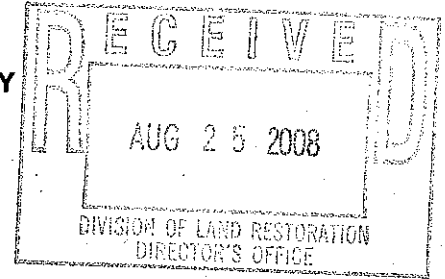




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029



Mr. Kenneth Ellison
Director, Division of Land Restoration
West Virginia Department of Environmental Protection
601 57th Street, S.E.
Charleston, WV 25304

AUG 21 2008

Dear Mr. Ellison:

EPA has completed our evaluation of WVDEP's Voluntary Remediation Program (VRP) and its process and the Federal RCRA Corrective Action Program. EPA has reviewed and evaluated WVDEP's voluntary cleanup program in determining consistency, equivalency and identifying differences with the Federal program.

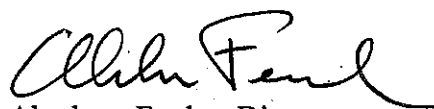
At this time EPA is providing a copy of the report, "Comparison of West Virginia Voluntary Cleanup Program and the Federal Corrective Action Requirements," (Enclosure 1) for WVDEP's review and comments. Also enclosed is a document entitled, "Comparison of EPA Facility Lead Agreement with West Virginia's Voluntary Remediation Agreement," (Enclosure 2). In the course of our review, we have determined that there is basic agreement between the VRP and the Federal program. The VRP offers a very comprehensive approach to protecting human health and the environment while cleaning up hazardous waste sites.

There are some differences that warrant further discussion. These are summarized in the enclosure starting on page two - Summary of Issues. EPA believes, however, that these differences can be easily resolved through further discussion.

We propose a meeting with the goal of WVDEP outlining its position on these issues. EPA has conceptualized a strategy that can easily address these differences in the authorization process and will be prepared to discuss these with you at that time.

We look forward to discussing these issues with WVDEP in determining the role of the VRP in the RCRA correction action process. I appreciate your continued efforts to reach an agreement on this program.

Sincerely,


Abraham Ferdas, Director
Land and Chemicals Division

Enclosures



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**COMPARISON OF WEST VIRGINIA
VOLUNTARY CLEANUP PROGRAM
AND THE FEDERAL CORRECTIVE ACTION REQUIREMENTS**

PREPARED FOR:

**EPA REGION 3
RCRA STATE PROGRAMS BRANCH**

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**COMPARISON OF WEST VIRGINIA VOLUNTARY CLEANUP PROGRAM
AND THE FEDERAL CORRECTIVE ACTION REQUIREMENTS**

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INTRODUCTION

This document presents a comparison of the West Virginia voluntary cleanup program requirements and the RCRA corrective action process in order to identify potential conflicts that may exist between the State's Voluntary Remediation Program (VRP) and RCRA Corrective Action. The most recent and comprehensive guidance issued by EPA for RCRA corrective action is found in the May 1, 1996 Advance Notice of Proposed Rulemaking (1996 ANPR), Section III (pages 19440 - 19455). The analysis presented in this document relies on the 1996 ANPR, as well as documents addressing EPA's policies and technical guidance for the various stages of the corrective action process.

The list of documents specifically evaluated is included in the **References** section of this report. In this document, the provisions evaluated under the West Virginia clean-up standards include the following:

- I. Eligibility requirements
- II. Application to participate in the VRP
- III. Public involvement/Public participation
- IV. Voluntary remediation agreement
- V. Risk characterization and assessment
- VI. Human health standard
- VII. Ecological Risk-based standard
- VIII. Residual Risk Assessment
- IX. Probabilistic Risk Assessment
- X. Remedy selection and evaluation
- XI. Land use covenants
- XII. Remedial action work plan
- XIII. Final report
- XIV. Certificate of completion
- XV. Violation of certificate of completion or land use covenants
- XVI. Re-openers
- XVII. Appeals

The issues identified are presented in the analysis Table for each of the topics.

SUMMARY OF ISSUES

(1) ROLE OF THE VOLUNTARY REMEDIATION PROGRAM AND ITS APPLICATION PROCESS

Under the RCRA corrective action program, a cleanup may be conducted pursuant to a RCRA permit or order or conducted under alternate authorities. Thus, it is acceptable for West Virginia to allow facilities subject to or potentially subject to RCRA corrective action orders or permits to perform corrective action in accordance with the requirements and standards of the Voluntary Remediation Program (VRP) to the extent that the requirement of the VRP are consistent and no less stringent than the federal corrective action requirements and that completed cleanups are consistent with EPA goals. While the VRP application requirements are consistent with the requirements for corrective action under RCRA, as indicated in Issue # 3 below, it would be inappropriate for West Virginia to use voluntary remediation agreements (VRAs) at facilities that are potentially subject to RCRA corrective action.

To the extent that West Virginia intends to use the procedural and technical requirements of the Voluntary Remediation Program (VRP) at facilities potentially subject to RCRA corrective action, it appears that there is general agreement between the EPA RCRA Corrective Action program and the VRP. West Virginia may incorporate the VRP requirements into a RCRA permit, order, or other enforceable document. West Virginia may also allow a facility potentially subject to RCRA corrective action to voluntarily perform a cleanup under the VRP. However, for all cleanups conducted at facilities potentially subject to RCRA corrective action, whether the cleanup is compelled or conducted voluntarily, the technical and administrative differences identified in this document must be addressed, either program wide or on a case-by-case basis, and the final remedy must be consistent with EPA goals. It is assumed that the site assessment component of the VRP application requirements and all subsequent procedural and technical requirements of the voluntary remediation program governing public participation, reporting, site characterization, risk assessment, remedial agreements, identification of remedial standards, remedy selection, remedy implementation, certificates of completion, reopeners, and appeals would apply to all facilities undergoing corrective action.

(2) PUBLIC PARTICIPATION

West Virginia is authorized for the corrective action program. Therefore, the voluntary remediation program public participation requirements are reviewed as additional public notice and public participation requirements that would be compiled within the context of the more stringent requirements of the hazardous waste regulations for permits.

As indicated in the RCRA Public Participation Manual (EPA, 1996), the EPA recommends that, to the extent possible, State corrective action programs develop and implement public notice and participation procedures for corrective action orders that are similar to those applicable to permits. EPA also recommends that, at a minimum, information regarding corrective activities (e.g., RCRA Facility Investigation (RFI) reports, Corrective Measures Study (CMS) reports, and Completion of Corrective Action Activities decisions) should be available to the public and the public should be given an opportunity to review and comment on proposed corrective action measures and before corrective action implementation is terminated and a facility is released from its RCRA obligations. These public participation activities include:

- Writing a statement of basis discussing the proposed remedy;
- Providing public notice;
- Providing a public comment period (30-45 days);
- Holding a public hearing if requested;
- Writing a final decision and response to comments;
- Use of Information repositories;

Holding public meetings.

If the State intends to allow responsible parties to conduct corrective action under the voluntary remediation program outside the confines of a permit or order, then West Virginia should provide for public notice and participation that is similar to the measures required during the permit issuance/modification process or those applicable to a corrective action order. In the advance notice of proposed rulemaking, EPA strongly encourages the use of public participation during facility lead corrective actions, and indicates that it will take into account the level of public participation conducted by the facility owner/operator when evaluating the acceptability of the facility lead actions.

In the voluntary remediation program, opportunity for public participation is limited to notices and participation during the application process. In addition, public notice and participation is required when proposed remediation goals for carcinogens under the Uniform Risk-Based and Site-Specific Risk-Based Standards have a residual cancer risk level greater than 1×10^{-6} for a residential land use or greater than 1×10^{-5} for commercial or industrial land use. There do not appear to be any public notice requirements or opportunity for public comments on other reports submitted to the Department, including the work plan report and the final cleanup report, nor in the issuance of the certificate of completion.

(3) EFFECT OF VOLUNTARY REMEDIATION AGREEMENTS

It would be inappropriate for West Virginia to use voluntary remediation agreements (VRAs) at facilities that are otherwise compelled to undertake corrective action pursuant to a permit or order. EPA does allow facilities subject to corrective action to commence a cleanup voluntarily without a RCRA permit or order and has itself developed the EPA's Facility Lead Corrective Action Agreement to be used in such situations; however, the terms and legal effect of the West Virginia model VRA are inconsistent with EPA's Facility Lead Corrective Action Agreement. A detailed comparison of the provisions in the EPA's Facility Lead Corrective Action Agreement with the model West Virginia Voluntary Remediation Agreement is provided in the accompanying document "*Comparison of EPA Facility Lead Agreement with West Virginia's Voluntary Remediation Agreement.*"

Issues of particular note related to the VRA include the binding nature of the VRA on both parties, limitations on changing the terms of the VRA once it is executed, and the liability protection provided once the terms of the VRA have been met. As such, when corrective action is conducted pursuant to a permit or order, it is inappropriate to utilize the VRA. The legal effect of the VRA under West Virginia law and the terms and conditions of the model VRA are inappropriate to the extent that the VRA limits State authority. All corrective action requirements should instead be incorporated as terms and conditions of the existing permit or other enforceable document. In addition, when corrective action is commenced voluntarily, the VRA should not be used at sites subject to the requirements of RCRA corrective action.

EPA allows the use of a voluntary Facility Lead Agreement in lieu of a permit, order, consent decree, or alternate enforceable document. This agreement is a non-enforceable commitment by the facility that the work conducted voluntarily will be consistent with EPA's RCRA Corrective Action goals. However, unlike the West Virginia VRA, EPA does not allow for negotiation of the terms of a Facility Lead Agreement; nor does the Facility Lead Agreement provide for dispute resolution. If negotiations are desirable or dispute resolution is necessary, then a permit, order, or comparable enforceable document is issued per EPA guidance. In addition, EPA stresses that public participation plays just as important of a role during the process when a cleanup is conducted pursuant to a Facility Lead Agreement. Finally, the Facility Lead Agreement does not provide for liability protection against future enforcement. In contrast, the applicant for the VRA does receive liability protection upon the State Agency's signing of the Agreement.

Even though the VRA component of the VRF is inconsistent with RCRA requirements for corrective action, EPA has determined that corrective action may be completed

in accordance with the other measures of the VRP, provided that the technical and administrative differences identified in this document are addressed, either program wide or on a case-by-case basis.

(4) USE OF BACKGROUND CONCENTRATIONS AS CLEANUP STANDARDS

In West Virginia, natural background concentrations may be used in place of the De Minimis Standard, and natural or anthropogenic background concentrations may be used in place of the Uniform and Site-Specific Risk-Based Standards. As stated in the original Subpart S Initiative (55 FR 30798; Section F. VI.5.c), EPA authority under RCRA is limited to releases from solid waste management units. Therefore, EPA does not have the authority under RCRA to compel corrective action of background contamination that is wholly unrelated to any release from a solid waste management unit. For instance, releases from production areas (unless the releases are "routine and systematic") and releases from off-site sources that are not affiliated with the facility would not be subject to RCRA corrective action. Therefore, a cleanup to background levels related to such releases is consistent with EPA requirements. There are no guidance documents on use of background levels as part of a RCRA corrective action. Under the CERCLA program, EPA guidance recognizes the futility and extensive cost of setting cleanup standards that are lower than either naturally occurring or anthropogenic background levels. (EPA, 2002. *Role of Background in the CERCLA Cleanup Program*, OSWER 9285.6-07P.) The CERCLA guidance emphasizes, however, that the establishment of background levels should be conducted following a baseline risk assessment and as part of the overall risk characterization. In addition, the risk associated with the use of background levels as a cleanup standard should be communicated to the surrounding community. Under the VRA program, there is no baseline risk assessment conducted when using the De Minimis or Risk-Based Standards and thus no associated risks associated with using the background levels as the cleanup standards are identified and communicated to the public.

(5) GROUNDWATER CLASSIFICATION

West Virginia limits potential sources of drinking water to groundwater with total dissolved solids 2,500 mg/l or less. EPA groundwater guidance defines potential sources of drinking water as groundwater with total dissolved solids of 10,000 mg/l or less. In general, EPA relies on State groundwater use designations when developing groundwater cleanup objectives for specific sites, especially when they are part of an EPA-endorsed Comprehensive State Groundwater Protection Program (CSGWPP), or where a State's designation considers the same factors listed in the CSGWPP guidance (EPA, 1997; EPA, 1992a). The overall impact of this difference is unknown as the site-specific analysis of the groundwater pathway may produce results that would be consistent with EPA guidance. West Virginia will need to demonstrate, on a case-by-case basis, that groundwater is evaluated and remediated to levels that are no less protective than they would be under a cleanup conducted pursuant to Federal guidelines.

(6) ECOLOGICAL SCREENING PROCESS

In the West Virginia program, the ecological screening evaluation focuses on "ecological receptors of concern," which are defined as those protected by federal, state or local laws and regulations or those that provide important natural or economic resources, functions, and values. The implication of the use of this terminology is that there may be ecological receptors that do not have to be taken into consideration despite the existence of contamination and complete exposure pathways. EPA guidance for ecological screening and risk assessment refers to the need to protect all impacted ecological receptors while giving special consideration to sensitive environments. In addition, West Virginia regulations state that some sites may be screened out from further ecological risk assessment based on site size or the lack of "valued ecological receptors". Pursuant to the West Virginia regulations there could be sites where ecological impacts will not be addressed even where there is contamination and complete exposure pathways impacting ecological receptors. EPA guidance does not screen out sites based on size or the lack of "valued ecological receptors".

West Virginia should demonstrate on a case-by-case basis that the focus on ecological receptors of concern and the use of site size or lack of valued ecological receptors to

screen out sites from further evaluation will not result in a cleanup that is less protective than a cleanup conducted pursuant to Federal guidelines.

(7) USE OF ECOLOGICAL BENCHMARK VALUES

In the West Virginia program, a Uniform Ecological Evaluation allows the use of "benchmark values" to determine the need for site-specific ecological risk assessment and/or cleanup. These benchmark values are derived from published studies on the ecotoxicity of various chemicals. For certain chemicals, the regulations rely on existing Federal and State water quality criteria to identify benchmark levels for surface water and groundwater. In all other instances, the regulations do not define the exact benchmark values. Instead, West Virginia guidance documents reference various third party studies as acceptable sources of benchmark values or even allow the responsible party to establish its own benchmark levels. Under West Virginia regulations, if benchmark values are found to be met, no remedial action or further characterization is required and the site is eligible for issuance of a Certificate of Completion. The EPA ecological risk assessment process does not allow for the use of benchmark values from third party sources to eliminate the need for site-specific ecological risk assessment. Instead, a literature review is identified as a component of the risk assessment process. Therefore, West Virginia should demonstrate on a case-by-case basis that the use of benchmark levels to limit the requirement to conduct a site-specific risk assessment will not result in a cleanup that is less protective than a cleanup conducted pursuant to Federal guidelines.

(8) POINTS OF COMPLIANCE

West Virginia's statutes, rules and regulations and technical guidance for the Voluntary Remediation and Redevelopment program have no specific provisions addressing identification of points of compliance (POC) for contaminated media. In order to ensure consistency with EPA cleanup goals, West Virginia should adopt some form of guidance that addresses the point of compliance issue. EPA defines the point of compliance at the location or locations at which media cleanup levels are achieved for a specific site. Although EPA recognizes points of compliance may be developed on a site-specific basis, the May 1, 1996 Advance Notice of Proposed Rulemaking provided the following guidance for establishing points of compliance:

For air releases, program implementors and facility owners/operators have generally used the location of the person most exposed, or other specified point(s) of exposure closer to the source of the release. For surface water, program implementors and facility owners/operators have routinely established the POC at the point at which releases could enter the surface water body; if sediments are affected by releases to surface water, a sediment POC is also established.

Points of compliance for soils are generally selected to ensure protection of human and environmental receptors against direct exposure and to take into account protection of other media from cross-media transfer (e.g. via leaching, runoff or airborne emissions) of contaminants.

For groundwater, program implementors and facility owners/operators generally set the POC throughout the area of contaminated groundwater or, when waste is left in place, at and beyond the boundary of the waste management area encompassing the original source(s) of groundwater contamination. This approach to the groundwater POC is generally referred to as the "throughout the plume/unit boundary POC."

(9) REMEDY EVALUATION AND SELECTION

EPA generally requires formal evaluation of remedial alternatives except when the overseeing agency has had direct involvement in the development of performance standards and there has been adequate public participation in the development of such standards. However, a selected remedy is acceptable without consideration of all

possible alternatives so long as the final remedy meets all of the criteria and the outcome results in a cleanup that protects human health and the environment. West Virginia does not require documentation or justification of remedy selection in the VRA or the Work Plan. Given that there is no agency oversight or public participation required during the remedy selection process in the VRP, it is potentially inconsistent with EPA corrective action guidance to not require the facility to describe the selection process or justify the final remedy selection decision.

West Virginia guidance explicitly states that there is no requirement to report the selection process or to establish a formal remedy evaluation and selection comparable to the Corrective Measures Studies required for RCRA Corrective Action. Given the lack of agency oversight and public participation in the West Virginia voluntary remediation program, this is inconsistent with EPA guidance even when achievement of performance standards is used in lieu of a specific remedy selection process.

West Virginia provides technical feasibility as a screening criterion to eliminate remedies from the selection process altogether. EPA provides technical impracticability as a component of the EPA balancing criterion for implementability. Although EPA guidance recognizes that consideration of technical impracticability may be made throughout the remediation process, technical impracticability determinations should be included in remedial decision documents. Therefore, alternatives should not be wholly screened out from the remedy evaluation process based on technical impracticability. However, as indicated earlier, a selected remedy is acceptable without consideration of all possible alternatives so long as the final outcome meets the cleanup criteria.

(10) AUTOMATIC APPROVAL OF REMEDIAL WORK PLANS

EPA guidance documents do not suggest that if the Agency fails to respond within a specific period of time, the Agency would automatically deem that reports submitted by a facility owner or operator during the various phases of corrective action are approved. Thus, West Virginia's provisions which allow for an automatic approval of reports appear to be less stringent. Time frames for report reviews and approvals were not found in the May 1, 1996 Advanced Notice of Proposed Rulemaking (EPA, 1996) nor in the 2003 Final Guidance on Completion of Corrective Action Activities at RCRA Facilities (EPA, 2003a). In the 2003 EPA guidance document addressing Tailored Oversight Guidance for Facilities Subject to Corrective Action (EPA, 2003a), EPA recommends tailored oversight as one means of reducing administrative requirements, such as reducing the number of formal reports to be submitted, or limiting review where Agency approval is not needed for a facility to proceed; this streamlining approach, however, does not extend to automatic approvals of reports.