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New VRP Rule Effective

On June 1, 2020, the revised Voluntary Remediation Program (VRP) Rule became effective. A full summary of the rule changes can be downloaded from the [Technical Guidance and Templates Section](#) of the OER website. Among the most notable changes are:

- The term “Vapor Inhalation Pathway” was added, and the rule states that it must be evaluated using procedures in the VRP Guidance Manual (VRPGM)
- The term “Conceptual Site Model” was added, and the rule discusses its use in evaluating exposure pathways to minimize the need for site specific risk assessment
- The list of remediation standards, institutional controls, and engineering controls was moved from the Voluntary Remediation Agreement (VRA) to the Certificate of Completion
- Clarified that the public copy of the VRP application can be placed in municipal or county offices, or in the county public library
- Added a provision to remove the VRP application from the public repository after the Certificate(s) of Completion for the site is/are issued
- Clarified that data validation is only required for data used in developing exposure point concentrations
- Clarified that institutional/engineering controls can be presumed in an exposure assessment to eliminate contaminant exposures, and therefore, eliminate the need for site specific risk assessment
- Clarified that free-phase contaminants can remain in groundwater if removed to the extent practicable when the LNAPL closure guidance is followed
- Removed the De Minimis Migration to Groundwater (MTG) Standard from the De Minimis Standards (Table 60-3B), and moved the evaluation of MTG to the VRPGM
- Clarified that previous VRP submittals should be incorporated into the Final Report by reference and not attached
- Added a requirement to the Certificate of Completion to list the deed book, page number, and tax parcel identification number of the property

NEW VRP GUIDANCE MANUAL RELEASED

Based on changes to the VRP Rule that became effective on June 1, the VRP Guidance Manual (VRPGM) was also updated. Information regarding changes to the VRPGM were presented during the LRS Training at the 2019 WV Brownfields Conference. That presentation can be downloaded from the OER website on the [LRS Training and Newsletter Archive](#) page. One addition of particular interest is using Migration to Groundwater (MTG) in predicting potential impacts to groundwater from soil contamination in lieu of sampling groundwater. At sites where groundwater impacts are highly unlikely, the need to assess groundwater can be superseded by comparing COPC concentrations in soil to one of the three tiers of MTG screening levels. The simplest and most protective tier is the default screening levels provided in Attachment 1 of the VRPGM. More representative screening levels can be calculated by following the procedures described in the USEPA Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (VRPGM Appendix C.3.7).



However, the most representative values can be developed by analyzing site-specific soil samples using the Synthetic Precipitation Leaching Procedure method (SPLP, SW-846 Test Method 1312). When using this approach, WVDEP requires SPLP analysis to follow the guidance developed by the New Jersey Department of Environmental Protection in Development of Site-Specific Impact to Ground Water Soil Remediation Standards Using the Synthetic Precipitation Leaching Procedure, but the applicable groundwater quality criterion will be the WV Groundwater De Minimis Standards. The Toxicity Characteristic Leaching Procedure (TCLP, SW-846 Test Method 1311) should be used in lieu of the SPLP where there is a potential for highly acidic leachate to be present, such as may be associated with a landfill or coal mining operation.

Continuing Education in the Time of COVID-19

Due to the many conferences and trainings being postponed or canceled, Professional Development Hours (PDH) can currently be obtained through webinars and other virtual events. This temporary policy applies to renewals beginning September 2020, and extends through 2022. Four presentations during the virtual 2020 WV Brownfields Conference will be eligible for PDHs (one hour of PDH per presentation attended):

- BF 101 & WVDEP
- State & Federal Updates
- Big Picture Planning
- Wrecking Ball: Dealing with Demolition on a Brownfields Project

Save The Date!!

With ongoing public health concerns, we're bringing brownfields training directly to you – wherever you are. This year's WV Brownfields Conference will feature nine sessions over three days, with breaks and networking opportunities in between, as well as a virtual *Women in Brownfields Breakfast*. For the full schedule and a link to **FREE registration:**

[WV Brownfields Conference website](#).

SUBMITTAL TEMPLATES

Templates are frequently revised based on LRS comments. Before completing a template, please browse the [Technical Guidance and Templates](#) section of the OER website to download the most current version. For example, remediation standards have been removed from the VRA and are now located in Exhibit B of the COC, so the COC template has been revised and an Exhibit B template has been developed.

OFF-SITE IMPACTS?

Where contaminants originating from a VRP site migrate off-site, the requirements to address these impacts depend on the type of VRP Applicant. In general, there are two distinct categories of VRP Applicants; those who did not cause or contribute to the environmental contamination, often referred to as Brownfield Applicants, and those who caused or are otherwise responsible for the contamination, generally referred to as Responsible Party Applicants.

Brownfield Applicants are frequently government entities, economic development corporations, and non-profit groups who are innocent landowners. Generally, these applicants enter the VRP to establish liability protection for future economic redevelopment of brownfield properties in their communities.

Responsible Parties Applicants are typically companies or individuals that operated a commercial or industrial facility at the site,



and are remediating the site to obtain liability protection for contamination caused by their activities.

Brownfield Applicants must determine if site-related contaminants have migrated off-site, however, they are not required to remediate off-site impacts. They are required to remove or mitigate any on-site sources that are causing off-site impacts and prevent future impacts to off-site media. For example, contaminated soil that is eroding into an adjacent stream should be stabilized and further erosion prevented. Conversely, Responsible Party Applicants that caused or are responsible for contamination that has migrated off-site must also remediate off-site impacts caused by their activities at the VRP site.

Mandatory Online Training and Testing!

Beginning 4th Quarter 2020, two of the twelve PDHs used for LRS license renewal must be earned by successfully completing training conducted by WVDEP. This required training will be an annual, one-hour online training administered by the West Virginia Technology Learning Center. A link to the training website will be emailed to all LRSs, and the training will be available to complete beginning 4th quarter of each year.

This is mandatory for all LRS renewals occurring after September 2020 and is specifically focused on VRP processes and procedures. A disproportionate number of VRP submittals received by OER do not meet the fundamental requirements of the statute, rule, and/or guidance manual. These result in lengthy comment letters that essentially serve as training for consultants that are unfamiliar with the VRP. If you are an LRS who works with a project manager in your firm to oversee your VRP projects, you may also request a link for them to participate in this training.



Tell Us What

You Think...

The goal of this newsletter is to keep the lines of communication open and flowing at capacity.

Please let us know if there are topics you want to know more about, or just tell us what you think about the newsletter.

The best way to reach us is by sending an email to the address below.



Office of Environmental Remediation

DEPLRSPprogram@wv.gov

News Feed

- **Hexavalent Chromium**

If the COPCs at your VRP site include metals, you may need to evaluate hexavalent chromium concentrations. A partial list of site-related activities that indicate the potential presence of Cr+6 include metal-plating, wood treating, tanning, paint and dye production/use, coal ash or any burned rock, mineral, or ore (e.g., lime kiln), and mafic or serpentine geology. Because the holding time for Cr+6 is generally very short, the concentration can be easily determined by analyzing Cr+3 and Total Cr, and assuming the difference is the concentration of hexavalent chromium.

- **Is a De Minimis Risk Assessment Right for You?**

Remember that the VRP encourages the use of an exposure assessment (or De Minimis Risk Assessment) to avoid the need for more costly and time-consuming site-specific risk assessment. This is often the best approach at simple sites where institutional and/or engineering controls can eliminate exposures.

- **Residential Screening**

COPC concentrations must always be screened against residential soil and vapor benchmarks. This must be done to determine the list of COCs associated with the site, regardless of any restrictions or controls that are to be used.

- **Migration to Groundwater**

As discussed in this newsletter and detailed in the regulations and guidance manual, the Migration to Groundwater (MTG) de minimis standard no longer exists. The MTG process is now only used to evaluate the need for groundwater monitoring, and comparison to this de minimis standard should no longer be performed.

- **Proposed VRP Rule Amendments - 2021**

OER has proposed to amend the Voluntary Remediation and Redevelopment Rule (60CSR3) during the 2021 WV Legislative Session to remove the de minimis standards (Table 60-3B) from the Rule and place them in the VRPGM. Removing the de minimis standards from the Rule will allow them to be calculated and updated annually using the same equations as the EPA Regional Screening Levels. Additionally, a revision was made in Section 9.9.g.2 to allow eight groundwater monitoring samples to be collected for natural attenuation monitoring no more frequently than quarterly and with no more than fifty percent collected during the same season. The proposed Rule revisions may be viewed on the [WV Secretary of State webpage](#).