



# Establishing Points of Compliance

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*In its 2000 session, the Wyoming Legislature created new opportunities, procedures, and standards for voluntary remediation of contaminated sites. These provisions, enacted as Articles 16, 17, and 18 of the Wyoming Environmental Quality Act and implemented by the Wyoming Department of Environmental Quality (DEQ), will govern future environmental cleanups in Wyoming.*

*This Fact Sheet summarizes the process of determining points of compliance and associated issues in the Voluntary Remediation Program (VRP).*

## **1. What are points of compliance?**

Points of compliance are the physical locations where air, soil, water, or other environmental media (e.g., sediments or plants) are monitored for constituents of concern within a remediation site. Establishing points of compliance provides DEQ and Volunteers with a way to assess a cleanup remedy's performance, to assess progress made toward achieving cleanup goals, and to ensure protectiveness of human health and the environment while cleanup is underway. Points of compliance are also used at the end of the remediation period set forth in the remedy agreement to determine if cleanup levels have been achieved.

## **2. What is the relationship between the point of compliance and the remediation time frame?**

The remediation time frame is the time period over which remedy implementation will occur. Throughout remedy implementation and at remedy completion, measurements will be taken at designated points of compliance to monitor contaminant migration and cleanup progress and to determine if cleanup levels have been achieved. Points of compliance are locations that may be used both during and after remediation.

## **3. Will the point of compliance remain the same throughout the cleanup process?**

Not necessarily. Points of compliance may change during the life of a cleanup project. At any given site, DEQ might establish both *interim points of compliance* and *long term points of compliance*.

Interim points of compliance would be established at strategic locations to enable assessment of multiple factors during implementation of the remedy, including:

- A remedy's performance;
- Progress made toward achieving cleanup goals; and

- Protectiveness of human health and the environment.

For example, where DEQ and a Volunteer negotiate a phased approach to remedy implementation, different points of compliance may be applied to different phases of the remedy. Interim points of compliance for groundwater remediation might be established first at the contaminant boundary or even the site boundary and then gradually progress toward the source(s) of contamination as cleanup progresses. Such an approach might be taken to ensure, in the short term, that people are not being exposed to unacceptable levels of contamination and that contaminated groundwater is not migrating, and then, as the project progresses, the points of compliance would be selected to monitor the effectiveness of the remedial approach.

Long term points of compliance would be set at locations that would allow DEQ to assess whether remediation is complete. For example, for a groundwater remediation site, long term points of compliance would be established at locations where monitoring would ensure the final standards in the remedy agreement have been met throughout the area of contamination.

#### **4. What is the relationship between the points of compliance and cleanup levels?**

Cleanup levels specify the concentrations of contaminants that must be achieved for a remedy to be considered successful. As discussed earlier (see question #1), the point of compliance is the location at which measurements will be taken to determine if cleanup levels are achieved.

If performance monitoring at a point of compliance determines that compliance is not being achieved and is not meeting estimated time frames, then contingencies identified in the remedy agreement will take effect to ensure that cleanup levels will be achieved.

#### **5. How are points of compliance determined for groundwater?**

Under § 35-11-1605(e), compliance with **groundwater** cleanup levels must be monitored as close as reasonably practical to the contaminant source or site boundary or the boundary of any use control area. DEQ will select groundwater points of compliance based on multiple factors, including:

- An evaluation of the properties of the aquifer;
- The proximity of existing and reasonably anticipated points of groundwater withdrawal or discharge to the surface;
- The location of contaminants relative to the site or use control area boundary;
- The toxicity of the contaminant;
- The presence and proximity of multiple contaminant sources;
- The exposure and likelihood of actual exposure to contaminated groundwater; and
- The technical practicability of groundwater remediation.

Points of compliance are established in the context of a site-specific remedy selection. Because establishing points of compliance is part of the larger remedy selection process, DEQ also will be influenced by the remedy selection factors when determining points of compliance. For example, in the context of a site-specific remedy selection, DEQ might approve a remedy that allows for containment (rather than removal) of certain source areas. In this context, it is likely that DEQ would select a point of compliance that is at the boundary of the containment unit, rather than requiring that compliance be measured in groundwater beneath the containment unit.

It is important to emphasize that these are site-specific choices that will be negotiated between DEQ and Volunteers. Remedy selection factors and the remedy selection process are discussed in Fact Sheet #21 *Remedy Selection*.

## **6. How are points of compliance determined for soils?**

Under § 35-11-1605(e) compliance with **soil** cleanup levels must be monitored at locations determined by DEQ to ensure protection of human health and identified environmental receptors. Soil points of compliance must also ensure protection of surface water, groundwater, and air from contamination resulting from any potential transfer of contaminants from soil to these other media.

DEQ has limited flexibility when selecting remedies for soils that are acting as a source of contamination to groundwater. DEQ, however, recognizes that circumstances and conditions at certain complicated sites (e.g., complex geohydrology, widespread contamination, multiple contaminants) can present particular challenges when addressing source soil contamination. For these situations, DEQ believes there is flexibility in site-specific remedial approaches related to, among others, remediation timeframes and points of compliance. For example, for contaminants such as hydrocarbons or other organic compounds that can be treated, where it may be impractical to do physical removal because contamination is too wide-spread laterally and/or vertically, and where there are no unacceptable risks, longer term remedial measures may be considered in the remedial strategy. Therefore, remedial measures may include active treatment or physical removal of highly contaminated soils or containment systems (e.g., barrier walls) in certain areas and use of other, less immediate remedial approaches for soils at other locations at the site. Points of compliance for soil may reflect this flexibility (e.g., interim points of compliance applied during the remediation timeframe). The rationale for points of compliance must be shown in the remedy agreement.

## **7. How are points of compliance determined for surface water?**

Under § 35-11-1605(e), compliance with **surface water** cleanup levels must be monitored at the point where any release enters any surface water of the state, consistent with applicable federal and state requirements (i.e., as much as practicable, compliance must be measured before dilution by the surface water body.) For groundwater that is discharging to surface water, compliance will be measured in the groundwater as close as practicable to the surface water discharge. If sediments are affected by releases to surface water, a sediment point of compliance may also be established.

## **8. How do I know what the points of compliance are for my site?**

In the context of negotiating a remedy agreement and selecting a site-specific remedy, DEQ will work with Volunteers to establish site-specific points of compliance. These points of compliance will then be documented with other remediation requirements, such as the remedy, cleanup levels, and remediation time frame, in a site-specific remedy agreement. DEQ cannot overemphasize that, while general guidelines (discussed above) will apply to determining points of compliance, actual points of compliance are specified on a site-by-site basis in consideration of site-specific conditions.

## **9. I have a very simple cleanup; is there an easier approach?**

Yes. DEQ has established streamlined administrative procedures, referred to as the Independent Cleanup Process, for sites where contamination is limited to soil and the remedy is soil removal. When the Independent Cleanup Process is used, compliance with cleanup levels will be measured in the excavation area using DEQ's guidelines for confirmation sampling. Cleanup can often be completed, and a liability assurance issued, in a matter of months.

For more information on the Independent Cleanup Process see Fact Sheet #6 *Independent Cleanup*. For more information on soil confirmation sampling, see Fact Sheet #10 *Soil Confirmation Sampling Guidelines*.

## **10. How can I get more information about the VRP?**

To learn about VRP sites in your community, obtain copies of other VRP Fact Sheets/guidance documents, get answers to your questions, or volunteer for the program, contact DEQ at (307) 777-7752 or visit the VRP website at: <http://deq.wyoming.gov/shwd/voluntary-remediation-program/>.

The VRP website includes all of the Fact Sheets and other guidance documents for the VRP. This website is updated frequently and includes the latest information about DEQ's progress in developing guidance, policy, and other supporting documents for the VRP.