

# **Evaluation of the Superfund Alternative Approach**



### Introduction

- Over the past decade, EPA has developed the Superfund Alternative approach (SA approach, or SAA) as an option for negotiating cleanups with cooperative potentially responsible parties (PRPs) without formally listing the sites on the NPL.
- Sites using the SA approach are identified and investigated using the same processes and standards that are used for sites listed on the NPL, and sites using the SA approach undergo the same "pipeline" steps of remedial investigation, development of records of decision (RODs) and remedial design and action.
- As of May 31, 2010, EPA's web site lists 63 sites with Superfund alternative approach agreements in place. EPA Region 4 has 21 of these sites.
- EPA Region 4's Superfund Division and the Office of Policy's Evaluation Support
  Division (ESD) sponsored this program evaluation to: examine the factors influencing
  the use of the SA approach, assess the effectiveness of the SA approach in achieving
  the goals of the Superfund program, assess the efficiency of the SA approach in terms
  of potential time and cost savings and identify strategies to improve the
  implementation of the SA approach.

# **Evaluation Questions**

- What is the response of potentially responsible parties (PRPs) to the Superfund Alternative approach (SA approach)?
- What do available data reveal about community member involvement in and perceptions of the NPL and SAA processes?
- Does a pattern of difference exist in the specific remedies selected for sites using the SA approach?
- Is there a difference in the potential for reuse/redevelopment at sites using the SA approach compared with more sites listed on the NPL? If there is a difference, does the evidence suggest why this difference exists?
- What are the total cost, cost net of cost recovery, and time differences of the SA and NPL approaches, for both EPA and PRPs?
- What has EPA done to improve the consistency of implementing the SA approach since an internal evaluation and an IG report on the approach was published in 2007?
- What additional factors or variables should EPA take into account when deciding if and when to use the SA approach in the future?

#### **Evaluation Methods**

- The evaluation used several research methods to answer the evaluation questions.
- The evaluation team reviewed existing program data on the costs and timing of site activities, and on selected remedies and reuse potential for sites. This effort included a review of spatial data to evaluate site expenditure and demographic patterns, and examination of data from EPA's CERCLIS and IFMS databases.
- The evaluation team collected new data through interviews with EPA staff, community representatives, Brownfield investors, and representatives of PRPs.
- The evaluation team also conducted a review of prior evaluations of the Superfund Alternative Approach and EPA's implementation of the recommendations of those efforts.

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# **Key Findings**

- Overall: Overall, interview respondents were uniformly positive in their opinions of the SA approach. Respondents noted that all PRPs who are given the opportunity to pursue the SA approach have agreed to do so, suggesting that PRPs also find value in the approach. The use of the SA approach does not appear to have a significant impact on community reactions to or participation in the site remediation process. Consistent with the interview emphasis that the SA approach mirrors the NPL process for most EPA activities, the SA approach does not appear to result in significant cost or time savings for EPA, though some preliminary data suggest that certain negotiations proceed more quickly at some SA sites, and cost data are incomplete. Anticipated future use patterns for NPL and SA sites are similar. These findings suggest that the program has value to participants, particularly avoiding the "stigma" of NPL listings. The issue of stigma remains an elusive but potentially significant factor in assessing SA approach impacts.
- Response of PRPs to the SA Approach: PRPs and many community leaders are concerned about "stigma" specifically, perceived property value and redevelopment impacts associated with an NPL listing. The SA approach provides an option for avoiding these without altering technical cleanup options. PRPs in particular view the SA approach as more cooperative, though the level of cooperation varies widely among individual PRPs and sites. In addition, a key potential benefit of the SA approach is the possibility of developing multi-site protocols for PRPs with sites across states or Regions.
- Community Perceptions of the SA Approach: Among community representatives, the SA approach is generally viewed as positive or neutral. Interview respondents suggest that the SA approach is often considered advantageous by community members and leaders concerned about property values and stigma. Other community members, however, require confirmation that the SA process will reduce resources or remediation standards. Most community concerns are consistent across SA approach and NPL sites.
- SA Approach Effectiveness and Efficiency: Mixed results suggest no significant difference in future use options between SA approach and NPL sites. An analysis of remedy data was inconclusive, but use of long term institutional controls and planned future uses are comparable, and interview respondents suggest that in some cases redevelopment may be easier at sites with SAA agreements due to the absence of NPL stigma.
- *Time and Cost differences:* Sites using the SA approach do not differ significantly NPL sites. A review of time to complete actions across sites shows no significant savings for sites with SAA agreements, but data and interview responses suggest that negotiations may be quicker at sites using the SA approach. However, large variability across sites and small sample size prevent clear conclusions. Similarly, limited EPA cost data show no significant cost advantage for sites with SAA agreements, though PRP costs are not available.

# Recommendations

The evaluation team suggests that EPA:

- Further investigate the role that "stigma" may play in the effectiveness of site remediation programs.
- Continue to improve tracking of community involvement activities to document successes and challenges in remediation programs.
- Update and expand the analysis of SA approach effectiveness as sites achieve construction completion and reuse.
- Examine the potential of the SA approach to be used as a method to efficiently address multiple sites.
- Investigate opportunities to integrate SA approach where appropriate in other regions, using Region 4 management approach as a template.
- Normalize accounting for progress at sites with SAA agreements to reflect similarity with NPL site activities.

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Report Link: <a href="http://www.epa.gov/evaluate/impact.htm">http://www.epa.gov/evaluate/impact.htm</a>

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