



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 15 2000

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

SUBJECT: National Remedy Review Board Recommendations for the Ciba-Geigy Superfund Site, Operable Unit Two

FROM: Bruce K. Means, Chair
National Remedy Review Board 

TO: Richard L. Caspe, Director
Emergency and Remedial Response Division
EPA Region 2

Purpose

The National Remedy Review Board (NRRB) has completed its review of the proposed Superfund cleanup action for operable unit two of the Ciba-Geigy Site. This memorandum documents the NRRB's advisory recommendations.

Context for NRRB Review

The Administrator announced the NRRB as one of the October 1995 Superfund Administrative Reforms to help control response costs and promote consistent and cost-effective decisions. The NRRB furthers these goals by providing a cross-regional, management-level, "real time" review of high cost proposed response actions prior to their being issued for public comment. The board reviews all proposed cleanup actions that exceed its cost-based review criteria.

The NRRB review evaluates the proposed actions for consistency with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and relevant Superfund policy and guidance. It focuses on the nature and complexity of the site; health and environmental risks; the range of alternatives that address site risks; the quality and reasonableness of the cost estimates for alternatives; regional, state/tribal, and other stakeholder opinions on the proposed actions, and any other relevant factors.

Generally, the NRRB makes "advisory recommendations" to the appropriate regional decision maker. The region will then include these recommendations in the Administrative

-- Pre-decisional; not for distribution --

Record for the site before it issues the proposed response action for public comment. While the region is expected to give the board's recommendations substantial weight, other important factors, such as subsequent public comment or technical analyses of response options, may influence the final regional decision. The board expects the regional decision maker to respond in writing to its recommendations within a reasonable period of time, noting in particular how the recommendations influenced the proposed cleanup decision, including any effect on the estimated cost of the action. It is important to remember that the NRRB does not change the Agency's current delegations or alter in any way the public's role in site decisions.

Overview of the Proposed Action

The Ciba-Geigy Superfund site was used for a variety of manufacturing operations, waste treatment, and waste disposal activities. Manufacturing operations were primarily related to the production of dyes, pigments, and epoxy resins. These activities have contaminated surface and subsurface soils on the site as well as the underlying groundwater. The contaminants include a variety of organic solvents along with some arsenic and heavy metals.

The proposed cleanup action includes bioremediation of most of the contaminated media at the site. Some wastes, which cannot be effectively treated by this technology, would be transported to off-site facilities for appropriate treatment and/or disposal. In addition, a small area would be capped. Institutional controls would be included as part of the remedy to limit the use of certain areas of the property.

NRRB Advisory Recommendations

The NRRB reviewed the informational package for this proposal and discussed related issues with EPA's Donald Lynch and Romona Pezzella on March 15, 2000. Based on this review and discussion the board offers the following comments.

- The site review package presented to the board does not adequately support the rejection of on-site containment alternatives. For example, Alternative #3 offered a cost savings of \$30 million over the preferred alternative and yet it is also expected to address contaminant leaching threats, though with greater uncertainty over the long term. In addition, the board notes the region did not develop an alternative that supplements a containment alternative with soil vapor extraction, bio-venting, air sparging, or other common in-situ treatment technologies. These technologies could potentially enhance contaminant removal (and thereby reduce mass loadings from source areas to groundwater) thus increasing the overall effectiveness of the containment alternative. The board recommends that the region, in the decision document for this site, clarify its reasons for rejecting on-site containment and for not evaluating in detail an on-site containment/treatment alternative.
- The board notes that the preferred alternative, which includes bioremediation, may leave more residual contamination in the back-filled soils than would thermal treatment. The rate and extent of the biodegradation will vary for contaminants of concern and other contaminants (e.g., tentatively identified compounds) at the site. On the other hand, the results of thermal treatment are more predictable. Further, it would likely be more effective overall in addressing the wide range of contaminants found at the site, and would do so at only slightly greater cost. The board recommends that the region

make sure that the community understands the trade-offs between these remediation technologies.

The NRRB appreciates the region's efforts to work closely with the state and community groups at this site. We encourage Region 2 management and staff to work with their regional NRRB representative and the Region 2/6 Accelerated Response Center in the Office of Emergency and Remedial Response to discuss any appropriate follow-up actions.

Thank you for your support and the support of your staff in preparing for this review. Please give me a call at 703-603-8815 should you have any questions.

cc: S. Luftig
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