

# Summary of Colorado Department of Public Health and Environment (CDPHE)

## Program overview

Properties that sit untouched because of their real or perceived contamination can be rehabilitated using our Brownfields Program in conjunction with the Voluntary Cleanup and Redevelopment Program.

- These programs provide public and private property owners with the resources to facilitate cleanups, as well as assurances against regulatory enforcement.
- Because the Voluntary Cleanup and Redevelopment Program provides both federal and state remedial plan approval in one step, banks will accept a "No Action Determination" letter from the program as assurance that we or the U.S. Environmental Protection Agency won't order a costly, conventional cleanup. This eases concerns of environmental liability when involved in property transfers.
- Cleanup decisions are based on existing standards and the proposed use of the property, but we provide no construction or cleanup oversight. The actual cleanup and verification are the owner's responsibility.
- To receive the EPA's assurances that it won't take Superfund action as specified in the Memorandum of Agreement (MOA), the owner must submit a completion report as a new application for a No Action Determination so we can review and concur that the plan has been completed as approved.

## Background and Purpose

There are many sites across Colorado where soils and groundwater have been contaminated by past uses. These sites range in size from small spills, involving a few square feet of surface contamination, to sites where large amounts of contaminants have impacted many square miles of land. In most cases, these sites fall within a regulatory framework which ensures appropriate cleanup and protection of human health and the environment. For example, a given manufacturing facility may have a Resource Conservation and Recovery Act (RCRA) permit to properly manage hazardous waste, or a facility with known contamination may be under a RCRA Corrective Action Order to ensure appropriate cleanup. Other sites across the state are being cleaned up under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

For some sites, however, an appropriate regulatory framework does not exist. For example, contamination which predates the RCRA statute would not be subject to RCRA authority.

As a result, several states have developed programs that provide alternate mechanisms for reviewing, approving, and overseeing these voluntary clean-up efforts. In 1994, the Colorado General Assembly passed the Voluntary Cleanup and Redevelopment Act, which formalized a non-regulatory process for cleaning up certain types of sites. This document provides a resource to landowners and their consultants who would like to propose a voluntary clean-up (VCUP) effort or receive a no-action determination (NAD).

The VCUP program operates under the Colorado Department of Public Health and Environment (CDPHE), Hazardous Materials and Waste Management Division. The VCUP program is very streamlined, such that VCUP staff handle all VCUP applications, regardless of the regulatory program(s), except those which involve regulated petroleum storage tanks, which are handled by the Colorado Department of Labor, Division of Oil and Public Safety (OPS). In evaluating each application, VCUP staff coordinate with the various regulatory programs within CDPHE, as appropriate, to ensure consistency.

The State's goals are to encourage as many voluntary clean-up proposals as possible and remove any barriers landowners might have in coming forward with a VCUP proposal. Traditionally, such barriers have included fear of prosecution or being forced to do more cleanup than necessary for the intended future use of a property. Such barriers hinder environmental cleanup and property redevelopment or reuse.

Authority for the Voluntary Clean-up Program is derived from the Voluntary Cleanup and Redevelopment Act (the Act) (C.R.S.25-16-301) passed in 1994. The purpose of the Act is to “Provide for the protection of human health and the environment and to foster the transfer, redevelopment and reuse of facilities that had been previously contaminated with hazardous substances or petroleum products.” **The program is designed to operate expeditiously, with minimal administrative processes and costs. Accordingly, no regulations have been promulgated for the Voluntary Cleanup and Redevelopment Act.**

The Voluntary Cleanup and Redevelopment Act was enacted to address sites not covered by existing regulatory programs and to provide a mechanism for approving clean-up plans. The Act specifically recognizes existing regulatory programs and excludes sites covered by these programs from participation in the VCUP Program.

**The VCUP Program is designed to be a one-time interaction with the CDPHE.**

Each application should include a detailed site history, outlining past and present uses of the property and identifying conditions that might have contributed to potential or actual environmental contamination. In addition to a history of site uses, the application should also include a thorough discussion of site characterization activities. **Site characterization efforts should be based on site history and demonstrate that environmental sampling included appropriate constituents, media, and locations on the property.**

**Most voluntary clean-up situations involve contamination that occurred in the past and do not trigger reporting requirements.** An exception to this is past releases from underground storage tanks, which are subject to reporting requirements.

Legislative Authority for the Voluntary Clean-up Program is derived from the Voluntary Cleanup and Redevelopment Act (the Act) (C.R.S.25-16-301) passed in 1994. The purpose of the Act is to “Provide for the protection of human health and the environment and to foster the transfer, redevelopment and reuse of facilities that had been previously contaminated with hazardous substances or petroleum products.” **The program is designed to operate expeditiously, with minimal administrative processes and costs. Accordingly, no regulations have been promulgated for the Voluntary Cleanup and Redevelopment Act.**

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**The VCUP program requires applicants to meet existing state surface water and ground water standards. The compliance point is the property boundary.** For sites where a groundwater plume originates on the property and migrates off the property in excess of state standards, the applicant is encouraged to perform remedial actions to reduce contaminant levels to below state standards at the property line. The applicant may treat the entire plume, or may perform remedial actions only within the property boundary, and rely on monitored natural attenuation for the remainder of the plume. Active remediation should be based on source characterization, contaminant concentrations, and contaminant fate and transport, and groundwater depth and flow characteristics. Remedial actions may include source removal, mass reduction, or other treatment alternatives. If the entire plume is not treated, an evaluation of monitored natural attenuation must be made.

This evaluation should include the geochemical reactions that influence contaminant concentrations, the time expected to meet state standards, and the expected land uses and exposure pathways that may exist during the attenuation period. The applicant must show that the attenuation timeframe is reasonable, given the expected land use scenarios. The use of institutional controls may be considered in this evaluation. An additional important consideration will be whether a ground water plume may adversely impact the quality of hydrologically connected surface water. If the proposed clean-up is determined to be adequate, taking the above considerations into account, the CDPHE may approve the voluntary clean-up proposal, even though ground water standards may be exceeded at the property boundary at the conclusion of active clean-up.

For most sites, a narrative description of the exposure pathways (or lack of completed pathways) is sufficient. For example, an acceptable level of risk could be demonstrated, if the land use (e.g., a paved parking lot) will prevent human health or environmental exposure to contaminated soil, as long as that soil is not a source of ground water contamination. In determining appropriate health-based standards for workers, Occupational Exposure Limits for protecting the health of workers who are knowingly exposed to hazardous chemicals in their line of work should be used, rather than exposure through the general environmental pollution pathway.

Under the Voluntary Cleanup Program, the state provides no construction oversight or certification. The applicant is responsible for providing a self-certification that the remediation has been completed in accordance with the approved plan. This self-certification must be submitted to the State by a qualified environmental professional (as described in 40 C.F.R. § 312.10(b)) within 45 days after completion of the clean-up plan. This certification is required in order to receive assurances that EPA will not take Superfund action (as specified in the aforementioned Memorandum of Agreement)

There is no formal agreement that binds the parties under the Voluntary Cleanup Program, and the state has no enforcement authority under the Act. Assuming the site is eligible for the program, the statute does not require proposed cleanups to be completed. The applicant can “walk away” at any time, with the only consequence being that any approval received from the state would be void. However, if a cleanup had been started, the state can require the owner to properly manage any waste that had been generated from the incomplete cleanup. This authority would not be used to force completion of the cleanup. The owner/applicant would be responsible for closing up the site to protect public safety and ensuring that environmental problems were not exacerbated (i.e., leaving a dangerous hole that would collect surface runoff and contribute to ground water contamination).

The Act has no formal requirements for public participation or review of applications. However, all files are public documents, available for public review. Also, the Department routinely contacts the local county, to determine if there is any knowledge or interest in the site, and will make a copy of the application available for local review, if requested. In addition, CDPHE will appear at community meetings, if requested, to provide information to interested citizens. Information on applications is available to the public on the CDPHE web site at <https://www.colorado.gov/pacific/cdphe/voluntary-cleanup>.

In order to receive assurances that EPA will not take action under CERCLA (as per the Memorandum of Agreement), the applicant must provide public notice, within 30 days of the approval, that the clean-up plan or no action determination has been approved by the state. In some cases, where public interest in the property is high, CDPHE may require that the applicant provide additional public information. For large sites or sites where public interest is likely due to publicity or proximity to Superfund sites, CDPHE may request that the applicant hold a public meeting to explain its cleanup plan.

The state provides an approval letter upon completion of the application review. The letter generally states that, based on the information provided in the application about the contamination and the proposed land use, if the plan is completed as proposed (either cleanup or no action), no further action will be necessary on the site. This letter provides the state's assurance that as long as the land use stays the same (as stated in the application), the state will not require any additional cleanup. There is no covenant not to sue in the letter. If the property is subsequently sold, the approval runs with the land, provided the land use stays the same.

<https://cdphe.colorado.gov/environmental-cleanup-guidance-and-policy> Go to Voluntary Cleanup Roadmap