that had a housing component. Using a random number generator, seven completed projects (accounting for ~10% of all closed BRELLA enrolled housing redevelopments, defined as having received COC), were selected. VT DEC brownfields staff completed full file reviews and constructed a detailed timeline for each project. Project milestones were restricted to brownfields related work that is regulated under the Investigation and Remediation of Contaminated Properties Rule or BRELLA program. The timelines capture initial work such as enrollment in the BRELLA program and extends through CAP implementation and finalization of the COC. Staff reviewed the time to complete site investigation, preparation of the CAP, amendments, and CAP completion reporting, as well as DEC response timeframes. The goal of this analysis was to better understand how brownfields work intersects with other components of redevelopment and the variability of the overall project timeline, and to identify any areas of common project delays

Stage One Results: Survey responses were collected from a broad array of brownfield project stakeholders including housing developers, regional planning and development organizations, and consultants. A common finding among the respondents is the adverse impact to the project timeline due to complex funding streams and related eligibility requirements. Often requirements for release of funds for a particular funding source, most commonly federal cleanup funds, are contingent upon completion of a separate task where there is no opportunity to complete these items in parallel with other state requirements.

A key contributor to efficient project timeframes is the extent to which a redevelopment has been planned prior to the initiation of the project. More experienced developers engage with environmental consultants earlier in the process, and often begin the process more detailed plans. Less experienced developers often wait to engage with consultants and DEC until later in the process, which can result in delays and added expenses. More



effective collaboration between the consultant and developer can aid in meeting cleanup requirements while managing the overall scope of cleanup work.

Other common concerns raised by respondents include:

- The development environmental media standards, particularly soil standards. This
 was identified by both the housing development and consulting community
 respondents as a topic of particular interest. Soil standards outlined in the
 Investigation and Remediation of Contaminated Properties Rule are risk based and
 established by the Vermont Department of Health (VDH).
- The need for supplemental site investigation work (including offsite work) following the completion of a Phase II ESA. Consulting respondents expressed that additional site investigation work extends the overall project timeline. The potential need for supplemental site assessment can be avoided by developers instructing their consultants to conduct thorough Phase II ESAs, as well as by incorporating field analytical techniques.

Stage Two Results: It was clear from several of the interview responses that there are areas where a lack of understanding surrounding the brownfield redevelopment process is leading to unrealistic expectations within the development community. This was particularly notable on the topics of supplemental site assessment, Corrective Action Plan development and implementation, and contaminated soil management. Consistent themes and concerns are further detailed below. Specifically:

- Issues surrounding soil management and disposal were consistently identified as barriers to redevelopment. Specific issues identified included: the high cost to dispose of soils off-site, limited number of locations to bring contaminated soil, and a lack of understanding regarding newly introduced soil disposal options.
- Developers and consultants stated that the need to complete supplemental testing after a Phase II Environmental Site Assessment (ESA) leads to uncertainty with project timelines. They requested additional guidance on when and why additional testing is sometimes required.
- Redeveloping brownfield sites, in particular projects led by non-profit housing
 organizations, generally requires a larger amount of upfront investment in the
 project before the developer has acquired the property. While this investment in site
 planning, permitting, and environmental work can increase the efficiency of the
 project and decrease the overall timeline, it is risky for developers, and some



developers cannot accept that much risk. Costs related to environmental assessment and cleanup planning may be eligible for brownfields funding, but many of the other associated expenses, including permit fees, are not eligible for funding.

- Non-profit housing developers face additional challenges while redeveloping brownfields due to the use of multiple federal funding sources, which include often include contradictory additional requirements that often cannot be completed at the same time as other project tasks. These additional challenges are taken on with fewer resources than for-profit development teams, including their staff capacity, knowledge about the process, and financial resources.
- State regulators were noted to be knowledgeable about the programs they
 regulated, but less knowledgeable about other programs that play a role in
 redevelopment projects. A better understanding of the different programs and
 elements that must be considered for a redevelopment project could be beneficial
 for all parties.

In addition to being evaluated to identify common themes in responses, the interview transcripts were reviewed to identify areas of strengths, weaknesses, and opportunities within the brownfield redevelopment community, particularly regarding the regulatory framework. This evaluation is summarized below.

Summary	Additional Details
STRENGTHS	
Access to funding	State funding through DEC and ACCD does not come with the increased requirements associated w/federal brownfields funding.
Liability protections	Offered through BRELLA program.
Collaboration	DEC staff are accessible, knowledgeable, and pragmatic. Early meetings for BRELLA enrollees and other project partners establishes shared expectations.
WEAKNESSES	paranere established entired expectations.

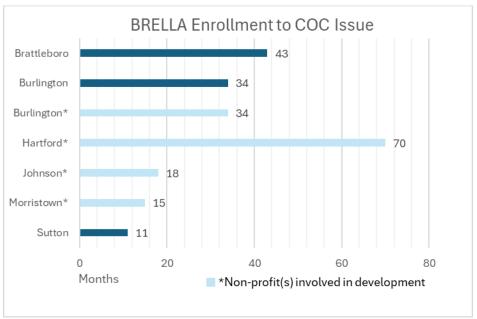


Complexity	Late involvement of any stakeholder (environmental consultant, developer, architect, etc) may lead to site design revisions, repeated work delays. Funding complexity emerges when multiple sources are involved, and developers can struggle to coordinate multiple requirements and public comment periods with stacked funds. Private developers sometimes forgo state or federal funding entirely to avoid delays and requirements.	
Capacity/Resource Constraints	There are a limited number of consultants in Vermont that have the knowledge and expertise to successfully navigate the environmental requirements at Brownfield sites. Additionally, there are a limited number of subcontractors that consultants rely on to complete environmental work scopes, such as drillers, laboratories, and abatement contractors.	
Market challenges	The average cost to build per unit of housing in Vermont is ~\$500,000, with construction costs for affordable units equaling roughly \$375/square foot in 2024 ² .	
OPPORTUNITIES		
Increased funding allocation	Since 2021, State allocated cleanup funds have been utilized to fund 44 unique projects, supporting the development of 718 new housing units and cleaning up over 80 acres of land. For every \$1 spent in State cleanup funds, an additional \$18 was leveraged. Leveraged funds for projects covered with federal funding are more modest, equating to roughly \$7 leveraged for every \$1 of federal cleanup money	
	advanced.)	
Increased training	Additional training and targeted outreach to lender, developer, and real estate groups.	
Tools and Guidance	Development of flowcharts, processes, procedures for how the Brownfields process intersects with other	



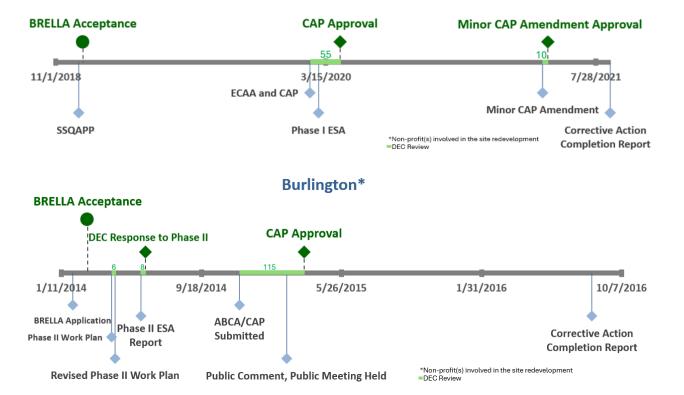
	state environmental permitting, financing, planning considerations. In particular, an inter-departmental collaboration between DEC and Act 250 staff for flowchart(s), defining milestones for the 'Full Picture' and staff learning the duties of other programs.
Kick-off Call	Early integration of key roles is essential and establishing early communication and coordination could set projects up for success. Opportunity to revisit components of pre-BRELLA calls to address common misunderstandings early.
Post-Cleanup Closure	Potential for development of a service standard such as 30-days for review of closure documentation upon submittal and 90 days for finalization of COC once all site closure requirements are met.

Stage Three Results: Of the sites selected, the average timeframe from start to finish (BRELLA enrollment to COC completion) was approximately 32 months. Two BRELLA sites did not require Corrective Action, and these completion times ranged from 11 months to 34 months, reflecting that site-specific conditions result in distinctly different timelines across projects. The unique conditions for each site, including contaminant type(s), degree and extent, and other factors including funding sources and overall preparedness of the development team, all contribute to a highly variable timeline to reach closure.



An example timeline for three of these BRELLA sites are provided below to visualize the major milestones of site project work in relation to VT DEC reviews.

Hartford*





Further evaluation of site files indicates that CAP approval timeframes for the Hartford and Burlington housing project were extended while the project teams were evaluating and finalizing funding resources. In both cases, the use of federal funds necessitated the fulfillment of additional obligations prior to CAP approval, which had not been accounted for earlier in the overall redevelopment planning process.



Generally, VT DEC instructs BRELLA stakeholders to expect a 30 day review time for larger project submittals, such as assessment reports and draft CAPs. This allows for consistency with federal brownfields document review times, and provides a planning benchmark early in the process. In our review of a representative selection of closed housing projects, we determined that in the absence of extenuating circumstances (such as detailed regarding the Hartford and Burlington projects above), VT DEC consistently meet this 30 day timeframe. It is, however, important to note that issues with submittals, particularly including a lack of adherence to requirements outlined in the Investigation and Remediation of Contaminated Properties Rule, can extend these timeframes considerably while brownfields staff work with environmental consultants to ensure that work products are acceptable.

Conclusions: Brownfields redevelopments are not a "one size fits all" process, and this can inherently introduce an element of unpredictability to timeframes associated with these projects. Assessment needs are dictated by current site conditions in conjunction with historic and surrounding property uses, and cleanups must be tailored to suit the planned reuse of the property.

It is also important to note that overall timeframes for these projects are impacted by factors that fall outside of the scope of VT DEC's regulatory purview. This may include delays in the overall project planning, issues related to state and local permitting, redevelopment funding shortfalls, as well as issues with environmental consultant and construction contractor capacity.

As a result, DEC recommends that brownfield developers employ some best practices, including:



- Early coordination with DEC, ACCD, RPCs, and other critical project partners.
- Evaluate project financing early in the process. Include contingencies for environmental assessment and cleanup related work, as brownfield funding sources are competitive and inconsistently available.
- Directing their environmental consultants to conduct complete Phase II ESAs. VT DEC acknowledges that developers often opt to balance costs and timeframe; thorough site assessments cost more upfront but can decrease the potential need for supplemental site assessment work prior to proceeding to cleanup activities.
- Work with their environmental consultants to ensure that they are providing overall brownfields project management services, rather than focusing exclusively on environmental site work.

Additionally, it is critical to note that dedicated state funding for cleanup implementation has been a key driver in the success of housing redevelopment projects since 2021.

Recommendations:

- 1. Dedicate two DEC brownfields staff to the management of housing related projects. This will help ensure efficiency and consistency in the regulatory management of these projects, and will promote partnership and relationship building with housing development organizations across the state.
- 2. Enhance BRELLA program requirements to include full project team check-ins at pre-determined intervals. This will help ensure better coordination and information sharing. Develop meeting agenda checklist to include topics including funding coordination, regulatory/programmatic obligations, and updates on planned redevelopment activities. Additionally, require program applicants to demonstrate access to funding resources to address site assessment and cleanup needs should public brownfields funding not be available.
- Increased education and training materials, particularly around funding and specific requirements tied to the commonly utilized sources for assessment and cleanup, FAQs regarding development of environmental media standards, as well as expectations for BRELLA enrollees and obligations to conduct assessment and cleanup work.

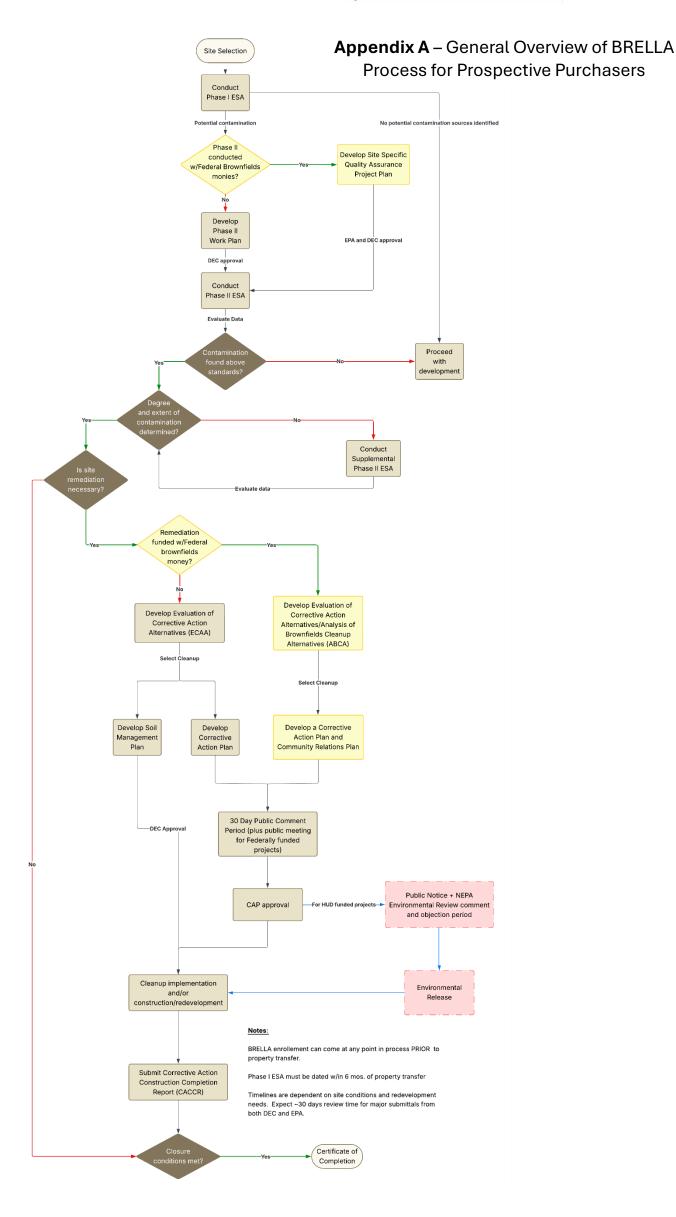


¹On average, there were 31 BRELLA enrollments per year from 2020-2024. From 2015-2019, there were an average of 10 BRELLA enrollments per year.

² D'Ambrosio, Dan (2025, July 10). Affordable housing in Vermont is headed for even worse times: What developers are predicting. *Burlington Free Press*.

https://www.burlingtonfreepress.com/story/money/2025/07/10/federal-budget-cuts-affordable-housing-vermont-building-construction-inflation/84505781007/?gnt-cfr=1&gca-cat=p&gca-uir=true&gca-

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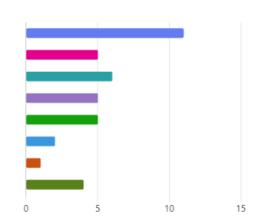


Appendix B

Survey Results

1. What is your role in brownfield redevelopment?

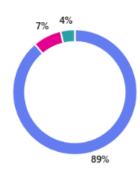




- 2. If "other" please specify.
 - Assist in budget stack development
 - EPA Assessment and RLF grantee
 - Affordable housing

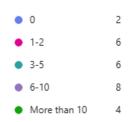
3. Have you used the VT BRELLA program for any of your projects?

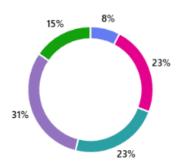




4. How many BRELLA housing redevelopment projects have you been involved with in Vermont?



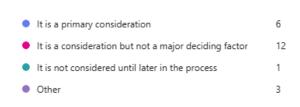


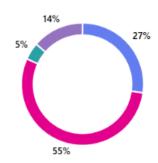


- 5. What are the key factors that shape your initial proposed project timelines?
 - The key factors that shape my initial proposed project timelines are the environmental review process including the CAP review and approval, design including permitting, financing and managing the current construction environment and its volatility.
 - The type of contamination, type of development and funding sources.
 - Ensuring the project would be able to move forward without Act 250
 permitting. It costs so much time and money, and is far too complicated and
 redundant.
 - Phases and if supplementals are needed, procurement process.
 - Time to complete site investigations / testing, the anticipated regulatory review timeframes and the proposed redevelopment schedules
 - If the parcel is a brownfield, that will likely add a year to our permitting/predevelopment work, and it is essential that the seller of the parcel is willing to extend site control for that long.
 - Budget development and access to capital
 - Grant availability to conduct Environmental Assessments and Corrective Action Planning.
 - State and local review for permitting, environmental clearance, etc.
 - Cost of remediation estimation and available funding; Local zoning and support; Cost & opportunity of future redevelopment
 - Cooperation of Town officials, which to date is unexplainably lacking.
 - Local zoning, NEPA Environmental Review, Corrective Action Plan process (if applicable)



- We are not developers.
- Environmental conditions; availability of grant funds
- the level of contamination
- The primary factor is how refined the Developer's redevelopment plan is. The secondary factor is how busy we are to undertake the assessment work.
- Environmental Assessment, Corrective Action Plans, Permitting requirements (Act 250), funding rounds, etc
- Awaiting Phase 1 results to understand what issues may exist at a site.
 Available funding assistance.
- Permitting, Environmental and Historic.
- Permitting and financing timelines.
- if a project Phase 1 indicates the need for additional site assessment testing this can lead to significantly lengthening the time to get to a CAP if needed. Sometimes the amount and cost of the testing can be prohibitive or take more time to find other resources. At this point in the project for the developer it would be considered at risk money spent on the assessment which could mean we would not advance the project and would not be able to recoup these costs. These costs can sometimes be significant.
- 6. How much does the potential for a property to be considered a brownfield impact your site selection and feasibility planning?





- 7. If "other" please specify.
 - My role doesn't make these decisions.
 - As a consultant this does not impact my consideration
 - Regional planning commissions are not developers but we fund brownfields work. Local developers who want to develop downtown or village properties



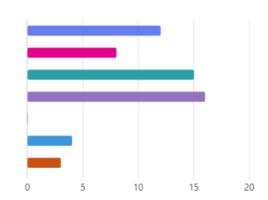
- understand they may have to address brownfields issues. Site selection and planning may be affected if the issues are complex and expensive.
- Affordable housing that utilizes local, state and federal resources is often relegated to developing in urban areas or on difficult to develop parcels passed over by private developers if there were not other sources of funding to help with the assessments and CAP preparation and funds to assist in cleanup activities, we would be less likely to pursue brownfield redevelopment
- 8. At what stage in your projects do you typically engage with VT DEC?



- 9. If "other" please specify.
 - Developers often engage with RPCs and DEC when they are considering purchasing a property

10. What permits have been required for your past brownfield redevelopment projects? (Select all that apply.)





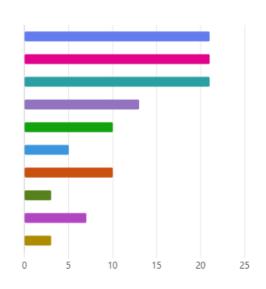
11. If "other" please specify.

- I can't select all that apply but my projects often also include stormwater, water/wastewater and building permits too.
- Multiple (Act 250, SW, local)
- It does not allow me to select more than one but they are stormwater and local zoning permits
- Act 248 for a solar field
- Permitting will require an Act 250 permit, wetland permit, stormwater permit, DEC Brownfield certificate of completion.
- 12. What are the most common pre-development costs you incur with brownfield redevelopment projects?
 - The most common pre-development costs include the environmental consultants that we need to hire for assessment and testing, building materials testing, legal notices and other legal costs, interest on the predevelopment loans needed for brownfield redevelopment projects and then all the costs associated with BRELLA and CAP work (assessment, ECAA, ABCA, etc.)
 - Engineering and environmental consulting
 - Pre-acquisition costs; information gathering on how significant the contamination is on the site.
 - Does not apply to my role.
 - Unsure
 - In addition to the environmental assessment and testing reports, the soils management plan must be coordinated with the sitework. But most of the added costs are due to the additional time it takes to get to an approved CAP. Time is money in real estate development.
 - ESAs, permitting



- BRELLA, Environmental Site Assessments, Corrective Action Planning
- Phase 1, phase 2, other engineering, architecture, legal, permit fees
- Assessment costs (consultants).
- Site engineers, environmental consultants and architectural support to provide guidance on costs, risks, needs
- Brownfield assessment and CAP expenses.
- Architectural/engineering schematic design, permit costs, site assessment costs
- Assessment and cleanup work, also architecture, landscape architecture and engineering costs, and legal costs.
- Addressing environmental issues
- Phase I&II, consultant costs for CAP, etc.
- Environmental assessment and corrective action planning
- Environmental Assessment services, corrective action plan creation, environmental review services, Architectural and Engineering services, Construction Management services, surveying, cost estimates, etc.
- EPA Phase 1 costs, Phase 2 costs, CAP expense, and BRELLA cost. Also, local and state permitting expenses.
- Design, Permitting, Phase I ESA.
- n/a
- Phase I & II and additional testing.
- Costs for Phase 1 & 2's, ECCA, CAP drafting. Also building
- 13. What are the most common funding sources you have used for brownfield redevelopments? (Select all that apply.)







14. If "other" please specify.

- All of the above are being contemplated.
- VHCB, HUD HOME, HUD NHTF
- State agencies such as Vermont Housing Finance Agency and Vermont Housing and Conservation Board, Energy Incentives from Efficiency Vermont and 3E Thermal
- VHCB and other federal and local funds
- 15. What funding gaps and/or challenges have impacted your redevelopment project (e.g. funding deadlines, use constraints, etc.)?
 - The funding gaps relate to the fact that the brownfield projects come with a
 lot of added abatement and assessment costs, and the brownfields funds
 cannot cover the full cost. The process to get a CAP reviewed and approved
 adds the challenge of timing and uncertainty since regulations change and
 we never truly know the extent of hazardous materials on our sites until we
 start excavating and testing.
 - Timelines
 - Act 250. Pure and simple. It's the kiss of death. There is a project in our community right now that is demolishing a building, which was constructed after a previous building was demolished. It's history is well known. It was cleaned up with state approval decades ago. There are no needs for archeological studies, historic research, or any number of other absurd requirements placed on this project. Still the Act 250 permit alone was \$98,000!! Defenders of this type of regulation are just wanting to keep their jobs, their piece of Vermont, and deny anyone else the right to build a home or a structure.
 - Cleanup funds
 - Deadlines and lack of funding for entire project have most commonly impacted the projects that I've worked on
 - Adding brownfield remediation to a real estate development project adds risk
 to the project. Significant predevelopment funds need to be spent to get to an
 approved CAP (foundation design, etc). Often we are near construction level
 drawings before the CAP is approved. Finding ways to reduce the amount of
 time to get to an approved CAP would be the biggest step forward for
 brownfield redevelopment.
 - Building demolition costs, HBM removal. Limitations/compliance with funders in a braided stack
 - In the past we have not been able to spend all of our EPA Brownfield
 Assessment funds prior to reaching the end of the grant period. We used to



reach out to other RPCs to inquire if any other region could use our grant funds, but the EPA no longer allows this sharing of funds. Acquiring access agreements with large corporations has also been a challenge which leads to delays.

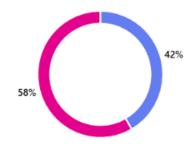
- N/A
- Costs associated with managing urban soils.
- The town zoning regulations and their anti-development leadership have been the major block for redevelopment. They imposed un-realistic zoning regulations immediately after the brownfield was cleaned by us that limited any further construction or progress for 6 years. Despite our property being identified by their housing study to be the #1 property for housing density and development, they continue to place restrictions that will prevent development and housing.
- Town official stalling due to concern for DEC over-reach in the brownfield assessment and cleanup process.
- NEPA Environmental Review public comment periods are a major factor, especially when combined with CAP public comment periods
- I believe that funding gaps have been a significant issue for many projects
- Availability of funding as costs for services and materials (especially cleanup-related costs) are rising.
- costs for Phase II's, deadlines as consultants are few; the developer hasn't thought out all the potential steps in their redevelopment project, etc.
- permit delays
- Cost increases/inflation from start of pre-development until time of funding closing. Funding requirements to meet energy efficiencies. Federal funding requirements to meet Davis Bacon, Section 3 and Build America, Buy America. Material availability/ premiums to meet timelines. Permitting costs when Act250 applies.
- High remediation and/or construction costs. Lengthy timelines due to grant cycles or grant requirements.
- Funding deadlines, some funds are only good for 2 years and the process to develop in the current market can take longer than that.
- federal funding requirements; funding deadlines; use constraints; securing full funding stack; funding terms (ex. reimbursement-based funding)
- We are not able to move through our Environmental Review until we have an approved CAP which takes a very long time.
- A challenge is always finding the funding for extensive testing and CAP preparation. Equally as challenging can be to find the resources in a timely enough way to keep this work flowing quickly so as not to delay the overall schedules. A few weeks or a month early in the schedule can have knock on



effects latter adding significant time or greater duration to the project which equates to higher costs. With Brownfields the cleanup costs can be difficult to find a source to support this work. Accessing EPA funding directly is on too long of a horizon, so we have been lucky to receive clean up funding from ACCD and VEDA in the past. I have worked on BRELLA projects that have had cleanup costs from ~\$250k to \$2M+

16. Have you encountered conflicts between environmental regulatory requirements and other project requirements (e.g. funding conditions, permitting timelines, contractual obligations, etc.?





17. If "yes" please specify.

- Timelines
- Most efforts to reach people in the Act 250 office, people like Susan Baird, who won't take a phone call and usually takes two weeks to respond, is rude and not at all helpful, define the Act 250 culture. Every other state agency is helpful, responsive and professional. Why does this office get a pass?
- If using federal funds, we can't clear Env. Review until we have an approved CAP
- Inconsistency on public comment period, notice requirements. NEPA/Section 106/Historic Preservation/wetlands challenges.
- The amount of assessment, planning and cost associated with managing urban soils has created timeline and funding gaps and made projects more expensive for taxpayers.
- In the past, cascading public comment periods have led to a long wait between having a project ready to bid and being able to actually go out to bid. This has an effect on project cost, as well as causing frustration for impatient owners.
- I believe that some of our applicants have struggled with how to make the various funding sources and their requirements line up.



- Have had to request grant extensions to allow for more time to address environmental issues before proceeding with redevelopment.
- Grant conditions were specific to a timeline, and while brownfields was running simultaneously in tandem, the brownfields work takes longer and so had to ask for extensions.
- Sometimes the timeline for approval of regulatory requirements pushes out funder closing timelines. Late starts create issues with construction timelines, weather conditions, material costs, subcontractor bids, subcontractor availability, the potential for funders to rescind their awards, or not have supplemental funds to fill the gaps, increases holding costs, extends/increases interest payments on pre-dev or construction loans, exceeds the option agreements deadline and sellers pull out.
- Grant requirements sometimes multiple environmental reviews for different funding sources. Permitting timelines sometimes delay projects.
- You cannot make any choice limiting actions until ER is complete and funds are released; this can cause scheduling conflicts within your contract and certainly can hold up/delay acquisition of a property.
- Funding/NEPA timelines may not account for brownfield assessment/remedial planning. Requirements for NEPA Environmental Release and the CAP per the IRule. Nowhere in the IRule is there a requirement for construction-ready (100%) design, which often require significant plan development on the part of the project civil engineer undertaking non-CAP items. Until the funding is in place and the ER is in hand, this work is done at risk by the owner. The IRule should be revised to specify the CAP should present the design criteria required to achieve remedial objectives rather than full design. Full designs could also be provided, but not necessary. Federal cleanup money and its requirements do not always align with the state brownfield process (ex. CRP, ABCA, historic preservation review) - projects can proactively include these steps but they might not be necessary or they may not include the appropriate EPA project officer because the EPA is not formally involved at that time. EPA also hasn't delegated historic preservation to its grantees, so those conversations would be happening after the CAP is already drafted/approved; this can result in project delays.
- The process to get to an approved CAP slows down our ability to move projects forward.
- If there is any HUD \$ in a project, it cannot proceed to signing a Purchase & Sale agreement to secure the property, complete construction documents, bidding or construction until we have completed HUD's Environmental Review process, and the project receives a HUD release of funds notice.



ACCD does not start the HUD Environmental Review process until the project has received an approved CAP and then it has its own 30-day notice period followed by a week or two for HUD to issue the Release of Funds letter. The quicker we get to a CAP the quicker we can get the release of funds and truly start a project, so the CAP approval is a critical path.

- 18. Are there regulatory requirements that overlap with the brownfields process and other aspects of your project? If so, do you see opportunities to streamline those processes (please be specific)?
 - I do hope we can streamline the process with brownfields and the federal environmental review process associated with NEPA as they are linked. The comment periods for both are extensive, and I know with staffing and coordination that these processes can be streamlined. Both processes seem to take longer and longer each time we engage with them.
 - No
 - Yes, eliminate Act 250. It's over 50 years in age and obsolete.
 - NEPA with NBRC Grants
 - For the most part the regulatory requirements for brownfields projects have aligned well with the brownfields process. The ability to streamline is tough given the time it takes to complete the work and regulatory review.
 - It is difficult to manage a project that has both contaminated soils and archeology
 - NEPA/Section 106/Historic Preservation/wetlands
 - Not with any of my past projects. However, one of my projects in a commercial core included an affordable component which was turned down due to opposition by local developers who convinced the select board that the property was too valuable to be used as affordable housing.
 - N/A
 - Not sure of question.
 - We had to spend over \$300K on design and engineering at various phases of the brownfield / grant planning that in the end were not used as the needs & development designs evolved. Because the planning, clean up to redevelopment is currently on its 10 year, much of that initial planning was a waste as we had to change our plans or path. Also, the grant funding and tracking process was incredibly complicated and burdensome. It required significant administrative costs that we didn't receive compensation. We would not repeat this process without specific funding.
 - Not as of yet.
 - NEPA Environmental Review



- Unclear
- None come to mind at this time.
- none come to mind
- dont know
- Everything overlaps. Our state funders collaborate and try to make one process work for them all.
- Wetland delineations and permitting. Sect 106 Historic Reviews. NEPA
 Reviews required by funding sources. State and Federal funding agencies
 should agree to accept a single environmental review rather than each
 agency having their own requirements.
- I am not sure of how to streamline the process.
- NEPA catching federally funded projects early to ensure they include required scope; supporting concurrence with QEP findings and documentation needed for agency coordination within NEPA ER process
- Reduce the public notice period for most CAPs.
- DEC is the regulator, but the staff has a level of experience that it can bring to problem solving, cost containment and finding efficiencies in the process without compromising community health and safety. Perhaps DEC could consider shortening the required notice periods for all projects or for straight forward less complicated brownfields conditions. Brownfields are more likely to be in the state's designated growth areas are there opportunities to better understand common background conditions across the state and then look for other opportunities to streamline processes.
- 19. Outside of the regulatory process, what are the most common challenges you encounter when working on a brownfields housing redevelopment project?
 - The most common challenges are timing including multiple reviews and back and forth on comments, the increasing cost to assess and mitigate sites, the turnover of staff working with us on brownfields making the process difficult to manage and the challenge with always chasing whatever available funding exists to cover these increasing costs associated with brownfield housing redevelopment projects.
 - Getting lenders comfortable with risk.
 - Time delays.
 - Funding stack
 - Permitting
 - The amount of time it takes to move from a Phase II to an approved CAP
 - Complex budget stacks/blended resources are necessary to move these projects.

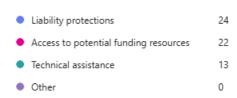


- Large corporations have delayed projects by not signing landowner participation agreements and access agreement.
- N/A
- Funding. Marketing sites for redevelopment.
- The Town of Richmond. Once the brownfield was clean, the leadership in the town started to restrict redevelopment and spread mis-information about our organization. Both town leaders and staff claimed that we had not been compliant with state or town permits. This is factually inaccurate. Last year, once we heard this rumor expressed openly at a Planning Commission meeting (e.g. they were discussing how they could take the property back from us from lack of permits), the town did a full analysis of our permits and found that we were fully compliant. Yet for 5 years this misrepresentation has infiltrated the town and it remains a point of discussion at meetings. This bias has lead to unfair, restrictive policies in zoning on our zone alone. Our property was identified as the #1 location to add housing density by the town of richmond's housing study but their leadership is restricting housing. If you need an example of how uninformed, biased, protectionist leaders are causing our housing crisis... just look at Richmond.
- TBD. As of now it is the inexplicable reluctance of Town officials to engage in my efforts to pursue the cleanup of a municipal landfill closed 50+ years ago.
- Costs associated with brownfield remediation
- Funding, since most housing projects in VT do not pencil out without significant subsidy.
- Funding procurement and increasing costs for services and materials that
 exceed grant funds secured for a project. As projects get delayed, costs
 increase and the funding gap grows, causing additional delays due to trying to
 secure additional funding.
- funding for the various phases, then the submittal and waiting on a response from ANR as to the final steps.
- Having to explain to developer how much it will cost to manage urban development soils
- Most of them are infill projects, and we see challenges with relocation if there
 are tenants, sites are tight and there isn't always great options for parking,
 staging, often have to coordinate with towns to shut down streets and
 sidewalks for certain work, paperwork... all the certifications,
 documentation, reporting- staff time is a challenge.
- Costs of construction!
- Having good partners that understand the process is key.
- Developing funding stack. Compliance with multiple funding requirements. Other regulations like historic preservation. Public pushback. Options for



soil disposal are limited. Rising cost of project implementation – including soil management costs, tariffs, inflation on labor and materials. Availability of subcontractors

- Cost of remediation.
- The funding/financing for a project often needs the liability protection of BRELLA which often means a CAP. Most projects end up requiring a CAP, it would be useful to provide the RPCs more assessment funds to help pay for Phase 1&2, ECAA, SSI and CAP since this is when projects are still most at risk. Since more development is likely to happen in Chittenden County more assessment funds should come to the CCRPC which has a robust, efficient, and effective program. DEC should advocate for more ACCD Brownfield Grant funds and that those funds be devoted to supporting affordable housing developments as a priority for receiving funding.
- 20. What aspects of the BRELLA program have been most beneficial to your projects? (Select all that apply.)

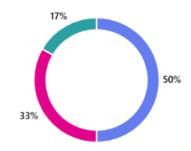




21. If "other" please specify.

- No input.
- General support, inspiration, and motivation. During the BRELLA program elements, we felt part of a team that was trying to improve Vermont. Being new to the brownfield implementation, the teams at ANR and ACCD were patient, helpful, insightful and pragmatic. We would not have been successful without their support and technical insight!
- 22. How would you rate your overall experience with the BRELLA program.





23. Please share why you selected this rating.

- For the most part, it is a beneficial tool for our projects and staff have been helpful navigating it.
- One thing that has discouraged clients from entering into BRELLA (particularly recently) is what seems like a more aggressive and comprehensive response from VTDEC towards Phase II work after submittal of the Phase I. Typically, I had seen site managers request Phase II only in response to RECS identified in a Phase I. More recently, I have seen site managers look beyond the RECs towards other potential issues that did not rise to the level of an REC. This increases the time, costs and risk associated with the BRELLA program. I understand that the Department needs to understand site conditions before going forward with BRELLA, but this more aggressive approach has discouraged some from entering into the program.
- Unlike the Act 250 people the BRELLA folks are professional, responsive, and invested in getting things done rather than watching them wither and die on the regulatory vine.
- I've always had good interactions with the Brownfields project managers and there seems to be a strong desire to help answer questions and be involved with the project right from the start.
- It is fairly easy to enroll in BRELLA
- Because the program allows a broad team approach to shepherd these projects forward.
- Many projects would not have been initiated if the redeveloper was not provided with liability protections for future contamination discoveries or newly regulated materials such as PFOAs. Also, most of our redevelopers rely on the accessibility of future funding sources that BRELLA enrollment may provide.
- Without the BRELLA program, the project would not have penciled. The risk
 was too high. The costs too high. And the technical skills to navigate were
 obscure. Without the BRELLA program, we would not have taken the project



on.. and likely the brownfield still would be there and no redevelopment occurred.

- We have not yet needed the liability protection, so it's a comfort that is sitting
 in the background, so to speak. It is also a very long process, with Certificates
 of Completion not being received for 1+ years after work is complete.
- I almost selected very positive. The only reason I hesitated is that the approval process can sometimes be slow.
- The process can be slow to work through with agency review times but the benefit of access to additional state grant funds makes it worthwhile.
- I last applied for BRELLA, and never heard from the contact as the webportal stated I would hear from. Eventually received a letter from the section, but took longer than was represented. Perhaps removing the 2-week notification from ANR on the BRELLA site would be better.
- BRELLA opens up the door to more scrutiny. For example, for a petroleum UST site that has a SMAC can often be required to sample for additional contaminants and make the process more complex
- The staff is easy to reach and always very helpful. They work hard to help us keep our projects moving and provide good feedback.
- Enrollment in BRELLA allows access to state funds, but sometimes those funds haven't been enough. Also, there have been times when getting the needed state funds requires multiple board review meetings - especially if remediation costs are greater than expected.
- It is a fantastic resource that allows us to feel protected and good about cleaning up a property for redevelopment.
- There can be inconsistencies in the way site managers apply the IRule/BRELLA requirements; BRELLA can still be very confusing to enrollees the pre-application meeting is helpful, but more communication on expectations could be helpful. COCs take a very long time for issuance.
- The limited liability and funding are crucial to cleaning up and developing these sites.
- The BRELLA program provides the needed liability protection so redevelopment can occur. It has experienced and skilled staff. It can provide early feedback to the project.
- 24. What other challenges have you encountered while participating in the BRELLA program. Please limit to issues not previously captured in earlier questions.
 - I would say the application fee and notice process is a bit costly and time consuming.



- I understand that staffing has been difficult for the Department, but sometimes response times have been really problematic for Brownfields projects, particularly those that have funding deadlines.
- None
- Getting contact information for absent property owners
- Eligibility in some cases but this is rare and most times the client has been deemed to be eligible
- None
- Limited resources to support environmental cleanup.
- None
- Other issues with the town happened. The Towns State Rep circumvented our P&S agreement and attempted to steal our grants to redevelop based on their wishes for the property. Costs doubled. Despite extensive evaluation on costs, more contaminates were identified during assessment that doubled the costs of the clean up. Therefore, we have to get additional funding through a block grant. This took additional investment and time.
- Reluctance of Town officials to be supportive of my plan to re-develop their long-closed municipal landfill.
- Too many rounds of investigations. IRule changes that result in revising cleanup plans or doing additional investigation after that phase of the project was thought to be completed.
- No funding
- Public notification can open the door to more scrutiny from neighbors
- No comment
- There have been a couple of instances where DEC is seeking greater off-site characterization than what seems to be needed for the actual redevelopment.
- N/A
- Funding through VTDEC requires an extended timeline for processing of purchase orders/task orders from business office – sometimes extending to several months – following site manager approval. This puts an undue burden on the consultant and the project team to find places to reduce schedule. And it costs a lot of money for developers/funders; when projects sit stale, someone needs to pay to pick them back up. Site managers sometimes do not have the capacity to quickly respond to site-specific challenges and concerns; reviews can be extended.
- 25. What changes or improvements to the brownfields redevelopment process or BRELLA program would make your work easier?



- I would allow for both PDF submission and online portal rather than just submitting via the portal.
- I have been told that some VTDEC documents (e.g. the COC, SMAC or comfort letter) require multiple levels of review before they can be approved. So, I have been in a position where the site manager says that a document is drafted and is awaiting review for months at a time. I don't know if the multiple level of review can be streamlined (or maybe the documents could be more standardized so the reviewer has less unique text to review), but it would be good to make that process more efficient.
- More funding.
- A better understanding of the program to lenders, purchasers and property owners.
- If there was a way to streamline the approval process that would make things easier.
- With the implementation of the I-rule, a CAP is required for almost every contaminated site. Prior to the I-rule, sites that were fairly straightforward (PAH, lead in soils) could use a soils management plan. That approach needs to be revisited.
- Expedite COCs
- Occasionally there are delays in site eligibility determination and review/comment on ESAs and CAPS but overall, I cannot think of any specific recommendations for improvement.
- N/A
- Revised the stringent contamination levels for urban soils. We just dug up a park and had soils exceeding the limits.
- Simplify the upfront redevelopment design process to allow for more flexibility on the end product. I understand that some plans must be provided but requiring various site plans, building renderings, landscape plans, bat studies, historical reviews, etc.. that inevitably either needed to be redone (e.g. we have had to do 4 bat studies and none found any bats!) or redesigned (e.g. we had to redesign after the initial concept in the hopes of getting a commercial tenant.. that then.. fell through it self. So we have redesigned the next phase of the development at least 3 times and still have no plans to build it.). Therefore, more flexibility based on market factors should be built into the redevelopment plans.
- Be proactive with Towns that are reluctant to engage with DEC over perceived heavy-handedness. DEC should be willing to enter bi-party or tri-party agreements (to include the Developer) to a) NOT enforce a corrective action plan if funding is not available, and b) NOT require layers and layers of overstudy and over-spending to appease the DEC's priorities which may not align



with a Town's priorities. In this case the Town desperately wants affordable housing at a former dump site, but not at the risk of being over-scrutinized by DEC.

- Streamlining public comment periods would be very beneficial, and speeding up the process of getting a Certificate of Completion
- Just make the approval process more timely.
- Not being required to backtrack on site work or revising approved cleanup plans when the IRule changes would make working through the process easier.
- Better communciation, and VT receiving more funding to assist in brownfields redevelopment.
- relax the requirement for QAPPs for small projects with limited contaminants of concern
- The nature of the process as a whole is daunting. Depending on third-parties availability and timing, the back and forth of corrections and revisions, additional testing and expense, the reports, the compliance, the ongoing oversite in some instances. It can often take multiple years to work a project through the process.
- The reduction in BRELLA enrollment cost (used to be \$5,000) to an easier to manage \$500 makes the decision to enroll much easier.
- Not sure, it has been a good experience for me.
- Quicker TO issuance/turn around or more flexible options for TO
 amendments to add in additional investigation, as needed based on results.
 It can be hard to identify all potential contingent tasks up-front for the initial
 request. More publicly available information on data availability/funding
 request deadlines. Consistent application of the IRule and BRELLA
 requirements by Site Managers. Most of the snafus we have experienced
 have been related to under trained personnel.
- Reviewing Vermont standards against national standards to assure they are not overly cautious especially for soil contamination and PCBs.
- Perhaps the notice period for BRELLA approval could be shortened to 15 days. Reviews of each step to get to the CAP kept as short as possible, but this is only possible if DEC is properly staffed. Does every BRELLA Brownfield project require a CAP? Is there another alternative?

26. Do you have any additional comments or suggestions?

- That pretty much covers it.
- I think you have guessed the theme. Stop blocking housing development with onerous regulation.



- I've worked on brownfields projects in Vermont for > 15 years and I've seen significant improvement in the BRELLA process / brownfields program and overall I've had a positive experience for each of the projects. From discussions with clients, the most frustration comes from additional requests for supplemental testing / ongoing work that drags out the process. Also, for many of the projects the NEPA environmental review requirements do not allow for a release until the CAP is approved. This a long process in most cases to get to this point so there has been frustration around this aspect.
- While it is not within VTDEC statutory framework, I would like to see VTDEC take a more proactive stance on how the standards are adopted by the VT Dept of Health.
- A shout out to the hard working, collaborative folks at the ANR DEC SMS Brownfield team!
- I consider Brownfields to be the most important and rewarding part of my job as an environmental planner. Our Brownfield Redevelopment Program is the impetuous to the remediation of impaired and blighted properties that would otherwise site idle for the unforeseen future. Brownfield redevelopment projects always lead to revitalization, job creation through corrective action, redevelopment, new businesses and an increase to local property and sales taxes. New affordable and market rate housing has been an incredibly important component of the majority of our recent brownfield redevelopments located in downtown and village settings.
- I wish we could do more. But the problems and costs we faces in our only BRELLA to date (e.g. the Creamery in Richmond) makes me very hesitate to do again. Sadly, this is not because of the State team but because the town leadership. I wish the State could force better decision-making and ethics (e.g. Code of Ethics with an actual stick) and encourage progress.
- None
- NO
- None
- I would like to express gratitude for all of those involved in these programs. It takes every resource to make these projects happen. Housing is a critical step in social equality and these programs help to make this happen.

