



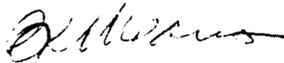
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 1998

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

SUBJECT: National Remedy Review Board Recommendations on the Joliet Superfund Site

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

TO: William E. Muno, Director
Superfund Division
EPA Region 5

Purpose

The National Remedy Review Board (NRRB) has completed its review of the proposed remedial action for the Joliet Army Ammunition Plant (JAAP) Superfund Site in Will County, Illinois. This memorandum documents the NRRB's advisory recommendations.

Context for NRRB Review

As you recall, the Administrator announced the NRRB as one of the October 1995 Superfund Administrative Reforms to help control remedy 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. The Board will review all proposed cleanup actions where: (1) the estimated cost of the preferred alternative exceeds \$30 million, or (2) the preferred alternative costs more than \$10 million and is 50% more expensive than the least-costly, protective, ARAR-compliant alternative.

The NRRB review evaluates the proposed actions for consistency with the National Contingency Plan 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 (to the extent they are known at the time of review); and any other relevant factors.

Generally, the NRRB makes "advisory recommendations" to the appropriate Regional decision maker before the Region issues the proposed plan. The Region will then include these recommendations in the Administrative Record for the site. While the Region is expected to give

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the Board's recommendations substantial weight, other important factors, such as subsequent public comment or technical analyses of remedial options, may influence the final Regional decision. 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.

NRRB Advisory Recommendations

The NRRB reviewed the informational package for the site and discussed related issues with EPA RPM Bob Bowden, and Larry Eastep of the Illinois Environmental Protection Agency on December 2, 1997. Based on this review and discussion, the NRRB generally supports the Army's proposed alternative and offers the following comments.

- The Board supports the Army's limited action alternative for ground water actions at the site. However, additional analysis will be necessary to evaluate the effectiveness of natural attenuation. Given this uncertainty, the Army should define in its decision document the process by which it would invoke a contingency remedy and the data needed to do so in the event one is necessary. The Board refers the Army to OSWER Directive # 9200.4-17 *Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites*, December 1, 1997, and OSWER Directive 9283.1-03 *Suggested ROD Language for Various Ground Water Remediation Options*, October 10, 1990, for more specific guidance.
- Program experience at other sites indicates that toluene tank farms are often associated with light non-aqueous phase liquid (LNAPL) ground water contamination problems. Since the JAAP has such a tank farm, the Army should ensure that their investigations have evaluated the potential for subsurface LNAPL contamination in this area. This is especially important since the Army's preferred alternative relies heavily on monitored natural attenuation to address GW contamination in this area.
- The NCP sets forth program expectations to treat principal threats wherever practicable. Another expectation is to contain low level threats, because treatment for these wastes may not be cost effective or practicable. The NCP also states that, for many sites, EPA will use a combination of treatment and containment. For this site, the information presented to the Board did not fully explain the extent to which the explosives-contaminated soils to be treated constitute principal threat wastes. The Board believes that less costly containment alternatives may be adequate for at least some of these materials, given the anticipated future land use and ground water considerations at the site. The Army should further explore these alternatives or more thoroughly explain in the decision document its rationale for choosing treatment over containment.
- The Board recognizes the difficulty in establishing ecological risk-based preliminary remediation goals (PRGs) for explosives at this site. For this reason, the Army should consider monitoring to verify that the human health PRGs used for the prairie ultimately achieve the desired ecological endpoints.
- The Army should revise the PRGs for PCBs and lead to be consistent with EPA guidance, future land use, and the ecological risk assessment for the site.

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- The Army should explain its rationale for addressing subsurface soil. This explanation should consider the potential for soil contamination as a continuing source of groundwater contamination, the exposure assumptions used in establishing PRGs (for the protection of health and/or environmental effects), and the incremental costs associated with addressing subsurface soils.
- EPA risk assessment guidance states that if key toxicity data are not in EPA's Integrated Risk Information System (IRIS), Regions should consult the Health Effects Assessment Summary Tables (HEAST). If this information is not in the HEAST or the documents referenced in it, Regions should consult with EPA's Superfund Health Risk Assessment Technical Support Center in Cincinnati, OH. Since a reference dose for Tetryl (trinitrophenylmethylnitramine) is in the HEAST and has been used by Regions and States at other sites, the Army should clarify its rationale for selecting a more conservative Tetryl reference dose for use at JAAP.
- The Board is concerned that exposure assumptions used in the Army's maintenance worker exposure scenario to calculate the PRGs for the manufacturing and load-assemble-package areas may be too conservative, given the expected future land use (Midewin National Tallgrass Prairie).
- CERCLA may not require the removal of sulphur-contaminated soil as a hazardous substance in Soil Remediation Unit (SRU) 7, although the Board supports the Army's plans to do so. The Army should clarify in its decision document their rationale for the planned soil removal.

The NRRB appreciates the Region's efforts to work closely with the Army, State, and community to identify the current proposed remedy. The Board members also express their appreciation to the Region and the State of Illinois for their participation in the review process. We encourage Region 5 management and staff to work with their Regional NRRB representative and the Region 5/7 Accelerated Response Center at Headquarters to discuss any appropriate follow-up actions.

Please do not hesitate to give me a call if you have any questions at 703-603-8815.

cc: S. Luftig
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OERR Regional Center Directors

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