

Process Outline

Voluntary Remediation Program

[Code: Voluntary Remediation and Redevelopment Act (VRRRA) – WVC §22-22]

[Rule: Voluntary Remediation and Redevelopment Rule – Legislative Rule 60-CSR-3]

Item 1. Pre-Application Meeting (Optional)

A pre-application meeting may be held with the Applicant and their LRS to discuss previous work completed at the site, the potential for off-site contamination, potential site use restrictions, redevelopment plans, etc. The pre-application meeting is optional for the standard VRP track, but mandatory for Brownfield Revolving Loan VRP projects.

Item 2. VRP Application & Fee *[Code: §22-22-4(b)/Rule: §60-3-4]*

The Applicant, or their Licensed Remediation Specialist (LRS), will download the Application from the [WVDEP/OER/VRP](#) website. After completing the Application, submit the Application in electronic format to DEPOERFileCopy@wv.gov. Submit the fee, made payable to “West Virginia Department of Environmental Protection”, at the same time to:

Voluntary Remediation Application
Office of Environmental Remediation
601 57th Street SE
Charleston, WV 25304

The Office of Environmental Remediation (OER) must receive both the Application and the fee before it can take any action on the Application.

Application Review [Code: §22-22-4(h), (i)/Rule: §60-3-4.4]

The OER will act upon all Applications within 45 days of receipt of the application fee, unless the Applicant and the OER agree on an extension of time and confirm the same in writing via email. The OER may approve or reject the Application, or accept the Application subject to correction.

Application Resubmittal [Code: §22-22-4(h), (i)/Rule: §60-3-4.5]

If the Application is accepted subject to correction, the OER will provide a list of all required corrections. The OER will provide the Applicant with a reasonable amount of time (OER policy is 60 days) to make the corrections specified. The applicant may resubmit an application without submitting an additional application fee.

If the OER rejects the Application, OER will provide an explanation of the reasons for the rejection. If the Applicant chooses to resubmit the Application, they must notify the OER within 25 days of rejection. If the Application is rejected and not resubmitted, the OER will return one

half of the application fee. Alternatively, the Applicant may appeal the rejection to the Environmental Quality Board or withdraw the Application.

Application Amendment (See Appendix A)

Item 3. **Application Location** *[Rule: §60-3-7.2]*

The Applicant must place a copy of the Application in the municipal or county commission offices where the remediation is proposed; the Applicant may also place a copy in the county library. *[Rule: §60-3-7.2]* The Application will also be available at the OER Charleston headquarters for public inspection and copying via a Freedom of Information Act (FOIA) request (<https://dep.wv.gov/pio/Pages/FOIA.aspx>).

Item 4. **Draft Voluntary Remediation Agreement** *[Code: §22-22-7/Rule: §60-3-6]*

The Applicant/LRS will download the Voluntary Remediation Agreement (VRA) template from the WVDEP/OER/VRP website, complete a draft agreement in Microsoft Word format (completing the fillable portion of the template only) and e-mail the draft VRA to the OER Project Manager and to DEPOERFileCopy@wv.gov.

The OER and the Applicant must execute a VRA within 31 days of acceptance of the Application. If they agree it is impractical to reach an agreement within 31 days, the time limit may be extended in writing via email. *[Code: §22-22-7(e)]*

NOTE: If the Applicant desires to change the language in the VRA template, this should be discussed with the OER Project Manager. Any requested changes to the template language in the VRA will require WVDEP Legal Section review at a cost to the Applicant and may delay completing the VRA.

Item 5. **Submit Signed Voluntary Remediation Agreement**

When the OER notifies the Applicant/LRS that the VRA is acceptable, the Applicant will sign the VRA and the Applicant/LRS will secure all additional necessary signatures (including the property owner, if required) and e-mail the signed document to the OER Project Manager.

Initiating Site Remediation *[Rule: §60-3-6.8]*

The Applicant may, in the interest of minimizing environmental contamination and promoting effective cleanup, initiate site cleanup before the OER approves the VRA, provided they notify the OER in writing.

Modifications to the Agreement (see Appendix B)

Item 5A. Draft Public Notice *[Rule: §60-3-7.1]*

A. Applicant

During negotiation of the VRA, the Applicant/LRS will download the Public Notice template from the [WVDEP/OER/VRP](#) website, complete a draft Public Notice in Microsoft Word format (completing the fillable portion of the template only) and e-mail the draft Public Notice to the OER Project Manager for review.

B. OER Project Manager

The OER Project Manager will review the draft Public Notice for accuracy, quality and completeness and make any required changes. The Project Manager will forward the Public Notice to the respective newspaper for publication and will also prepare a Press Release for the WVDEP Public Information Officer. Cost for the Public Notice will be billed to the Applicant.

Item 6. Initial Site Visit

When the VRA is signed, the OER Project Manager will schedule an initial site visit with the Applicant and LRS. Both the Applicant and OER Risk Assessors should attend the initial site visit. The purpose of the initial site visit is to observe pertinent site features; confirm or identify potential contaminant sources, affected media, migration pathways, and other factors that will bear on the site assessment and risk assessment. A list of general items to note during the initial site visit may be found in Section 2.3.3 of the *Voluntary Remediation Program Guidance Manual* (VRPGM).

Item 7. Submit Site Assessment Work Plan

[Code: §22-22-8/Rule: §60-3-8.2, §60-3-10.1, §60-3-10.5.a]

The Site Assessment Work Plan (SAWP) must describe the methods and procedures used for data collection at the site to evaluate environmental conditions and establish data quality objectives. Data may be collected for use in risk assessment, remedial action design, and modeling. Information to be included in the SAWP may be found in Section 2.4 of the VRPGM. A checklist is also included as Attachment 4. The SAWP must also include a Site-Specific Health and Safety Plan (HASP) and Quality Assurance Project Plan (QAPP). Guidance for a Site-Specific HASP may be found in Section 2.4.3 of the VRPGM. The QAPP should be developed in general accordance with the OER QAPP, while addressing site-specific issues for the given project. General guidance for the QAPP is provided in Section 2.4 of the VRPGM; a checklist for the QAPP is included as Attachment 5. Whether included in the SAWP or submitted separately, these documents must be approved prior to initiation of the site assessment. The LRS must submit the SAWP via email to the OER Project Manager and to DEPOERFILECOPY@wv.gov in accordance with the schedule in the VRA. If the SAWP is not approved, the Applicant/LRS must resubmit the corrected SAWP or terminate the VRA.

Item 7A. Cost Estimate

When approving the SAWP, the OER Project Manager will also provide a cost estimate to the Applicant which estimates OER costs for oversight and review of the VRP project. The OER estimate will be based on the submittals outlined in the VRA, information from the initial site visit, and the current understanding of all work required to complete remediation of the site. Therefore, the actual cost will vary, based on actual conditions encountered and the amount of work required. (NOTE: A separate cost estimate will be provided if an outside contractor is needed to review the risk assessment –Item 9.)

Item 8. Site Assessment

A. Applicant *[Rule: §60-3-8.2.a-c.]*

The LRS should provide the OER Project Manager with a minimum of 2 weeks' notice prior to initiating field activities. In completing site assessment, the LRS must use sampling approaches, data quality requirements, and statistical methods set forth in the VRPGM. 60CSR3, Section 8.2 requires the following criteria be met to develop data necessary to evaluate environmental risk:

- Collect and analyze enough samples to provide a reasonable characterization of the nature and distribution of site contaminants.
- The number and location of samples must be of sufficient quantity and quality to calculate exposure point concentrations.
- Samples must be collected from all environmental media reasonably anticipated to have been impacted from contaminants at the site, considering the nature of the site operations and the nature of the contaminants of potential concern.
- Samples must be analyzed for contaminants reasonably anticipated, considering site operations and substances used or disposed of at the site.

B. OER Project Manager *[Code: §22-22-10]*

The Project Manager will provide oversight of field activities to ensure the investigation and sampling procedures provided in the approved QAPP are followed. The amount of time spent on-site will depend on the types of environmental media to be sampled, the number of samples per media, the number of chemicals of potential concern (COPC) and the overall complexity of the site. The Project Manager will collect split samples (10%) from all media being investigated during the site assessment (except vapor). The Project Manager will provide his/her own sample containers and will use a different lab than that used by the LRS for sample analysis. Laboratory analytical costs will be billed to the Applicant.

Item 8A. Data Validation/Site Assessment Report

Data collected during the site assessment must be validated to verify that it is of adequate quality for risk assessment purposes. At least 10% of the data per media (or some other percentage agreed to by the OER) must be validated using standard EPA protocols. Guidance on data validation and the associated Data Validation Report may be found in Sections 2.4.1 and

2.15 of the VRPGM. A Data Validation Report checklist is also available as Attachment 6 of the VRPGM. The Data Validation Report may be submitted with the Site Assessment Report (SAR) or as a separate document, but it must be submitted prior to the Risk Assessment.

The Data Validation Report cover letter should outline any potential data usability issues. The Project Manager will discuss these issues with the LRS and their risk assessor, as well as with the OER Risk Assessor, and if there are serious deficiencies in meeting the data quality objectives, additional sampling may be required.

Guidance on the content and format of the SAR may be found in Section 2.14 of the VRPGM. The LRS will e-mail the SAR to the OER Project Manager and to DEPOERFILECOPY@WV.GOV. If changes or corrections to the SAR are required, the Applicant/LRS must resubmit the corrected SAR or terminate the VRA. If it is determined that the site assessment does not meet the criteria set forth in 60CSR3, Section 8.2 and the VRPGM, the Applicant/LRS will need to submit a Supplemental Site Assessment Work Plan for review and approval. Once approved, the additional site investigation work must be completed, and a Supplemental Site Assessment Report (SSAR) submitted for review and approval. This process must be duplicated as needed until site assessment is complete.

Item 9. Risk Assessment Report

The Risk Assessment (RA) Report cannot be submitted before site assessment and data validation is complete. The Applicant/LRS must receive approval for the SAR (and/or SSAR) and the Data Validation Report prior to preparing the RA.

Risk assessments must consider both existing and reasonably anticipated human exposures, as well as potential adverse effects to ecological receptors of concern. A Baseline RA is typically used to assess the need for remedial action considering site-specific conditions, or to demonstrate the acceptability of current site conditions with respect to the selected remediation standards. As an alternative to a Baseline RA, a Residual RA may be used to evaluate site conditions following implementation of the remedy. It is not necessary to submit a Baseline RA prior to remedial action or prior to submitting a Residual RA. Probabilistic techniques may also be applied to human health and ecological risk assessments. At a minimum, the Applicant must perform a site-specific de minimis screening ecological evaluation (i.e., complete the De Minimis Ecological Checklist) to determine if a complete exposure pathway exists to ecological receptors of concern.

Risk assessment can be completed via one of three remediation standards: De Minimis Standards, Uniform Risk-Based Standards or Site-Specific Risk-Based Standards. A quantitative risk assessment (risk characterization) that calculates hazard quotients and cancer risks is not required for all sites. However, a qualitative risk assessment (exposure assessment) that includes an exposure pathway analysis which evaluates exposure pathways from contaminants

to receptor populations is required for all sites. At sites where human and ecological exposure pathways do not exist, or where the Applicant proposes to eliminate all exposure pathways through a remedy, the risk assessment can be terminated after completing the exposure assessment (i.e., toxicity analysis and risk characterization are not required).

Guidance on performing risk assessments may be found in Section 60-3-8 of the Rule and Sections 3, 4 and 5 of the VRPGM. The “Checklist to Determine the Applicable Ecological Standard” (De Minimis Ecological Checklist) is included as Attachment 8 in the VRPGM. Guidance on the content and format of the RA Report may be found in the VRPGM. The LRS will e-mail the RA Report to the OER Project Manager and to DEPOERFILECOPY@WV.GOV. If changes or corrections to the RA Report are required, the Applicant/LRS must resubmit the corrected RA Report or terminate the VRA.

Item 10. Remedial Action Work Plan

[Code: §22-22-8/Rule: §60-3-9.8, 60-3-10.1, 60-3-10.5.d,e]

The Remedial Action Work Plan (RAWP) details the remedial actions necessary for the site to meet the chosen remediation standard(s). This includes institutional controls such as a Land Use Covenant (LUC) to implement Activity and Use Limitations (AULs) or engineering controls such as contaminant removal, treatment, or covering/capping.

At sites where institutional controls are adequate to eliminate all exposure pathways and meet the selected remediation standards, and where the default OER LUC template is to be used, the RAWP may be submitted as an appendix to the RA Report. However, if groundwater does not meet De Minimis standards and a remedy will be required (either treatment or natural attenuation), the RAWP will require separate review and cannot be included with the RA Report.

Evaluation criteria to be used in selecting a remedial alternative that will achieve the goal of cost effective protection of human health and the environment may be found in [§60-3-9.8.a](#) of the Rule. These factors are to be balanced such that no single factor predominates over the others. Additional guidance on selection of a remedy and on the content and format of the RAWP may be found in Sections 6 and 7 of the VRPGM. This includes guidance for submitting a request to use natural attenuation as a remedy ([§60-3-9.9](#)).

In cases where natural attenuation is selected to address groundwater impacts and sufficient groundwater quality data has not yet been collected to meet the requirements of 60CSR3, Section 9.9g, the RAWP must include a natural attenuation groundwater monitoring plan and schedule.

A RAWP may be submitted at any time it is determined that remedial actions will be necessary to meet the selected remediation standards (e.g., prior to the RA Report). For example, the

Applicant may choose to conduct remedial actions prior to submitting a Residual RA. As noted previously, it is not necessary to submit a Baseline RA prior to submitting a Residual RA. The LRS will e-mail the RAWP to the OER Project Manager and to DEPOERFileCopy@wv.gov. If changes or corrections to the RAWP are required, the Applicant/LRS must resubmit the corrected RAWP or terminate the VRA. Upon approval of the RAWP, the Applicant will implement the remedy in accordance with the design and schedule in the RAWP.

Development of Remediation Goals *[Rule: §60-3-7.3, §60-3-9.3.d, §60-3-9.4.a]*

If the Applicant proposes a carcinogenic risk of greater than 1×10^{-6} (one in one million) for individual carcinogens as a residential remediation goal, or greater than 1×10^{-5} (one in one hundred thousand) as an industrial goal, they must provide public notification. This includes a 30-day public comment period and informational public meeting. The Applicant will publish an advertisement once per week for four consecutive weeks in a local newspaper of general circulation in the county where the remediation is occurring, noting information concerning the site contained in the Application and the date, time, and location of the public meeting. Additional specific requirements in the Rule apply to the advertisement and the public meeting. The Applicant will send a copy of the advertisement to the municipality, the county commission, and either the county and/or municipal land use agency or the area's Regional Planning and Development Council. The Applicant will respond to comments received during the comment period and provide the comments and responses to the OER. The OER will review the comments and responses when deciding whether to approve the remediation goal and will inform the parties who provided comments of their decision.

Item 10A. Land Use Covenant

A. Applicant *[Code: §22-22-14/ Rule: §60-3-13]*

Any limitation on the use of a property that is required to meet the selected remediation standards shall be contained in a the Land Use Covenant (LUC)([§60-3-13.1](#)). Guidance on completing the LUC may be found in the LUC Instructions available on the [WVDEP/OER/VRP](#) website. If the Applicant is not the property owner, the property owner must consent to the proposed AULs and sign the LUC. Any other holders of the covenant must also sign the LUC. Additional provisions or modifications to the LUC not included in the template may be agreed to, provided they are not inconsistent with the Rule, Act, or the Uniform Environmental Covenants Act. Any requested changes to the template language will require WVDEP Legal Section review at a cost to the Applicant and will usually delay completing the LUC.

In addition to the printed map attached to the LUC, a georeferenced file must also be provided in shapefile or a computer aided drafting format (.dwg or .dng) which is adequate to accurately delineate the area or areas to which the AULs apply. The Applicant/LRS will download the LUC template from the [WVDEP/OER/VRP](#) website, complete a draft LUC in Microsoft Word format (completing the fillable portion of the template only) and e-mail the draft LUC to the OER Project Manager and to DEPOERFILECOPY@WV.GOV.

When the OER notifies the Applicant/LRS that the LUC is acceptable, the Applicant will sign the LUC and secure all additional necessary signatures (including the property owner's and any additional holders). The Applicant/LRS will mail one signed hard copy LUC with original signatures to the OER Project Manager. An original document containing original (wet) signatures is required by the county clerks.

B. OER Project Manager Final Review and Processing

The Project Manager will forward the signed LUC to the Director for signature. Once signed, OER will mail the signed LUC to the Applicant/LRS for recording with the county clerk of the county in which the site is located.

C. Recording the Land Use Covenant [Code: §22-22-14/Rule: §60-3-13.3, 13.5, 13.6]

The Applicant/LRS must ensure that the signed LUC is recorded with the county clerk of the county in which the site is located. The LUC must be recorded in every county in which any portion of the real property subject to the covenant is located. The Applicant/LRS must supply a certified copy of the recorded LUC to each party named in Section 13.5 of the Rule and ensure that the county clerk returns the recorded LUC to the OER.

Item 11. Remedial Action and Remedial Action Completion Report

If the RAWP includes active remediation measures, such as contaminant removal or treatment, or engineering controls such as construction of a cap, the remedy must be documented by a Remedial Action Completion Report (RACR).

In cases where natural attenuation has been selected to address groundwater impacts and sufficient groundwater quality data has not yet been collected to meet the requirements of 60CSR3, Section 9.9g, the RAWP will include a natural attenuation groundwater monitoring plan and schedule. If the Applicant requests that the OER issue a Certificate of Completion prior to collecting sufficient data, groundwater monitoring must continue after the Certificate of Completion is issued. When the scheduled groundwater monitoring program is completed, the LRS will issue the RACR to document that the requirements of natural attenuation have been met. If the groundwater monitoring data does not adequately document that natural attenuation is occurring, the Applicant and the OER will reopen the VRA to develop an alternate remedial action or develop a plan for additional groundwater monitoring.

Guidance on the content and format of the RACR may be found in Section 8 of the VRPGM. The LRS will e-mail the RACR to the OER Project Manager and to DEPOERFILECOPY@WV.GOV. If changes or corrections to the RACR are required, the Applicant/LRS must resubmit the corrected RACR or terminate the VRA.

Item 12. Final Report and Certificate of Completion

A. Applicant [*Code: §22-22-8, 22-22-13/ Rule: §60-3-10.1, 60-3-11, 60-3-12*]

A Voluntary Remediation Program project is complete when the site meets the applicable remediation standards and all work specified in the VRA has been completed ([§60-3-12.1](#)). When these criteria are met, the LRS should issue a Final Report to the Applicant. The Final Report should include an executive summary of the project, explaining how compliance with the selected remediation standards for each media have been met. Requirements regarding the content of the Final Report is found in [§60-3-11.3 through §60-3-11.8](#) of the Rule, as well as Section 9 of the VRPGM. The Applicant, the Applicant's authorized agent, and the LRS must certify in writing the completeness and accuracy of the final report ([§60-3-11.9](#)).

When the Applicant receives the Final Report from the LRS, they should request a Certificate of Completion (COC) from OER (or from the LRS if the site meets De Minimis Standards). Any request for a COC submitted to OER must include the Final Report and a draft COC (in Word format), plus any COC exhibits. If changes or corrections to the Final Report are required, the Applicant must direct the LRS to correct and resubmit the Final Report or terminate the VRA.

B. OER Project Manager

When OER Project Manager determines that the Final Report has been appropriately issued and meets all requirements of the Rule, they will refer the COC to the Director to execute and issue to the Applicant.

C. LRS-Issued Certificate of Completion [*Code: §22-22-13/ Rule: §60-3-12.4*]

An LRS may issue a COC for any site that meets the De Minimis Standards, provided that the LRS issues a Final Report and gives the OER notice of his/her intention to issue the COC. Any COC issued by an LRS must comply with [§60-3-12.3](#) of the Rule. Within 30 days of notice by the LRS, the OER may object to the issuance of the COC. If the OER objects, the Applicant may direct the LRS to make the corrections identified by the OER or terminate the VRA. If the OER does not object within the 30-day notice period, the LRS may issue the Certificate of Completion.

D. Post-Certificate of Completion Monitoring

If the Applicant requests that the OER issue a COC prior to collecting sufficient groundwater quality data to meet the requirements of 60CSR3, Section 9.9g, the RAWP will include a natural attenuation monitoring plan and schedule, and monitoring must continue after the COC is issued. When the scheduled monitoring program is completed, the LRS will issue the RACR to document that the requirements of natural attenuation have been met. If groundwater monitoring data does not adequately document that natural attenuation is occurring, the Applicant and the OER will reopen the VRA to develop an alternate remedial action or develop a plan for additional groundwater monitoring.

Appendix A

Application Amendment

An Application Amendment must be completed whenever the Applicant chooses to make any of these changes:

1. Change the VRP Applicant
2. Add additional Applicants
3. Add or delete area to the site (an Application Amendment is not required to parcel the site)

A Voluntary Remediation Agreement Modification is also required to make the above-described changes.

A. Applicant

The Applicant/LRS will request an Application Amendment template from the OER Project Manager. Instructions for completing the Amendment are included with the template. The Applicant/LRS will submit the amendment in electronic format to the OER Project Manager and to DEPOERFileCopy@wv.gov. No additional fee is required for an Application Amendment.

B. OER Project Manager

The OER Project Manager will review an Application Amendment within 2 weeks (OER Policy), but no later than within 45 days of receipt. Any extension of the review time beyond 45 days must be agreed to by the Applicant and OER and confirmed in writing via email. *[Code: §22-22-4(g)/Rule: §60-3-4.4]*. The Project Manager may approve the amendment or request corrections.

C. Applicant Follow-up

The Applicant should resubmit the corrected amendment within 30 days (OER Policy).

Appendix B

Voluntary Remediation Agreement Modification *[Rule: §60-3-6.1.k]*

The Applicant and the OER must execute a Voluntary Remediation Agreement Modification (VRA Mod) for the following reasons:

1. Separate the site into more than one parcel
2. Specify remediation standards (when not specified in the original VRA)
3. Add new or different work plans/reports to the list of submittals in the VRA
4. Change the schedule for submittals in the VRA
5. Change the LRS or the OER Project Manager
6. Update contact information for the Applicant, LRS or OER Project Manager
7. Obtain the property owner's signature on the agreement to place AULs on the property (when not completed in the original agreement)

A VRA Mod must also be completed when the Application is amended (see Appendix A). The VRA Mod will be completed generally following the same steps as the original VRA, using the VRA Modification Template.

A. Applicant

The Applicant/LRS will download the Voluntary Remediation Agreement Modification template from the [WVDEP/OER/VRP](#) website, complete a draft VRA Mod in Microsoft Word format (completing the fillable portion of the template only) and e-mail the draft VRA Mod to the OER Project Manager and to DEPOERFILECOPY@WV.GOV.

When the OER notifies the Applicant/LRS that the VRA Mod is approved, the Applicant will sign the VRA Mod, secure the property owner's signature (if required), and e-mail the signed document to the OER Project Manager.

After the VRA Mod is executed by the Director, signed copies will be provided to the Applicant and LRS.