



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

SACM Notebook

OFFICE OF  
SOLID WASTE AND EMERGENCY RESPONSE

NFR. 8 1002

**IMPORTANT -- ALL READ**

**Desk to Desk Delivery**

**MEMORANDUM**

**SUBJECT:** Superfund Accelerated Cleanup Model (SACM) Notebook

**FROM:** Henry L. Longest, II, Director  
Office of Emergency and Remedial Response

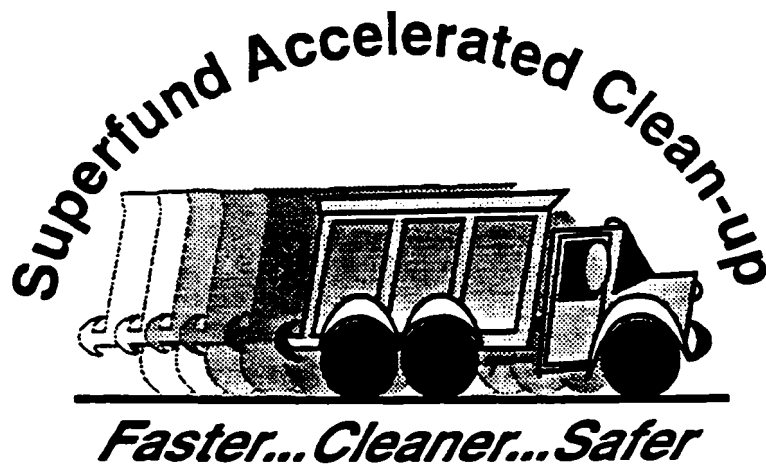
**TO:** All Superfund Regional Personnel

Attached is your personal copy of the Superfund Accelerated Cleanup Model Notebook that includes all the major SACM information available to date. This material will constitute the "core knowledge" of the SACM initiative. It has been prepared for you to insert into a three ring binder. All further SACM information will be sent to you to add to this notebook.

Please contact the Outreach and Special Projects Staff of my office (703/603-8950) if you have any questions regarding this notebook. Thank you!

Attachment

# SACM NOTEBOOK





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

OCT 19 1992

OFFICE OF  
SOLID WASTE AND EMERGENCY RESPONSE

**IMPORTANT - ALL READ**

**MEMORANDUM**

**SUBJECT:** Superfund Accelerated Cleanup Model - Vision for the Future

**FROM:** Henry L. Longest II, Director  
Office of Emergency and Remedial Response *HL*

**TO:** All OERR Staff

**PURPOSE**

This memorandum is to help crystalize the vision for what we as a program want to achieve through the Superfund Accelerated Cleanup Model.

**BACKGROUND**

Every meeting convened on Superfund seems to reinforce the issue of the numerous priorities that compete for the top attention of our staff and managers. Accordingly, OSWER and OE, are preparing a document entitled "National Superfund Program Priorities." The first priority of the seven listed in that memo is Construction Completions; the second is Accelerated Cleanups, otherwise known as SACM. Other priorities follow concerning base closures, enforcement, contract management, and communications. For FY 93, these are discrete priorities; yet successive years will meld these into one single priority that will help us achieve our targeted 650 site completions by the year 2000. We can achieve that goal through our SACM Vision: **BUILD PUBLIC CONFIDENCE -- THROUGH PROMPT AND APPROPRIATE HAZARDOUS WASTE CLEANUP THAT PROTECTS THE HEALTH OF PEOPLE AND THE ENVIRONMENT.** How do we do that? By accelerating and streamlining our process to provide risk-based cleanups at the greatest number of sites.



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## **DISCUSSION**

The Superfund Program is responding to the concerns raised by all segments of the American public concerning the pace and focus of hazardous waste cleanups. Accordingly we are redirecting our efforts to achieve the outcomes that people can identify with and value:

- 1) prompt risk reduction and public health protection at all Superfund sites - both removal and remedial.
- 2) results within 3-5 years of site identification
- 3) separate performance of the long and difficult job of ground water cleanup and environmental restoration, where feasible.

A major goal of SACM is to publicly account for all risk reduction achieved by all facets of the program at all Superfund sites, both NPL and non-NPL. Indisputably, the combination of our assessment, Early Actions, Long Term Actions, enforcement, and community relations successes makes a more cogent statement concerning our progress than merely focusing on NPL deletions. From a "communications" perspective, Superfund benefits from the decreased use of unnecessary bureaucratic distinctions (such as fund/enforcement, studies/cleanups, removal/remedial), that tend to diffuse the totality of the progress we've made. Further, we can make the best cleanup decisions by channeling Superfund's limited resources to the most significant, near term threats to existing populations. Successful implementation of SACM will enable us to demonstrate that the new streamlined Superfund is working; we are reducing risk from hazardous wastes quickly, thoroughly, and appropriately.

Over the last year, as a program we have laid out the SACM concept, developed its legal framework, initiated Regional pilots, drafted "Short Sheets" and work plans, and used TQM to involve all staff in deploying this initiative. Early in the process we obtained the Administrator's support and Don Clay's commitment to back us in this paradigm shift. We have talked to Congress, OMB, the Regions, State organizations, other Federal agencies and outside stakeholders in an attempt to resolve Superfund's conflicting mandates and propel SACM forward. Further, we have commenced budgetary and management tracking shifts and talked to the IG regarding their concerns with the former "removal" problems. Now its time to make SACM happen - both in terms of taking the actions to accelerate cleanup, as

well as effecting the cultural change that will remove the barriers and disincentives that slowed the program and partitioned the progress in the past.

### CONCLUSION

Both the Regions and Headquarters have responded with commitment and energy to the challenge of deploying SACM. You have done this concurrently with achieving a record number of site completions -- not only through your present efforts but, through your past diligence in building the construction pipeline. Clearly, staff and managers have focused on enhancing Superfund, without regard to turf or other parochial concerns. The aspect of program-wide positive change has been embraced with enthusiasm.

SACM has the potential to give Superfund a new life, and a sound footing to enter the Reauthorization debate. We must assure the public that every program action we take, continuously moves us toward our goal of maximizing the number, quality, and speed of Superfund cleanups.

We will all be working together over the next year, with enhanced cross-program effort, to lay out the specific steps and activities to make this vision a reality.

cc: Waste Management Division Directors  
Bruce Diamond, OWPE  
Sally Mansbach, OWPE  
Tim Fields, SRO  
Larry Starfield, OGC  
Bill White, OE

## **CONCEPT PAPER**

### **SUPERFUND ACCELERATED CLEANUP MODEL (SACM!)**

#### **THE NEW SUPERFUND PARADIGM**

##### **Introduction**

The present Superfund program operates within a complex pattern that was designed eleven years ago to accommodate a new and complicated law, then tinkered with as the program lurched from its infancy. The result has been a somewhat "jerry built" structure, altered to fit everyone's perceived needs and a host of conflicting expectations, that basically satisfies few. Early implementation focused on numerous intricate administrative and legal requirements. However, recent budgets have dramatically shifted the emphasis towards construction and completion of cleanup actions, and the policy emphasis has moved from Fund financed actions to actions secured using enforcement. Various groups continue to suggest ways to speed up the process. Congress will soon consider many ideas for restructuring the program under Reauthorization.

Amidst this evolution, however, a few facts are unlikely to change - the public does not fully understand our present process, or grasp the full scope of our work. It wants

**THIS PAPER IS MEANT TO CONVEY THE GENERAL CONCEPT OF THE SUPERFUND  
ACCELERATED CLEANUP MODEL. IT IS NOT MEANT TO BE A DEFINITIVE LEGAL DOCUMENT.  
OERR/OSWER 8/5/92**

faster cleanups, and believes that enough money has been given to Superfund to get the job done. The bottom line is that we can expect neither a lowering of expectations, nor a rise in resources. These factors have crystallized into a new focus on attempting to radically speed up and streamline the program within existing statutory and regulating constraints.

### **Background**

The current system for Superfund cleanups has led to the evolution of two discrete programs – remedial and removal. The remedial program tends to address long term cleanup sites on the National Priorities List (NPL). Separate and apart are the activities of the removal program. These sites enter our system through a different "door," usually the States (through the National Response Center) seeking our help at a specific release. Some are spontaneous "screaming emergencies," others are short term problems. While the removal program generally does not address long-term ground water, many of the other risks addressed by, and response actions associated with, the two programs are similar. There may also be significant differences between remedial and removal actions regarding the depth of investigation, and cost and time expended to complete a cleanup.

In summary, the complexity of our process and our heretofore unsuccessful attempts to communicate the full extent of the program's progress, have left the Superfund

program highly vulnerable to criticism. Therefore, we must focus attention on a few major outcomes that the public will value. -- We must make sure we deliver these outcomes and do it in terms the public will understand. For this reason, the new Superfund paradigm must be:

- o simple and flexible -- to allow fastest possible, worst case first, risk reduction;
- o free of unnecessary administrative constraints that divide and diffuse the totality of reduced risk reported at remedial and removal sites;
- o realistically achievable in that we make realistic cleanup commitments and deliver them on time; and
- o focused on rapid protection of people and the environment, rather than unattainable goal of returning all groundwater to pristine condition.

#### **The New Superfund Accelerated Cleanup Model (SACM)**

Under SACM all sites at which Superfund takes any kind of cleanup action are Superfund sites. Rather than viewing removal and remedial actions as parts of separate



programs, they will be viewed as separate legal authorities with different, but complimentary, application at Superfund sites. The intent of SACM is take better advantage of the flexibility conferred through CERCLA and the NCP in implementing these two authorities.

Rather than entering the program through one of two doors marked "remedial" or "removal", all sites will enter through one door marked "Superfund". All site assessment will take place in one program, combining, as appropriate, elements of present removal assessments, PA/SIs, RIs, and risk assessments. At any point during or after the assessment process, a Regional Decision Team may consider short term activities to address threats to the health and safety of the existing population. These actions include cleanup activities that will generally take no more than three or, at the most, five years-- a reasonable time frame based on the program's demonstrated ability to identify and address immediate risks to people and the environment within three to five years.

These activities will be published on a Quarterly basis in the Federal Register (for public information purposes only, not as a rulemaking) on an Early Action List. It is crucial to note here, that though these actions are "short term" and quickly implemented, in some cases they may eliminate the majority of human risk from Superfund sites.

Enforcement activities for early actions would commence with immediate PRP search/notification, expedited orders/negotiation, and opportunity for consensual cleanup. Because the vast majority of risk reduction will occur in this part of the program, most of EPA's public participation/information activities will be focused here. Community relations and opportunities for Technical Assistance Grants (TAGs) continue as they do today. The State role is confirmed in its present configuration; further, State-funded programs, are encouraged resulting in a net increase of cleaned-up sites nationwide.

The Regional Decision Team can also determine if and when long term remediation (e.g., ground water restoration) is appropriate. Sites would then be placed on a Long Term Action List (which will most likely be a subset of the NPL), and cleaned up over many years. Regional Decision Teams could also decide that no Federal action was appropriate or that the site should be deferred to RCRA or other response authority.

The major parameters of this concept are outlined below.

1. Single Site Assessment Function. There are a number of redundancies in the beginning of the program as it is structured today. Hazardous waste sites often receive numerous similar, but sequential, assessments before any kind of cleanup begins. Sites are evaluated by the removal program

(removal assessments), the site assessment program (PAs, SIs, Expanded SIs, and Hazard Ranking System (HRS) scoring), the remedial program (RIs and baseline risk assessments), and even in some cases by the RCRA program. ATSDR, State, local, and private party assessments may also occur. Many, if not most of these assessments start from scratch, – they do not necessarily take into consideration the information and data generated by the studies that preceded them. This happens not only because of the obvious financial incentives to the contractor community and the human inclination to distrust the work of others, but because each part of the program is gathering data to respond to its particular perceived need. The site-assessment program wants to know if it will score on the HRS; the removal program wants to know if the site is going to blow up; the remedial program wants to know the extent of the ground water plume, the size of the cap, etc.

Large amounts of time and money are expended on the process of executing separate contracts, mobilizing sampling teams, designing sampling strategies, modifying health and safety plans, etc., as each part of the program goes out to "feel a different part of the elephant."

Assessment, in all of its forms, now absorbs far more time than any other part of the process. Although it is important to carefully study complicated contamination problems before taking action, whole steps in this redundant process must be combined to expedite cleanup. The FIT/TAT contract mechanism could support this combined assessment effort and thereby assist in blending the remedial and removal "cultures" of the program.

In some Regions, there will be no reason for a two-staged screening function (PA followed by SI) since there will be no backlog of sites to be screened. Discovered sites could be screened once and, if serious, go directly to RI level data collection and risk assessment. Appropriate short term cleanup activity, combined with public participation/outreach, and expedited enforcement action (i.e., PRP search, information gathering, and notification) could begin immediately. These changes in the assessment process could save several years, since the level and type of risk posed by the site would be understood and often eliminated prior to listing.

Consolidating all site assessment activities would require the development of new protocols that could serve many needs. Rigid QA/QC procedures would assure the integrity and multiple-usability of the data developed.

**2. Regional Decision/Management Teams.** Regions are often able to identify the most likely alternatives to remediate a site early in the decision process. In future years that capacity certainly will expand. The Regional Decision Teams would "traffic cop" sites onto the Early Action List and/or score sites where long term restoration actions are expected to be necessary (such as ground water sites). In addition, standards for both remediation levels and technologies will continue to be developed. This move toward standardization will both speed decision making process and allow increased flexibility in the staging and timing of various activities.

**The chief benefits are the ability to:**

- o reduce the number of assessments**
- o make early action decisions while studies continue;**
- o carry out relatively short term cleanup steps that  
may in many cases be all that is necessary ;**
- o stay flexible (within CERCLA and the NCP) while various activities are  
going on, rather than keeping functions in rigid and  
sequential boxes;**
- o effectively utilize the decision making expertise in the Regions, possibly  
delegating where appropriate to the project manager level to  
cleanups;**
- o realize time and cost economies.**

Regional Decision/Management Teams would require the skills of the most experienced managers (Fund and Enforcement), site and risk assessors, on-scene coordinators (OSC), remedial project managers (RPM), Community Relations coordinators and State officials, as appropriate. The OSC and RPM individual site management function would eventually become combined, which would further increase the efficiency of the process. Enforcement orders and negotiations would be conducted within strict deadlines. Cleanup could be performed by PRPs and appropriately overseen by the Agency. Training and commitment on the part of Superfund Headquarters and Regional management can help overcome different cultures that now exist and use the combined expertise in the remedial, removal, and enforcement programs to achieve the common goal of risk reduction.

3. Early Actions. Risks at NPL sites fall into a number of categories, but most commonly are associated with the direct contact with wastes or contaminated soil, or drinking contaminated water from ground water sources. Source control steps taken early in the remedial process, such as drum removal, soil cleanup and access restraints, as well as alternate drinking water provision, frequently provide substantial risk reduction to existing populations. Actions taken under removal authorities as well as early remedial actions are designed to address just such risks.

The Early Action initiative of SACM would encourage an expansion of non-time critical removal activities and early remedial actions. In fact, we have already interpreted and expanded removal authority to allow continuing cleanup actions at NPL sites if consistent with remedial actions (e.g., Radium Chemical, White Chemical, Avtex, Publicker). True emergency situations such as train derailments would continue to be handled as they are today. Surface cleanup (i.e. actions other than long term ground water pump and treat or extensive site restoration technologies such as large mining site cleanups, wetlands/estuaries remediation, or extended incineration projects), would be carried out through the Early Action phase of the of the program. This would include such activities as:

- o waste and soil removal,
- o preventing access,
- o relocating people,
- o providing alternate drinking water sources.

Most important, immediate threats to public health and safety would be addressed in this part of the process. While standardized cleanups for similar sites would expedite many cleanups, innovative technology would be considered whenever it is faster, more efficient, more acceptable to the public, less expensive,

or less environmentally impactful. Both standardized and innovative treatment technologies offer opportunities for cost efficiencies.

The public could be notified of activities at these Superfund sites through a quarterly Federal Register notice – the Early Action List. Sites would be listed when the decision to cleanup was made, then documented and removed from the list when the early action work was completed. Public input would be achieved through all the mechanisms (possibly including TAGs, where available) that are now used by the program's community relations professionals. Most important, Superfund progress would be measured against all of its risk reduction activities and most of those activities would be completed rapidly. Under the New Superfund Accelerated Cleanup Model, the Agency would commit itself first and foremost to substantially reducing or eliminating threats to public health and the environment within a specified time frame and that time frame would be short. This commitment would be EPA's primary measure of success.

4. Long Term Action. Sites requiring ground water restoration or long term remediation (e.g., mining sites, extended incineration projects, wetlands/estuaries) or significant Fund-financed O & M would be published in the Federal Register. They would not be placed there until the need for such remediation activities was clearly established by the site assessment process. Many sites would already have been addressed under the Early Action phase, eliminating many of the issues that



hold up RODs today. Enforcement opportunities would be vigorously pursued using the full arsenal of Enforcement tools to obtain PRP participation. Community Relations would be performed and public participation fostered as set out in the NCP. Innovative technologies and standardized cleanups would be used, as appropriate. Of greatest benefit, the public would understand that the actions placed on this list would require many years, if not decades, to clean up, but would pose no immediate threat to existing populations. Removing the long-term cleanup/restoration question to a separate part of the decision making process would also allow for a more reasonable evaluation of the benefits and costs of such restoration. Public policy makers could then more reasonably decide which ground water resources warrant priority action given limited funding.

### **Implementation**

This concept has been developed in Headquarters and discussed with several Regions. The next step is to refine the definition of SACM and hypothetically run some sites through the proposed process and see if there are any unforeseen "stoppers." Then we would test SACM on a pilot basis in the Regions. Various Regional pilots are being reviewed for utility in the execution of the process. Meanwhile we are preparing a paper on the legal underpinnings of SACM. The

timing is very opportune considering the congruence of current recommendations for improving and streamlining Superfund.

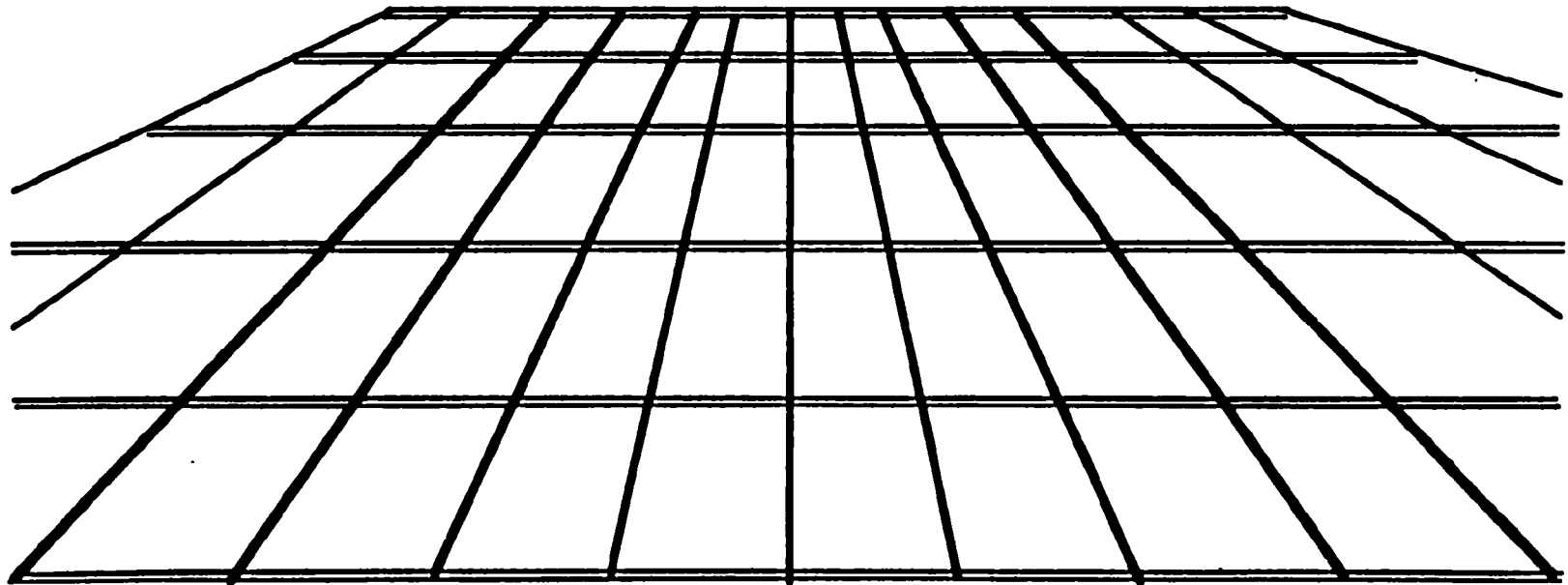
### **Conclusion**

A program guaranteeing prioritized public health protection at all sites, without unnecessary distinctions, between types of actions, within five years of site identification, and having, as a separate activity, the long and difficult job of environmental media restoration, has a better chance of being understood, appreciated, and, therefore, publicly supported.

Counting the totality of risk reduction rather than focusing on NPL site deletions, is a simple, uncontrived, and true expression of the work of the program. It fulfills several of our most basic needs in building public confidence. First and most important, it focuses the program on the very substantial risk reduction that is now achieved, and achievable. Second, it focuses on the distinction between sites with the risk reduced to safe levels because of completed surface cleanup and those sites presenting no immediate threat, but requiring decades to complete. And third, it supplies what the public expects, and has every reason to expect from a program called "Superfund" - the achievement of appropriate cleanup at large numbers of sites.

# **SUPERFUND ACCELERATED CLEANUP MODEL – SACM**

**(The New Superfund Paradigm)**



**March 1992**



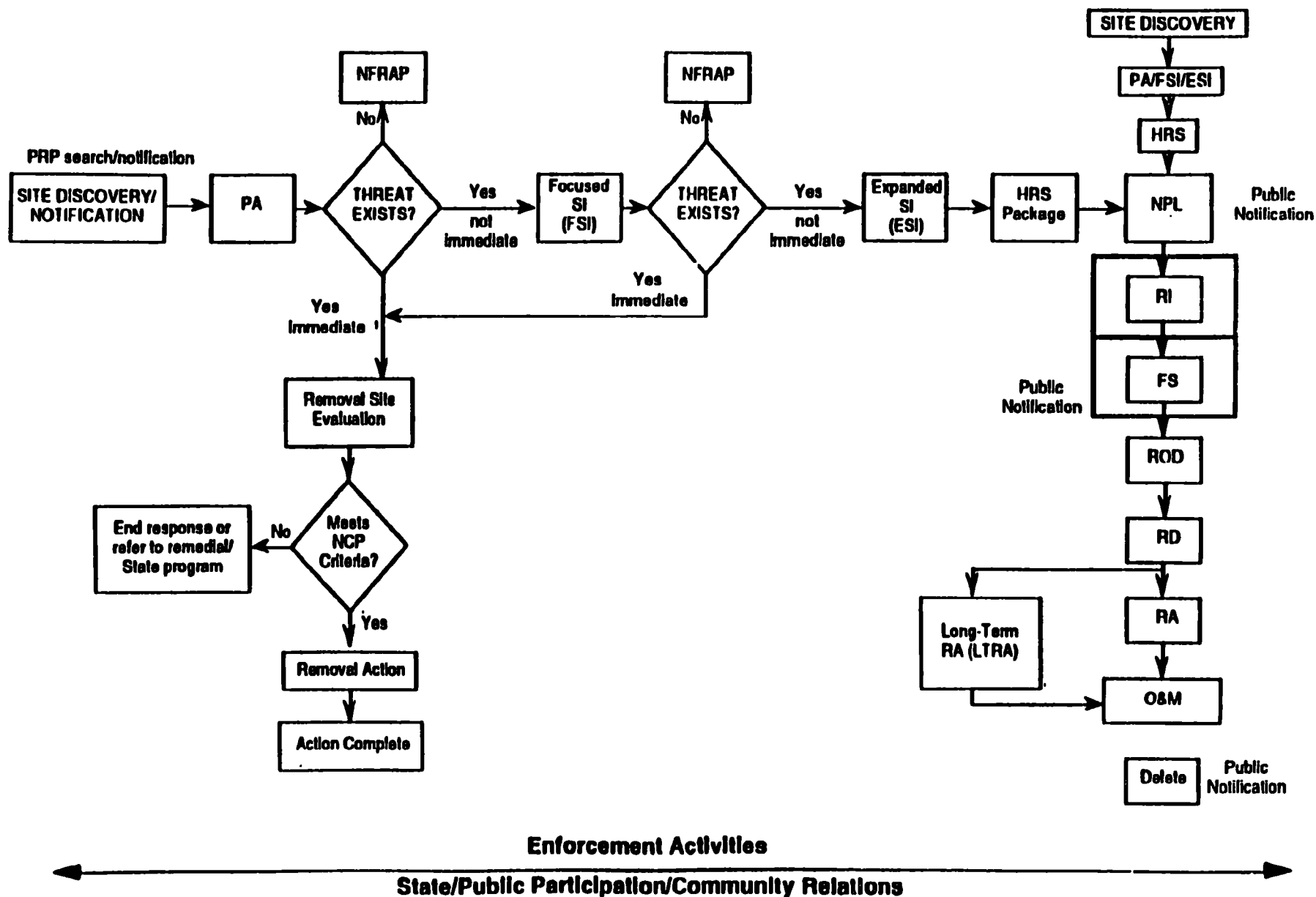
**U.S. Environmental Protection Agency  
OSWER/OERR**

## WHAT'S THE PROBLEM?

1. **Outside perception of Superfund is poor**
  - Too slow
  - Scanty environmental improvement
  - Not enough \$\$ in cleanup.
2. **Internal Superfund process is inefficient**
  - Redundant
  - Pokey
  - Too much "cool down" time.



# THE CURRENT SUPERFUND PROCESS



# WHAT'S THE SOLUTION?

## MAKE SUPERFUND WORK BETTER

1. **Provide results the public will value**
  - **Quickly reduce acute risks**
  - **Restore environment over long-term.**
2. **Streamline program**
  - **Eliminate delays and rework**
  - **Expand "worst first"**
  - **Funnel \$\$ Into cleanup.**



## **HOW DO WE DO IT?**

- 1. One step site screening and risk assessment.**
- 2. Regional Management Teams "traffic cop" all sites.**
- 3. Early action to reduce immediate risk.**
- 4. Long-term cleanup to restore environment/media.**

**Enforcement, community relations, and public involvement throughout process.**



# **1. ONE STEP ASSESSMENT**

- **Streamlined assessment will speed cleanup.**
- **Also blends removal/remedial cultures (action vs. study).**
- **Enforcement search and notification starts immediately.**
- **Community outreach and public involvement throughout.**





## **2. REGIONAL MANAGEMENT TEAMS**

- **Unite management experience – removal, remedial, enforcement, assessment, community relations, State involvement.**
- **Serve as "traffic cop" for sites moving to Early Action or Long-Term Action List.**
- **Prioritize workload to achieve common goal of risk reduction.**
- **Help develop standard cleanups and technologies.**



### 3. EARLY ACTIONS

- All immediate threats to public health and safety will be eliminated.
- Public will be notified when Early Action starts and notified when work is complete.
- Substantial risk reduction in a short timeframe will be our primary measure of success.



## **4. LONG-TERM ACTION**

- **Long-term actions:**
  - **extensive mining sites**
  - **ground-water remediation**
  - **estuarine/bay sites**
  - **incineration.**
- **These would be published in FR on the Long-Term Action List.**
- **The public would know long-term actions require years to clean up, but pose no immediate threat.**
- **Allows more reasoned evaluation of restoration benefits and costs.**



## WHAT'S DIFFERENT?

- **ALL SITES OR RELEASES** with Superfund cleanup action are "Superfund sites."
- We stopped seeing Superfund as separate programs:
  - Removal/Remedial
  - Fund/Enforcement
  - NPL/Non NPL.
- No separate list of removal actions and remedial actions.
- One simple goal of prioritized risk reduction from all Superfund cleanups.



## **ADVANTAGES**

- **Rapidly reduces majority of risk from Superfund sites – to people and the environment.**
- **More money dedicated to cleanup – versus support/study function.**
- **Efficient and effective – geared for results.**
- **Cost and time efficient – emphasizes standard remedies and innovative technologies.**
- **Realistically achievable – commit and deliver.**

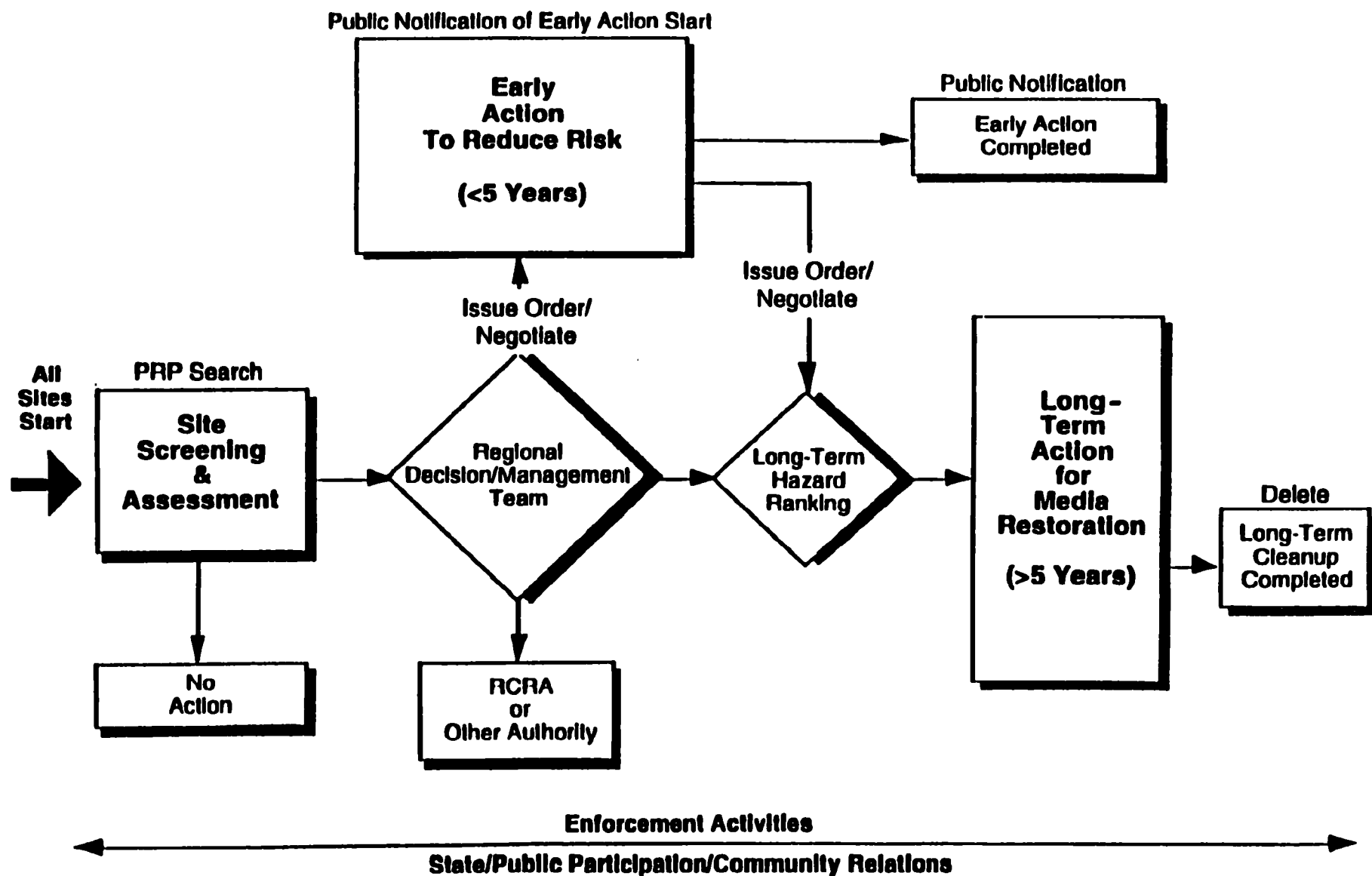


## BENEFITS

- **Measures success by risk reduction, not NPL completions.**
- **Makes long-term restoration a separate activity.**
- **Builds public confidence:**
  - **Substantial risk reduction in early actions**
  - **"Worst first" approach**
  - **Cleanup at a large number of sites.**
- **In sync with Agency management themes.**



# THE NEW STREAMLINED PROCESS



## Superfund Accelerated Cl

## Model (SACM) Matrix

DR,

NCP Terminology	Early Actions				Long Term Actions
	Emergencies	Time Critical	Non-Time Critical		Remedial
<b>Funding Source and Authority</b>	Removal	Removal	Removal	Remedial	Remedial
<b>Types of Actions Generally Performed Under Each Authority</b>	Classic Emergencies	Site Access Direct Threats Water Supply Visible Soil Contamination Remove Surface Structure and Debris	Source Control (soil and waste) - Treatment (Incineration and other technologies) - Containment Capping DNAPL Source Extract GW Plume Containment  Post Removal Site Control (By PRP or State)	Actions With Extended O&M Property Acquisition Permanent Relocation Institutional Controls	Restore - Groundwater - Surfacewater Sediments Wetlands/Estuaries Large Mining sites
<b>Enforcement Vehicles Available</b>	<div> <div>Administrative Order on Consent</div> <div>Consent Decree</div> <div>Unilateral Order</div> </div>				
<b>State Role</b>	Notification, Consultation and Optional Participation			Notification, Consultation and Participation	
<b>Cost Share</b>	Not Required		Optional	Required	
<b>Contractor Vehicle</b>	ERCs FIT/TAT		FIT/TAT	ERCs and ARCs and COE FIT	
<b>Requirements</b>	Required To Extent Practicable (or get waiver)				Required (or get waiver)
• ARARS	Extent Varies Based on Urgency and Duration				Required
• Community Relations	No Requirement		Required on EE/CA	Required on RI/FS	
• Public Comment	Risk Documented in Action Memo		Informal Under EPA Policy	Generally Required	
• Baseline Risk Assessment	As Time Allows (but not required)		Preferred Under EPA Policy	Required	
• Preference for Treatment	Action Memo		Action Memo	Quick ROD	Full Scale ROD
<b>Documentation</b>	Emergency Waiver Administrative Record - (After the Fact)	Emergency Waiver Consistency Waiver	Consistency Waiver  Administrative Record	HRS Scoring NPL Listing RI/FS CA/SSC Administrative Record	

SF012A



# Superfund Accelerated Cleanup Model

**E**PA is streamlining Superfund to speed hazardous waste site cleanups and quickly reduce risks to people and the environment.

The Superfund Accelerated Cleanup Model, or SACM (pronounced sack-em), will combine Early Actions, such as removing hazardous wastes or contaminated materials, with ongoing studies so that immediate public health and environmental threats are taken care of while long-term cleanups are being planned.

"SACM is about achieving more cleanup, quickly," says Office of Emergency and Remedial Response (OERR) Director Henry Longest.

Emergencies such as train derailments and motor vehicle accidents will be handled expeditiously, as they are today. Teams of highly trained technicians will swing into action right away, coordinating the cleanup and removal of hazardous materials to ensure public safety as quickly as possible.

### Breaking With Tradition

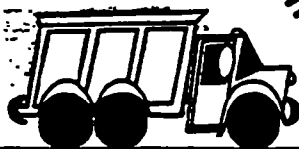
The traditional Superfund process begins with a lengthy phase of study and site assessment, but SACM will save time by combining separate, yet similar, stages of site assessment. A Regional Decision Team of Superfund site managers, risk assessors, community relations coordinators, Regional counsel and other experts will monitor the studies and determine whether a site requires Early Action (taking less than five years), Long-term Action, or both.

"The Regional Decision Team, composed of people with cross-cutting program skills, will have the latitude to make decisions about the most appropriate action for each site," explains Longest. "These teams will have the expertise and flexibility to determine the best way to meet the goal of site cleanup."

While the site is studied, the Regional Decision Team will begin the short-term work required to correct near-term public health or environmental threats. Besides removing hazardous materials, these Early Actions include taking precautions to keep contaminants from moving off site and restricting access to the site.

"Although these actions are short term and quickly implemented, they could eliminate most human risk from these sites," Longest says. "More public participation and public information activities will be focused during assessment and Early Action."

**Superfund Accelerated Cleanup**

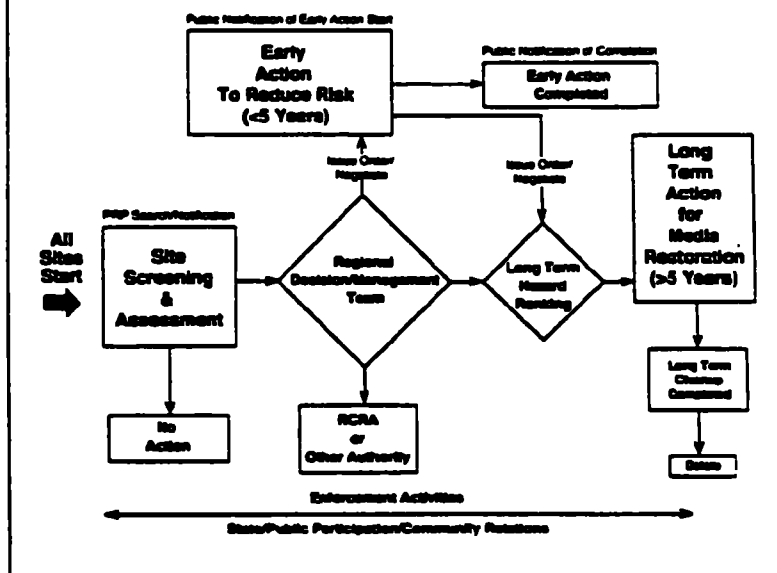


**Faster...Cleaner...Safer**

### Long-Term Solutions

Many hazardous waste problems can be corrected, and most public and environmental protection can be achieved, by Early Actions, but some problems will take a long time to correct. Cleanups of mining sites, wetlands, estuaries, as well as projects involving incineration of contaminants or restoration of ground water, can take far longer than the three to five years envisioned for Early Actions.

### SACM's Streamlined Superfund Process



## Streamlining Superfund

EPA will take steps to pursue the potentially responsible parties (PRPs) who may have caused or contributed to the site contamination. Expedited enforcement and procedures for negotiating PRP involvement in cleanups will secure their participation. EPA's Superfund personnel will continue to oversee cleanup work performed by PRPs.

### Measuring Success

SACM will focus Superfund on the very substantial risk reduction that is now achieved and

achievable. No longer will Superfund's success be measured by how many sites are struck from the National Priorities List (NPL). Protection of people and the environment at all Superfund Actions will be the program's yardstick.

"We need to move away from defining success as deleting sites from the NPL; success in the Superfund program is cleaning up hazardous waste sites to reduce risk to people and the environment," Longest says. "SACM will achieve appropriate cleanup at as many sites as possible."

### Accelerating Superfund With Presumptive Remedies

Learning from experience is a sign of maturity in federal programs as well as in people. Since its inception in 1980, Superfund has amassed a great deal of experience correcting similar problems at many sites. Now, the program is grouping proven clean-up techniques into sets of responses appropriate for specific types of sites, contaminants, or both.

Known as presumptive remedies, these sets of responses will help streamline removal actions, site studies, and cleanups to improve consistency, reduce costs, and speed the correction of environmental problems. The reasoning behind presumptive remedies is straightforward: sites with similar characteristics, or which were previously used for similar activities, likely are contaminated by the same chemicals. The techniques for cleaning up those chemicals, which worked well before, can be expected to work well again. So, lengthy site study and evaluation of treatment options are unnecessary.

Superfund has selected four types of site to test the presumptive remedy approach to cleanup. They are municipal landfill, wood treatment, solvent, and contaminated groundwater sites. These categories were selected based on the number of potential sites, the amount of historical information available, and types of contaminants typically found there, and the technologies used in the past to clean up such sites.

Superfund is evaluating several approaches to determine the most effective way to

implement presumptive remedies. The approaches consist of training, developing new policies and guidance, and establishing teams of experts to help evaluate sites quickly and choose appropriate clean-up methods.

**Municipal Landfill Sites.** Superfund's goal is to have at least one pilot project in each of the 10 EPA Regions nationwide. That way, each Region will have at least one person knowledgeable about how work at these sites can be streamlined. Remedial Project Managers (RPMs) who participate in these pilots will form an "expert team" to help other RPMs clean up such sites.

**Wood Treatment Sites.** Experience shows that the same contaminants often appear at such sites. To accelerate the clean-up process, Superfund is narrowing the list of potential technologies to speed selection of a clean-up technique. Program experience, guidance, and an expert team will help identify technologies that may be applied to specific situations.

**Solvent sites.** This initiative also focuses on early selection of a proven clean-up technology. It will generate guidance on standardized remedy selection and site characterization.

**Groundwater Sites.** Over 75 percent of Superfund sites have contaminated groundwater. This initiative will develop and publicize presumptive remedies for dealing with this problem, which can take years to clean up.



## The Superfund Accelerated Cleanup Model (SACM)

Office of Emergency and Remedial Response  
Outreach and Special Projects Staff, OS-200

Intermittent Bulletin  
Volume 1 Number 4

The U.S. EPA currently is developing and implementing a streamlined way to clean up hazardous waste sites known as the Superfund Accelerated Cleanup Model, or SACM. It is designed to make the Superfund Program more efficient by cutting years off of cleanups and quickly reducing risks to people and the environment.

SACM will focus Superfund on the very substantial risk reduction which is now achieved and achievable. Protection of people and the environment at all Superfund actions will be the program's measure of success. Superfund will reduce risk from hazardous wastes quickly, thoroughly, and appropriately.

The Superfund Program is responding to concerns raised by all segments of the American public concerning the pace and focus of hazardous waste cleanups. The program was designed in 1980 to accommodate a new and complicated law. Since then, EPA has learned through experience what works.

The accelerated cleanup model incorporates five essential elements:

- One-step site screening and risk assessment
- Regional Decision Teams to "traffic cop" all sites
- Early Action to reduce immediate risk
- Long-term cleanup to restore the environment
- Enforcement, community relations, and public involvement throughout the process

Traditionally, Superfund cleanups are performed after long periods of site studies and assessments. The heart of SACM, however, is an approach that fosters immediate action at a site, at the same time that necessary

studies are being conducted. Regional Decision Teams of site managers, risk assessors, community relations coordinators, Regional attorneys and other experts will decide whether a site requires Early Action (taking less than five years), Long-term Action, or a combination of both.

Any short-term work required to correct immediate public health or environmental threats will be done while a site is studied. Besides removing hazardous materials to prevent human contact, these Early Actions include taking precautions to keep contaminants from moving off site and restricting access to the site.

Many hazardous waste problems can be corrected — and most public and environmental protection can be achieved — by Early Actions, but some problems will take longer to correct. Cleanups of mining sites, wetlands, and estuaries, as well as projects involving incineration of contaminants or restoration of ground water, will take more than the three to five years envisioned for Early Actions — possibly decades.

EPA will continue to pursue potentially responsible parties (PRPs) who may have caused or contributed to the site contamination. Expedited enforcement and procedures for negotiating PRP involvement in cleanups will secure their participation. EPA's Superfund personnel will continue to oversee cleanup work performed by PRPs. Public and State participation and access to information will be encouraged during all phases of Superfund cleanups.



Efficient, effective, and geared for results, SACM will direct more Superfund resources to actually cleaning up Superfund sites. By working to correct the worst problems at a large number of sites, Superfund will be able to maximize its protection of people and the environment from the effects of hazardous materials.



# Status of Key SACM Program Management Issues — Interim Guidance

Office of Emergency and Remedial Response  
Office of Waste Programs Enforcement  
Office of Enforcement

Intermittent Bulletin  
Volume 1 Number 1

The purpose of the Superfund Accelerated Cleanup Model (SACM) is to make Superfund cleanups more timely and efficient. This will be accomplished through more focus on the front end of the process and better integration of all Superfund program components. The approach involves:

- A continuous process for assessing site-specific conditions and the need for action;
- Cross-program coordination of response planning;
- Prompt risk reduction through early action (removal or remedial);
- Appropriate cleanup of long-term environmental problems;
- Early public notification and participation; and
- Early initiation of enforcement activities.

SACM is a process change that should be considered for all Superfund activities. Implementation of this policy will be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Overall Superfund priorities remain the same: deal with the worst problems first; aggressively pursue enforcement; and involve the public and relevant State agencies at all appropriate stages of the work.

## Status of Key SACM Program Management Issues - Interim Guidance

SACM raises a number of management-related issues which require reconsideration of the current ways Headquarters and Regions do business in budget planning and execution, reporting accomplishments, measuring performance, contracting, training, distribution of responsibility, and communications. This SACM Program Management Update will describe activities underway, planned, and recently completed to refocus Superfund's program management systems to support SACM implementation.

### Regional Target (SCAP/STARS) Flexibility

To allow greater Regional flexibility in implementing Superfund site cleanups, SACM will require changes in the program's targets and measures under the Superfund Comprehensive Accomplishments Plan (SCAP) and the EPA Strategic Targeted Activities for Results System (STARS). FY93 program measures and targets were developed too early to incorporate key aspects of SACM. To prevent the FY93 STARS/SCAP measures from impeding the implementation of SACM,

the Office of Policy Planning and Evaluation (OPPE) approved an Office of Solid Waste and Emergency Response (OSWER) request to allow the program maximum flexibility to grant target relief.

Granting FY93 target relief requires the Regions to provide, on a case-by-case basis, a good resource-based rationale which clearly shows work commensurate with the targeted measure. For example, the Office of Waste Programs Enforcement (OWPE) has proposed to grant SCAP/STARS target relief for Remedial Design/Remedial Action (RD/RA) settlement where the Region implements a non-time-critical removal with an estimated clean-up value of greater than \$2 million. The Office of Emergency and Remedial Response (OERR) has proposed to grant target relief for remedial action starts where the Region conducts a large (>\$2 million) non-time-critical removal instead.

Headquarters and the Regions have started developing new FY94 SCAP/STARS measures. These new measures will reflect the program changes brought by SACM,

and will provide the Regions greater flexibility to clean up "NPL-caliber" sites more efficiently. Headquarters will transmit a proposal of draft FY94 measures to the Regions



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for review in January 1993. This package will be a basis for discussion during the Program Management meeting in February 1993. The intention is to complete a comprehensive revision of STARS/SCAP targets and measures so that SACM implementation is fully supported while reducing the total number of Regional targets.

#### **National SACM Evaluation Measures**

Baseline national criteria need to be established to analyze and evaluate the success of SACM in improving the timeliness and cost-effectiveness of Superfund cleanup actions. Existing Superfund time duration trend measures will be reevaluated to ensure they effectively document the program's baseline and capture incremental changes. Development of Superfund risk reduction measures is critical to the program's ability to report achievements of early action and long-term site cleanups. Existing Superfund environmental indicators will be the starting point for measuring risk reduction consistently for both early actions and long-term responses. These measures will allow us to identify the extent to which SACM projects and overall program changes linked to SACM implementation are measuring up to the overall objectives of SACM. These measures may also identify areas in which the SACM approach can be refined as full implementation proceeds in 1994.

In addition, there is a need to reach agreement on overall measures of program performance that will communicate meaningful program results to Superfund's customers. Ongoing communication initiatives are being reexamined to consider any refinements that are called for with the SACM program changes.

#### **Workload Model**

The workload models were frozen in FY91 and FY92, and are frozen for FY93. With SACM, there is a need to determine the future relationship between FTE workload/pricing factors and future program goals. To date, Headquarters' efforts have focused on generating a consensus on revising/reopening the Superfund workload models.

The Regions provided input on whether the models should be reopened. Six Regions favored reopening/revising the models, two proposed that a new, less resource intensive mechanism for distributing FTE be pursued, and two

opposed reopening/revising the models. The Regions also made two key recommendations: the models should not be reopened until FY95, and the family of Superfund models (program, enforcement, and Federal facilities) should be integrated.

In preparation for the February 1993 Program Management meeting, Headquarters plans to draft an approach for addressing the model changes based on the Regional and Headquarters correspondence to date. This proposal will be the point of departure for a break-out/discussion session during the meeting. The goal is to close the Program Management meeting with a joint approach to revising the Superfund workload models.

In addition, as was identified during the initial SACM planning meetings, it is critical that Regions evaluate their existing workforce skill mixes and identify cross-training and workforce development activities that are needed to effectively implement SACM.

#### **Budget Flexibility**

Beginning with the FY92 budget, Superfund monies have been apportioned between "Cleanup," "Enforcement," and "Support," with control subtotals for each category, and a narrow definition of cleanup. Regions need more flexibility in resource utilization than the budget process has provided to streamline and accelerate the cleanup of Superfund sites under SACM. One of the most critical areas involves the cleanup/support budget category. For FY94 OERR recast the Superfund Response budget, taking into account Sacm, in a way that considerably broadens the definition of cleanup.

Though the broader definition of cleanup was developed for the FY94 budget submission, it has been implemented in the FY93 enacted budget. A new advice of allowance (AOA) category has been added to the Cleanup category. The new AOA is site characterization; it includes all site assessment and remedial analysis (e.g., aerial photo, hydro-geo work) funding, and creates more Regional funding flexibility in these categories. This change significantly bolsters the Agency's ability to support the funding needs of the integrated assessments called for under SACM.

Greater flexibility among the various response activities is also needed. As an example, a Region that has planned a

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remedial action at a given site and identifies an opportunity to more quickly reduce risks via an early action must have access to the funds required to implement this action. As such, the program has set aside \$50 million of the remedial action budget to encourage increased risk reduction at NPL sites through early action activities. The FY92 removal budget was successfully increased to support SACM early action projects. As new opportunities for flexibility present themselves we will continue to work with the OSWER senior budget officer, comptroller, and Office of Management and Budget (OMB) to further increase budget flexibility.

#### Program Priorities

Implementation of SACM requires that overall Superfund program priorities be reexamined. The *Superfund Program Management Manual* and *Agency Operating Guidance* are the key documents that lay out these integrated program priorities. The FY93 *Program Management Manual* was revised to incorporate FY93 SACM implementation activities into overall program priorities.

SACM has modified the way we think of the Superfund universe. Traditionally, sites were distinguished primarily by whether or not they were listed on the National Priorities List (NPL). EPA typically conducts only emergency and time-critical responses at non-NPL sites. EPA does not intend to alter significantly its traditional approach to addressing non-NPL sites not expected to qualify for listing.

In contrast, the program will seek to invest resources earlier in NPL-caliber sites to conduct integrated assessments and early actions. For sites currently on the NPL, EPA intends to take advantage of opportunities to conduct early actions and accelerate long-term responses. Thus, it may be useful to think of the Superfund universe under SACM as consisting of (1) non-NPL sites which EPA screens and takes needed emergency/time-critical actions; (2) NPL caliber sites where EPA conducts integrated assessments and early actions; and, (3) NPL sites where EPA conducts the full range of Superfund responses.

Analysis is underway to assess what actions will be needed to achieve the Superfund program's long-term goal of 650 NPL construction completions by the year 2000. This analysis should help to determine the ability of EPA and State

agencies to invest more resources into SACM integrated assessments and early actions at NPL-caliber sites without jeopardizing the NPL construction completion goal. Discussions during the February 1993 Program Management meeting will clarify program priorities and provide more specificity in appropriate resource investments and disinvestments to support SACM's implementation.

#### Federal Facilities

The Office of Federal Facilities Enforcement (OFFE) supports the focus on accelerated cleanup. OFFE, in conjunction with the Regions, has developed a draft guidance covering site assessment, impact of NPL listings, presumptive remedies, early actions vs. long-term actions, effect on existing Federal facility agreements, and Regional Decision Teams. The draft guidance is due out for final comment during the latter part of December and is expected to be final by February 1993.

OFFE has been working with the Superfund Revitalization Office (SRO) to communicate the Federal Facilities Accelerated Cleanup for Superfund (FFACS) policy and its Superfund impacts to the other Federal and State agencies.

OFFE will also be assessing the impacts of FFACS on SCAP/STARS targets and measures, workload model, and other program management issues.

#### Contracts

The Long-Term Contracting Strategy for Superfund (LTCS) was completed in September 1990. Implementation of the Strategy is ongoing. The Strategy analyzed the long-term contract needs of the Superfund Program and designed a portfolio of Superfund contracts to meet those needs over the next ten years.

Many of the underlying principles of SACM (e.g., increasing early action responses) were anticipated in activities under the LTCS (e.g., creating Emergency and Rapid Response Services (ERRS) contracts; combining site assessment and response technical assistance functions under a single Superfund Technical Assessment and Response Team (START) contract, etc.). Placement of new contracts has begun and will continue over the next several years. The LTCS itself and the scheduling of new procurements easily lend themselves to the phase-in of SACM.

## Communicating Program Accomplishments

Considerable effort has been undertaken to communicate the goals/objectives, plans, and expectations for implementing SACM to other Federal and State agencies, other EPA Offices, critical external groups including Congress, environmental and trade groups, and others. We need to seek and incorporate feedback from these groups into our implementation efforts, and regularly communicate the program's progress to this audience.



**NOTICE:** The policies set out in this fact sheet are not final Agency action, but are intended solely as guidance. They are not intended, nor can they be relied upon, to create any rights enforceable by any party in litigation with the United States. EPA officials should follow the guidance provided in this fact sheet, or may act at variance with the guidance, based on an analysis of site-specific circumstances. The Agency also reserves the right to change this guidance at any time without public notice.

## Status of Key SACM Program Management Issues - Interim Guidance

This paper is one of five fact sheets published by EPA under publication number 9203.1-05I (Volume 1, Numbers 1-5) to describe the Superfund Accelerated Cleanup Model (SACM) and should be reviewed in conjunction with the other SACM fact sheets. Regions are encouraged to contact the following individuals for information on program management issues: Dave Evans (703) 603-8885 in OERR; Tai-ming Chang (703) 603-8965 in OWPE (SCAP/STARS and contracts); David Chamberlin (202) 260-4118 in OWPE (workload model and budget); or Rene Wynn (202) 260-3025 in OFFE for further clarification, suggestions or comments.

There are two other important sources of information: "SACM concept paper" (8/5/92) and *Guidance on Implementation of the Superfund Accelerated Cleanup Model Under CERCLA and the NCP* [OSWER Directive No. 9203.1-03 (7/7/92)]. General SACM information can be obtained by calling the Superfund Document Center (202) 260-9760.





United States  
Environmental Protection  
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Office of  
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Emergency Response

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## Early Action and Long-Term Action Under SACM — Interim Guidance

Office of Emergency and Remedial Response  
Office of Waste Programs Enforcement  
Office of Enforcement

Intermittent Bulletin  
Volume 1 Number 2

The purpose of the Superfund Accelerated Cleanup Model (SACM) is to make Superfund cleanups more timely and efficient. This will be accomplished through more focus on the front end of the process and better integration of all Superfund program components. The approach involves:

- A continuous process for assessing site-specific conditions and the need for action;
- Cross-program coordination of response planning;
- Prompt risk reduction through early action (removal or remedial);
- Appropriate cleanup of long-term environmental problems;
- Early public notification and participation; and
- Early initiation of enforcement activities.

SACM is a process change that should be considered for all Superfund activities. Implementation of this policy will be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Overall Superfund priorities remain the same: deal with the worst problems first; aggressively pursue enforcement; and involve the public and relevant State agencies at all appropriate stages of the work.

### Response Goals

The primary goals of an early action are to achieve prompt risk reduction and increase the efficiency of the overall site response. The main goal of a long-term action is to attain an effective, final site cleanup.

### Prompt and Effective Risk Reduction

The only response authorities under CERCLA are removal and remedial. Any Superfund clean-up action that is taken must meet the requirements of one authority or the other. SACM encourages Regions to think creatively about the way these authorities may be used under the NCP to achieve prompt risk reduction (early action) or to conduct more complex, time-consuming remediations (long-term action). Take, for example, a site where substantial soil contamination threatens a drinking water aquifer. Traditionally, no response action might have been taken until the study of and planning for all the site work was complete. Under SACM, the Region should consider taking an early action to eliminate the soil problem through a non-time-critical removal or an early remedial response, as appropriate. Of course, if the soil poses a significant threat (e.g., human di-

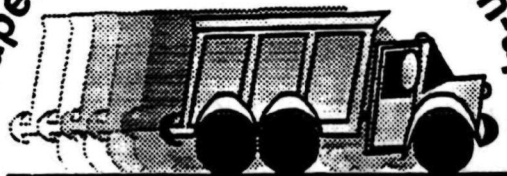
rect contact), an emergency or time-critical removal may be warranted. SACM is anticipated to result in an increase of early risk reduction activities at both National Priorities List (NPL) and "NPL-caliber" sites.

A Regional Decision Team (RDT) is responsible for determining/recommending the approach that will be taken at a site. The RDT should not be involved in response decisions for most emergency and some of the more time-critical removals, as these actions will be taken within the normal removal implementation process. However, the RDT should stay apprised of any emergency responses to factor information into future response plans. A primary consideration will always be what enforcement options are available. An emphasis on early actions will not jeopardize the program's commitment to enforcement first. The over-

all plan must also ensure good State coordination and suitable community involvement.

All response actions must meet the statutory and regulatory requirements established in CERCLA and the NCP. In situations where a time-critical response is warranted, established removal mechanisms will continue to be used. In less urgent situations, non-time-critical removal actions or early remedial actions may be used to accomplish early risk reduction. Long-term actions using remedial authority are most appropriate

Superfund Accelerated Clean-up



*Faster... Cleaner... Safer*



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for sites requiring complex source control or surface or groundwater remediation.

### Early Actions

Early actions are responses performed under removal or remedial authority to eliminate or reduce human health or environmental threats from the release, or threat of release, of hazardous substances, pollutants, or contaminants. These risk reduction activities can be conducted as emergency or time-critical removals, where quick response is necessary, or as non-time-critical removals or early remedial actions, in less urgent situations. These actions generally will take less than five years and will not always achieve complete site cleanup. The early action must meet all of the statutory and regulatory requirements of whichever authority is used (e.g., time and dollar limitations for removal actions and State assurances for remedial actions) and should generally not be started before the possibilities for enforcement are pursued, depending on the urgency of the situation. In some cases, more than one early action may be conducted during the course of work mitigating the threat at a site.

Time-critical actions will be taken when a removal site evaluation indicates that a response is appropriate and must be initiated within six months. Even when there is little time to get the response organized, Regions are always expected to consider enforcement options and to work with State and local officials in conducting the response. When a removal site evaluation indicates the need for an early response and a planning period of at least six months exists prior to the on-site initiation of the removal activities, a non-time-critical removal action is an option. A major change as a result of SACM will be that the number of non-time-critical removal actions (i.e., those where there is at least six months to plan) will likely increase because of the greater emphasis being given to early risk reduction. In order to ensure consistent use of non-time-critical authority, Regions must consult with Headquarters on potentially responsible party (PRP)-lead and Fund-lead non-time-critical removals costing over \$5 million.

The NCP establishes some special requirements for non-time-critical removals, including the need to prepare an Engineering Evaluation/Cost Analysis (EE/CA). (See NCP Section 300.415(m)(4) for additional requirements for non-time-critical removals.) An EE/CA is a study to identify and assess response alternatives. It is similar to, but less comprehensive than, what is done during the Remedial Investigation/Feasibility Study (RI/FS) phases of a remedial action. The EE/CA must go through a public notification and comment period to ensure all interested parties have an opportunity to have input to the proposed response. EPA is developing guidance on how to conduct a non-time-critical removal action.

Sometimes it may be more appropriate to undertake early actions with remedial authority. This may be likely for National Priorities List (NPL) sites already far down the remedial pipeline, enforcement lead sites where a consent decree may be appropriate, sites outside the scope (technical or financial) or authority of a removal action, or sites where State cost share, operation and maintenance or other

assurances may be important considerations. These expedited remedial actions still require a Record of Decision (ROD). The work can be done through a variety of contracts discussed below under Response Selection Factors.

The RDT should ensure that an early action will be consistent with any long-term action that may eventually be required. This means that, especially for non-time-critical removals and early remedial actions, opportunities for treatment and permanence of remedy must be fully evaluated. Furthermore, potential differences that may exist between early action and long-term action data quality objectives and risk assessment goals must be reconciled at the outset. This can only happen if there is an emphasis placed on good program coordination, particularly among the participating Site Assessment Manager (SAM), On-Scene Coordinator (OSC), Remedial Project Manager (RPM), risk assessor, and enforcement/legal staff.

### Long-Term Actions

Long-term response actions will usually be taken when there are conditions requiring extensive site characterization, where there are high costs, or where it will take more than approximately five years to complete the work. The majority of current NPL sites have some long-term response component. Most groundwater remediation efforts, many surface water remediation efforts, and most large-scale soil remediation efforts would be expected to take in excess of five years to complete or have complexities that preclude early action approaches, alone, from being used. In addition, remedies that require extensive operation and maintenance activities may fall into the long-term response category.

Identification of a remedial action as a long-term response does not mean that all of the work can or will be deferred. In many cases, even where there is no immediate threat, a quick start to the long-term response will be necessary to prevent site conditions from deteriorating (e.g., containment of a groundwater plume). In such circumstances, an early action is appropriate if the site meets the NCP requirements for a removal action or if an early remedial action can be initiated.

### Response Selection Factors

Under SACM, the RDT has considerable flexibility for selecting/recommending the most appropriate approach for a site. Many factors will enter into its deliberations. The following is provided as a general overview of the differences between early and long-term actions.

**Response Duration** — A Region should be able to plan for, implement, and complete an early action in less than five years. Projects which will take more than five years should generally be done as long-term responses using remedial authority. If an action can be done quickly, but there are extensive operation and maintenance requirements to ensure the reliability of the response (regardless of the cost of the O&M), then early or long-term action under remedial authority should be considered. It is removal program policy that protracted and costly long-term post-removal site control is more appropri-

ately conducted by the affected State, local unit of government, or Potentially Responsible Party (PRP). In some cases, it may be done by the Superfund remedial program through a ROD. (For additional information on this removal policy see OSWER Directive 9360.2-02, *Policy on Management of Post-Removal Site Control*, December 3, 1990).

**Cost** — Since either removal or remedial authority may be used, there is no maximum dollar cap on the cost of an early action. Regions must always follow the existing rules for justifying and obtaining exemptions for removal actions estimated to cost over \$2 million or exceed one year in duration. Also, Regions must consult with Headquarters prior to taking an early action which will require funding beyond what the Region has in its allowance. Regions are also strongly urged to discuss with Headquarters any situations which present particularly difficult issues or may be controversial with a State or other interested parties.

**Enforcement** — The "Enforcement First" policy will continue to be aggressively pursued under SACM. Regions must take appropriate enforcement steps consistent with removal and remedial policy and guidance. This includes, but is not limited to, conducting PRP searches, issuing notice letters, and negotiating with PRPs to conduct an action through the use of administrative orders (unilateral or consent) or consent decrees. The lead time available for non-time-critical removal actions should allow for comprehensive PRP searches and subsequent negotiations. For each site, an administrative record file must be established and made available to the public according to the schedule in the NCP.

**Protection of Human Health and Environment** — It is critical that removal actions conducted at non-NPL sites take into consideration the potential for future NPL listing to ensure consistent goals are achieved, where practicable. In cases where a non-time-critical removal action will be the only or last action taken to clean up an NPL or NPL-caliber site, the alternatives should be evaluated on their ability to achieve clean-up levels consistent with the remedial program and be protective of public health and the environment.

**ARARs Compliance** — Under the NCP, applicable or relevant and appropriate requirements (ARARs) must be met during removal actions to the extent practicable considering the exigencies of the situation. ARARs should be identified and factored into the non-time-critical removal process. Careful consideration of ARARs is a key to ensuring that early actions are consistent with possible long-term actions. (For additional information on ARARs compliance during removal actions, see the NCP section 300.415 (i) and *Superfund Removal Procedures, Guidance on the Consideration of ARARs During Removal Actions*, EPA/540/P-91/011, September 1991).

**State Involvement** — An early action must include appropriate State involvement. This means there needs to be continuing meaningful communication between a Region and each State in order to ensure the highest priority sites are being handled and there is no unneces-

sary duplication of effort. State ARARs must be met or waived for remedial actions and met to the extent practicable for removal actions. For non-time-critical removal actions costing over \$2 million, Regions should request State participation in the response action (e.g., funding, in-kind services). Although a State cost share is not required under CERCLA section 104 (c) (3) for a removal action, the absence of a State's financial participation may limit the capacity of EPA to fully fund certain large dollar value non-time-critical removal actions. When a State does not participate in the conduct and financial support of a Fund-lead non-time-critical removal action, the RDT must evaluate whether the urgency is great enough to justify the loss of the State contribution. (Until such time as the authority for approving \$2 million waivers at non-NPL sites is delegated to the Regions, Headquarters will have to be involved in this decision on a site-by-site basis.) Until a final policy is developed, Headquarters will generally support projects costing less than \$5 million, as long as there is a good justification, even if a State is unable to participate. Headquarters also will consider projects costing over \$5 million, but there will have to be a compelling case for undertaking the work in the absence of a State contribution. Response actions taken under remedial authority must comply with established procedures for State involvement, including securing State assurances for Fund-financed remedial actions. States may apply for a cooperative agreement to conduct non-time-critical removal actions (See 40 CFR Part 35 Subpart O, Cooperative Agreements and Superfund State Contracts for Superfund Response Actions).

**Public Involvement** — Early and frequent involvement of the public is pivotal to the success of expediting cleanups under SACM. All applicable community relations requirements in the NCP must be met at both removal and remedial actions. Site managers should make sure the public has an opportunity for meaningful input and that concerns are considered. As community interest and awareness increase, it may be appropriate to conduct additional community relations activities beyond those required in the NCP. For example, field personnel (OSCs, RPMs, SAMs, Community Relations Specialists) could make themselves available to the public, or meetings could be held in the community, during times outside those that are typical (e.g., prior to the initiation of or at the conclusion of on-site work).

**Risk Management** — Since removal and remedial action levels and clean-up levels may differ, when making risk management decisions for early actions it is important that potential long-term response actions be considered. For emergency and time-critical removal actions, Regional response personnel may utilize their Agency for Toxic Substances and Disease Registry (ATSDR) representative to obtain public health advice on potential action and clean-up levels in the form of a Public Health Advisory or a Health Consultation. In planning for non-time-critical removal actions, the Regional risk assessor should be consulted for similar advice. It is important that the RDT take into consideration the potential for NPL listing and subsequent remedial actions in order to achieve consistent risk goals, where

practical. For example, when performing a source removal to mitigate a direct contact threat at a site that also has a groundwater threat, it may be prudent to consider removal of additional soil contaminants consistent with projected groundwater clean-up goals. This could eliminate the need for additional source control actions during future response actions. Furthermore, it could reduce the ongoing release of contaminants to ground water, thereby reducing the time required to pump and treat ground water.

**Contracting Mechanism** — Available contracting vehicles and capacities will affect the strategy for conducting both early and long-term actions. Contract mechanisms potentially available are site-specific contracts (including the Pre-Qualified Offerors Procurement Strategy (PQOPS) contracts for incineration and solidification), the Emergency and Rapid Response Services (ERRS) contracts, the Alternative Remedial Contract Strategy (ARCS) contracts, the Technical Enforcement Services (TES) contracts, or accelerated contracting mechanisms accessible from the U.S. Army Corps of Engineers or the U.S. Bureau of Reclamation. The time and resources necessary to procure and administer these contracts, and the individual contract capacities, where applicable, are factors that must be considered when evaluating response options. A separate guidance short sheet is currently being developed on how to access the various contracts listed above.

**Data Quality Objectives** — When performing site assessment activities, appropriate data quality objectives should be used for decisions in support of removal and/or remedial actions. Historically, sampling investigations performed in support of removal actions and remedial actions have had dissimilar Quality Assurance/Quality Control (QA/QC) requirements and have focused on different media (i.e., wastes, ground water, soil, etc.). As an element of SACM implementation, the RDT should ensure that sampling activities are coordinated between removal and remedial actions. Site assessors may be able to take advantage of lower costs and quicker turn-around times if an adequate number of samples are also collected that will meet other anticipated data uses. Sample collection and analysis activities performed during removal actions should be coordinated such that the data generated will also support NPL listing and remedial actions, as appropriate.

#### Selecting a Response

A primary function of the RDT is to weigh what is known about a site and recommend/select those actions which address the threats in a timely and efficient manner. When

time allows, the RDT with support of the designated site manager should consider all of the response options available, State and community concerns, and the need for future action before a response is initiated. The table below gives a conceptual outline of activities generally considered to be either early actions and/or long-term actions; however, it is not an exhaustive, definitive categorization.



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Early Action	Either	Long-Term Action
Access Restrictions Source Removals/ Containment Surface Structures and Debris	Source Remediation Capping/Containment Permanent/Temporary Relocation NAPL Source Extraction Ground Water Plume Containment/Cleanup Alternate Water Supply Property Acquisition	Extensive Source Remediation Restoration: Groundwater Surface Water

#### Early Action and Long-Term Action Under SACM — Interim Guidance

This paper is one of five fact sheets published by EPA under publication number 9203.1-05I (Volume 1, Numbers 1-5) to describe the Superfund Accelerated Cleanup Model (SACM) and should be reviewed in conjunction with the other SACM fact sheets. Comments on this document should be directed to Mark Mjoness of the Emergency Response Division (703) 603-8770.

There are two other important sources of information: "SACM concept paper" (8/5/92) and *Guidance on Implementation of the Superfund Accelerated Cleanup Model Under CERCLA and the NCP* [OSWER Directive No. 9203.1-03 (7/7/92)]. General SACM information can be obtained by calling the Superfund Document Center (202) 260-9760.



United States  
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Office of  
Solid Waste and  
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## Enforcement Under SACM — Interim Guidance

Office of Emergency and Remedial Response  
Office of Waste Programs Enforcement  
Office of Enforcement

Intermittent Bulletin  
Volume 1 Number 3

The purpose of the Superfund Accelerated Cleanup Model (SACM) is to make Superfund cleanups more timely and efficient. This will be accomplished through more focus on the front end of the process and better integration of all Superfund program components. The approach involves:

- A continuous process for assessing site-specific conditions and the need for action;
- Cross-program coordination of response planning;
- Prompt risk reduction through early action (removal or remedial);
- Appropriate cleanup of long-term environmental problems;
- Early public notification and participation; and
- Early initiation of enforcement activities.

SACM is a process change that should be considered for all Superfund activities. Implementation of this policy will be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Overall Superfund priorities remain the same: deal with the worst problems first; aggressively pursue enforcement; and involve the public and relevant State agencies at all appropriate stages of the work.

### Overview

All actions taken under SACM must be consistent with CERCLA and the NCP, and each response selection must be adequately documented by an administrative record. EPA's enforcement first policy will continue under SACM. Potentially Responsible Parties (PRPs) are performing approximately 70 percent of the new work at NPL sites, and EPA remains committed to maximizing PRP involvement when applying the principles of SACM. Successful enforcement under SACM will require careful consideration of the nature and timing of PRP participation in particular.

Major enforcement areas affected by SACM include:

- The timing and methodology of PRP searches;
- The timing and content of negotiations with PRPs;
- Notice letters;
- Consultations for early actions;
- State involvement in enforcement;

- De minimis settlements;
- The availability and adequacy of administrative records; and
- Cost recovery and cost documentation.

This document highlights the need to maintain an enforcement first stance and discusses appropriate approaches for addressing the issues listed above.

### Enforcement First

SACM does not change the Superfund program's emphasis on enforcement first. Coordination of site activities, including decisions and recommendations made by the Regional Decision Team (RDT), should anticipate the activities required for enforcement and ensure that they are carried out in a timely manner so that the response lead can be passed to

PRPs as early as possible without delaying work at the site. EPA expects much of the early site assessment activities to be Fund-lead. However, response lead changes can occur at any of the following points in the process:

1. During the site assessment activities;



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2. Prior to development of an Engineering Evaluation/ Cost Analysis (EE/CA);
  3. Prior to a removal action;
  4. Prior to a Remedial Investigation/Feasibility Study (RI/FS);
  5. Prior to a Remedial Design/Remedial Action (RD/ RA); and
  6. Prior to an RA contract solicitation, when funding the RA would have significant implications for the Fund and when no significant delay will occur.

EPA may take back the response lead from a PRP when the Agency deems a lead change would be appropriate to maintain response integrity or to protect human health and the environment.

The Region should identify the earliest point that the PRP search should begin and when negotiations should occur at each site.

#### **PRP Searches: Timing and Methodology**

Conducting adequate PRP searches can be crucial when preparing for negotiations and other enforcement activities. EPA does not anticipate that SACM will lead to changes in PRP searches for sites that require only emergency or time-critical removal actions. However, SACM's integrated site assessment process may lead to changes in PRP search methodology for non-time-critical removals and remedial actions for several reasons. First, because an RI may begin with or during a Site Investigation (SI), giving PRPs an opportunity to participate in the RI/FS will require that PRPs be identified earlier in the process than they are traditionally identified. Second, because the integrated site assessment is envisioned to require less time to complete than under the current process, there may be less time to develop liability information before a non-time-critical removal or remedial design begins. In addition, the greater emphasis on early risk reduction is expected to increase the use of non-time-critical removals to address some threats that previously were addressed with remedial actions. This will mean that there may be less time available before initiation of the response than in the past. For all of these reasons, there will be less time to conduct the PRP search and an increased emphasis on Regions' PRP search programs.

As a general rule, PRP search activities should begin as soon as possible after the Region decides that a response

action is likely to be required at the site. PRP searches for some sites, such as multi-generator landfills, may require substantial effort. Early initiation of PRP search activities may be valuable at these sites to ensure adequate time for carrying out enforcement activities such as issuing general notice letters. Many other sites, however, may require no action beyond the initial site assessment activities. Expedited searches at these sites probably would be unnecessary and not cost-effective in most instances.

Once Regions have decided to begin PRP search activities, they are encouraged to adopt a phased PRP search approach that focuses first on establishing liability for PRPs about whom information is most readily available from site assessment activities and other available sources and then expands to address the remaining PRPs. If a core group of PRPs is identified before a discrete phase of a combined site assessment, negotiations may begin for the conduct of data collection associated with the site assessment activities (i.e., SI, RI, FS, etc.), even if the Region believes that additional PRPs may be found later. (Keep in mind that under the current policy, EPA has the lead responsibility for the site assessment activities - Preliminary Assessment (PA), SI, and Expanded Site Investigation (ESI). This should continue under SACM. PRPs may collect data, but final responsibility for interpreting that data in reports and making site decisions remains with EPA.) Similarly, negotiations for conducting a response action (i.e., RD/RA, removal, etc.) may be initiated with known PRPs even if all PRPs have not been identified. Once potential liability has been established for the core group, the PRP search can be extended to the remaining PRPs whose liability is more difficult or more time consuming to establish. Regions should share information with known PRPs as soon as possible to facilitate PRP organization.

In conducting PRP searches, Regions should coordinate and share information with other parts of the program and with States. Where the Regional office uncovers information on PRPs as part of an emergency or time-critical action, the RDT should make full use of the information from these activities to support later enforcement actions at the site. Similarly, site assessment should include PRP search activities such as the documentation of evidence that identifies owners, operators, and witnesses; the collection of drum label information; the identification of the location and condition of generator records; and other activities that may help establish liability or waste contribution. Site assessment activities might include a more detailed or targeted waste analysis to tie wastes to specific PRPs. Where available, Regions should make use of States' authority to search for and notice PRPs. Regions should

consider writing a generic PRP search work assignment that can be used for a number of searches, each of which is initiated with a separate technical direction memorandum. Coordination of the PRP search and other site activities will require close communication between the PRP search team and the RDT.

#### **Negotiations: Timing and Content**

Generally, it is anticipated that by using the phased PRP search approach and some of the additional techniques listed above, there will be sufficient time before initiation of non-time-critical removals and early remedial actions to allow those actions to be PRP-lead. For example, if the RDT decides, based on the early results of a PRP search, to initiate a Fund-lead EE/CA to support a non-time-critical removal action, the Region can continue PRP search activities during the EE/CA. Upon completion of the EE/CA, the RDT can decide, based on the supplemented PRP search, whether to seek PRP participation in the non-time-critical removal action. There may be even more time for the PRP search if it begins during an emergency or time-critical removal action, or during the SI.

With the exception of non-time critical removals, it may be appropriate in some cases to conduct additional PRP search activities before initiating a response action at a site if the Region believes that a more thorough PRP search will increase the likelihood of settlement (for example, by identifying more PRPs). Any delays in work should be brief. Establishing liability against additional PRPs may have other benefits such as similar treatment of all PRPs, reduced risk of contentious cost recovery actions, and conservation of the Fund.

The Region should identify logical points during the site assessment process when negotiations with PRPs should be considered. Some of the major criteria for this decision include:

1. PRPs:
  - a. the availability of viable parties for which Regions have liability evidence;
  - b. the degree to which the identified PRPs appear willing to settle; and
  - c. the ability of PRPs to conduct response activities.
2. Site conditions and work to be performed:
  - a. the risk posed by the site and the need to move forward with the response quickly;
  - b. the probable sequence and nature of cleanup activities scheduled for the site; and
  - c. the action to be negotiated.

3. Cost:
  - a. if the activity to be negotiated is a removal costing more than \$2 million, enforcement will minimize the need for waivers under CERCLA Section 104(c); and
  - b. State matching funds for remedial actions at NPL sites are not required if PRPs conduct remedial actions under, for example, a consent decree or unilateral administrative order.

The following examples show some stages in the process where negotiations may be appropriate, and the possible scope of the negotiations:

1. The initial assessment indicates that there is a hazardous substance release at the site and there is a high probability that the site may be listed on the NPL. In addition, some removal action is needed. In this case, the Region could negotiate with PRPs to perform the site assessment data collection activities—including any necessary sampling—and the EE/CA or RI/FS. The Region could also include performance of the EPA-selected removal action in the negotiations. Keep in mind that although PRPs may conduct sampling and data collection, EPA retains responsibility for decision making.
2. The initial assessment indicates that a non-time-critical removal action should be taken. The Region could negotiate an order with the PRPs for the EE/CA, and in some cases could include the eventual non-time-critical removal action in the order.
3. The initial assessment shows that additional site evaluation is needed to determine if the site will require any action (early action or long-term action). In most cases EPA should continue performing the site assessment activities while continuing the PRP search. Negotiations should occur after a determination is made that a time-critical removal, an EE/CA, or an RI/FS is needed.

Under all of these scenarios EPA retains the responsibility to perform the risk assessment for removal and remedial actions, to prepare Hazard Ranking System scoring packages, and to make all response selection decisions.

#### **Notice Letters**

CERCLA and current EPA guidance encourage the use of special notice letters (or issuance of waivers) for RI/FSs and RD/RAs. When Regions anticipate conducting a com-

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bined SI/RI/FS, they should use special notice letters if they believe that such letters could facilitate a settlement.

Regions also should use special notice letters for non-time-critical removals when they believe that such letters could facilitate a settlement.

A special notice letter initiates a moratorium on response activity and enforcement. Such moratoria generally last 90-120 days (if EPA receives a good faith offer from the PRPs within the first 60 days of the moratorium). Therefore, when Regions expect that they will be issuing special notice letters, the letters should be sent out far enough in advance of the planned activities so that work is not significantly delayed. Certain investigatory and planning activities set forth in Section 104(b) of CERCLA should occur during the negotiation moratoria.

#### Consultations for Early Actions

In implementing SACM, careful site and case selection is important. When identifying appropriate sites for non-time-critical removal actions, Regions may wish to consult with Headquarters.

Regions must follow the existing rules for justifying and obtaining exemptions for removal actions estimated to cost over \$2 million or exceed one year in duration. Also, Regions must consult with Headquarters prior to taking an early action which will require funding beyond what the Region has in its allowance.

When a State does not participate in the conduct and financial support of a Fund-lead non-time-critical removal action, the RDT must evaluate whether the urgency and need are great enough to justify the loss of the State contribution. (Until such time as the authority for approving \$2 million waivers at non-NPL sites is delegated to the Regions, Headquarters will have to be involved in this decision on a site-by-site basis.) Until a final policy is developed, Headquarters will generally support projects costing less than \$5 million, as long as there is a good justification, even if a State is unable to participate. Headquarters also will consider projects costing over \$5 million, but there will have to be a compelling case for undertaking the work in the absence of a State contribution.

In order to ensure consistent use of non-time-critical authority, Regions must consult with Headquarters on PRP- or Fund-lead non-time-critical removals costing over \$5 million.

If an early action under SACM presents particularly difficult issues or may be controversial with States, PRPs,

communities or other interested parties, the Regions are strongly encouraged to consult with the appropriate Regional coordinator at Headquarters. Regional staff responsible for public involvement may be consulted to assist in gauging the level of public interest.

#### State Involvement in Enforcement

State capabilities and authorities differ. Each Region should work with each of its States to develop a general strategy for enforcement and the manner in which the State will be involved. Actions planned under State enforcement-lead must be under documents enforceable under State law and overseen by the States. Sites may be designated as State-lead if the Region agrees and the State has the capability and authority under State law to undertake the action. States should be kept informed of negotiations concerning site assessment activities and early actions to the same extent that they are notified and kept informed currently under CERCLA Section 121(f) and the NCP.

#### Late-identified PRPs

When the decision is made to take either a Fund-lead or PRP-lead action, and the Region expects that additional PRPs will be identified subsequent to initiation of the action, the Region should take steps to provide some type of constructive notice to PRPs who may be found at a later date (that is, "late identified" PRPs). For example, Regions could send letters providing information about a site to prospective PRPs. Regions might also place an announcement of site activity or of availability of the administrative record file in a major local newspaper and the *Federal Register*. (A *Federal Register* notice generally would be more effective than newspapers for reaching PRPs located outside the area of the site and the newspaper circulation area.)

#### De Minimis Settlements

SACM is expected to produce more site information earlier than in the past, allowing Regions to develop de minimis settlements earlier. In some cases, Regions will pursue PRP-lead early actions before developing the waste-in lists and volumetric rankings normally needed for de minimis settlements, making de minimis settlements at that time less likely. In such cases, de minimis settlements may still be developed prior to a subsequent early action decision (Action Memorandum, Record Of Decision) when the required information becomes available. Regions should follow EPA guidance on early de minimis settlements (including OSWER Directive Number 9834.7-1C) and strive to develop such settlements as early in the process as possible.



## The Department of Justice

SACM does not change the delegations under CERCLA. The Department of Justice (DOJ) should be consulted for enforcement strategy planning when judicial enforcement of an administrative order is likely, consent decrees are planned, and certain de minimis and cost recovery activities are contemplated (e.g., DOJ must concur on de minimis and cost recovery settlements where the total response costs for a site exceed \$500,000).

## Administrative Records

The administrative record, required under CERCLA, contains the documents that form the basis for the selection of a response action and serves as the basis for judicial review of EPA's response action. High quality administrative records are necessary to ensure the defensibility of response decisions made under the expedited procedures of SACM and are particularly important for SACM projects that may set precedents. Regions must establish an administrative record for each response action in accordance with CERCLA, the NCP, and OSWER administrative record guidance (OSWER Directive Number 9833.3A-1). All decisions concerning the selection of the appropriate response action should be documented in the administrative record file in accordance with EPA guidance. In particular, the administrative record should include documentation showing that the action taken is not inconsistent with the NCP.

CERCLA also requires that EPA provide the public (including PRPs) with an opportunity to participate in the development of the administrative record. According to the NCP Subpart I, the administrative record file for a non-time-critical removal must be available for public inspection when the EE/CA is made available for public comment. For time-critical removals, the administrative record file must be made available within 60 days after the start of on-site removal activity. The administrative record file for the selection of a remedial action must first be made available when the RI/FS begins. When the Region is conducting a combined SI/RI/FS, the administrative record file must be made available at the point when work characteristic of an RI/FS begins. In order for the record to be ready for public inspection when the RI/FS begins, Regions should begin compiling the administrative record file when the RDT decides a combined SI/RI/FS is needed.

## Cost Recovery and Cost Documentation

SACM may increase the number of cost recovery actions subject to the removal statute of limitations (SOL) because more sites may be addressed with non-time-critical removals than in the past. The SOL for removals is three years

from a removal completion, unless a remedial action is initiated within three years of the completed removal. Early remedial actions would fall under the remedial SOL which is six years after initiation of physical on-site construction of the remedial action.

Documentation of cost and work performed needs to be compiled whenever cost recovery actions are taken. EPA's past costs should be sought in all negotiations with PRPs for response work at SACM sites. The cost recovery rule is expected to assist in defining documentation requirements.



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### Enforcement Under the Superfund Accelerated Cleanup Model (SACM) - Interim Guidance

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# Assessing Sites Under SACM — Interim Guidance

Office of Emergency and Remedial Response  
Office of Waste Programs Enforcement  
Office of Enforcement

Intermittent Bulletin  
Volume 1 Number 4

The purpose of the Superfund Accelerated Cleanup Model (SACM) is to make Superfund cleanups more timely and efficient. This will be accomplished through more focus on the front end of the process and better integration of all Superfund program components. The approach involves:

- A continuous process for assessing site-specific conditions and the need for action;
- Cross-program coordination of response planning;
- Prompt risk reduction through early action (removal or remedial);
- Appropriate cleanup of long-term environmental problems;
- Early public notification and participation; and
- Early initiation of enforcement activities.

SACM is a process change that should be considered for all Superfund activities. Implementation of this policy will be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Overall Superfund priorities remain the same: deal with the worst problems first; aggressively pursue enforcement; and involve the public and relevant State agencies at all appropriate stages of the work.

## SACM Assessment

Assessing sites under SACM involves the following principles:

- The process integrates traditional site assessment functions to allow continuous assessment for high priority sites that proceeds until all necessary data are collected to screen sites or support any needed response actions. SACM goals include combining activities to support both removal and remedial assessments. The continuing assessment process supports both National Priorities List (NPL) listing and remedial actions.
- Response action decisions should be initiated as soon as evidence indicates that early action is warranted. Any appropriate enforcement actions should be initiated as well. Assessment work can continue concurrently with early actions.
- Assessment procedures are coordinated to ensure that data collected in one phase of assessment support other assessment, enforcement, and response activities.



- Sites posing the greatest threat are addressed first ("Worst Sites First"). All sites will be reviewed to determine site priority for continued assessment.

Superfund assessment under SACM integrates previously separate removal and remedial assessments into a single process. Under SACM the assessment processes operate concurrently; specific functions need not be completed before other functions can start. Integrating assessment functions

will cut several years from the assessment and cleanup process. Sites receive the appropriate level of effort needed to make assessment decisions, and sites needing no further action under Superfund are designated as Site Evaluation Accomplished (SEA). Sites assigned an SEA designation are referred to the States or other regulatory authorities for further action, as appropriate. Whenever possible, Superfund assessment activities are conducted concurrently with response and enforcement actions. The basic principles of SACM assessment are built upon the need to eliminate redundancy and expedite the Superfund process.

The SACM assessment approach can screen out a large percentage of potential releases early in the process. Where

it is clear no CERCLA response action will be taken, the assessment is completed by documenting the basis of the decision through an SEA designation. If further data indicate that the site is likely to have a Hazard Ranking System (HRS) score of 28.5 or more, EPA (or the State, under a cooperative agreement) may initiate a Remedial Investigation (RI). Additional data needed to prepare the HRS package can be collected while the RI is underway. RI data can be used to support removal action decisions and HRS scores, as well as remedial action decisions. The Region must include documentation required by the NCP for moving from one phase of assessment to another.

The Regional Decision Team (RDT) is an integral part of the site assessment process. Under SACM, coordination among removal, remedial, and State agency personnel is critical, and fostering that coordination is a role of the RDT. At the point where assessment information is adequate for decision-making, the RDT convenes to consider options for sites. The RDT can then direct or recommend a response action (e.g. time critical removal), decide to collect additional data, develop an enforcement strategy, and recommend placing the site on the NPL.

The States have always played a critical role in site assessment, performing most of the Preliminary Assessments (PA) and many of the Site Investigations (SI). EPA expects that role to continue under SACM. The EPA Regions and the States will coordinate to develop two-way communication concerning Federal and State response actions. EPA Regions are responsible for working out the appropriate arrangement with each of their States.

Coordination of assessment and enforcement activities is also critical. When it is feasible, the site assessment reports should identify owners, operators, and witnesses, with the appropriate documentation. Likewise, they should describe generator records and other useful information, such as drum labels. The decision to start a Potentially Responsible Party (PRP) search requires a balancing of resources. Although many sites (i.e., those designated SEA) will not need PRP searches, rapid action under SACM may require that PRP searches begin early in the process for some sites. As a general rule, PRP search activities should begin as soon as possible after the decision is made that a response action is likely to be required at the site.

Experience has shown that early and frequent communication with local communities can enhance site response, and this will be particularly true under SACM. Where appropriate, EPA and the State should take the initiative in commencing community involvement early in the assessment process. The Agency is developing guidance for community involvement activities at the assessment stage of the process.

Consistent with the NCP, listing sites on the NPL will continue to be a prerequisite to spending remedial action funds to clean up sites. The HRS will continue to be the primary basis for selecting sites for the NPL. SACM does not change the role of the HRS and NPL, and in general SACM should not significantly affect the number of sites that EPA will place on the NPL.

### Expediting Cleanup Through SACM Assessment

SACM promotes performing risk assessment and RI activities earlier in the assessment process for a site where data indicate remedial action will be needed. Once a decision has been made to conduct the RI in conjunction with HRS data collection, integrated assessment data collection and sampling efforts continue to:

- Obtain documentation for the HRS; and
- Characterize site sources, extent of contamination, and risks to determine appropriate cleanup actions.

Consistent data collection approaches and appropriate data quality objectives that serve the needs of early action, long-term action, and NPL listing will promote efficiency in Superfund. A single team should collect samples and select analytical methods to serve multiple program needs. A coordinated site mobilization eliminates duplication of tasks and reduces sampling and analyses, saving both time and money.

The scoping and planning of the RI should begin as soon as EPA determines that the site will most likely require remedial action. The RDT may decide to begin an RI at any time during the assessment process. Once RI activities begin, assessment activities continue concurrently to collect sufficient information to determine the site score for possible listing on the NPL. While a site might be designated as SEA during that process, the RDT should select sites for early RIs only where it appears the site will meet the criteria for the NPL. Removal actions can, of course, be taken at any time in the assessment process, and the RDT should consider an early action at any site selected for an early RI.

One key to the success of the SACM approach is to select the appropriate sites for starting the RI prior to HRS scoring. It is important to avoid committing high levels of resources to sites that may not be eligible for the NPL. Some site conditions, in particular where human exposure or contamination of a sensitive environment has been found, clearly indicate that the HRS score will be above 28.5 and that a response action will be needed (see Figure 1). These "NPL-caliber" sites will be a focus of integrated assessments and early actions.

Even where a site appears to warrant an early RI, there is some possibility that the site will not score high enough to be placed on the NPL. EPA recognizes this and is willing to proceed with the RI early in the assessment process to

### **FIGURE 1: Examples of NPL-caliber Sites**

- Public drinking water supplies are contaminated with a hazardous substance.
- Private wells are contaminated with a hazardous substance above a health-based benchmark.
- Soils on school, daycare center, or residential properties are contaminated by a hazardous substance above background levels.
- A hazardous substance is detected above background in an offsite air release in a populated area.
- A highly toxic substance known to bioaccumulate (e.g., PCBs, mercury, dioxin, PAHs) is discharged into surface waters.
- Sensitive environments (e.g., critical habitats for endangered species) are contaminated with a hazardous substance above background levels.

encourage faster response actions at the majority of cases. Moreover, sites with the conditions described above will often meet the criteria for removal actions anyway, and the RI will provide valuable information for any response that is ultimately selected.

In addition to the risk related conditions, the RDT should consider the following when evaluating whether an RI should be initiated at a site:

- Some sites may be excluded from Superfund consideration under policy, regulatory, or legislative restrictions. For instance, EPA policy is to defer from the NPL those facilities subject to corrective action authorities of the Resource Conservation and Recovery Act (RCRA)(see 54 FR 41000, October 4, 1989).
- At sites where receptors have been exposed to hazardous substances, but the source or sources are unknown, the decision to perform an early RI may depend on the nature of the potential sources. For

example, if a RCRA facility is a potential source, an early RI should generally not be performed based on the RCRA deferral policy. However, in most other cases, an early RI may contribute to identifying the source or sources of contamination.

The PRP search and other enforcement actions should indicate whether ensuing site response will be Fund- or PRP-lead, under the policy that enforcement first is the preferred strategy. While the above serve as general guidelines, the RDT will need to evaluate individual cases to determine whether to proceed with an early RI and whether enforcement or the Fund offers the more appropriate course of action.



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## SACM Regional Decision Teams — Interim Guidance

Office of Emergency and Remedial Response  
Office of Waste Programs Enforcement  
Office of Enforcement

Intermittent Bulletin  
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SACM is a process change that should be considered for all Superfund activities. Implementation of this policy will be consistent with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Overall Superfund priorities remain the same: deal with the worst problems first; aggressively pursue enforcement; and involve the public and relevant State agencies at all appropriate stages of the work.

### Regional Decision Team Goal

The goal of the Regional Decision Team (RDT) is effective coordination, communication, and integration of program authority, expertise, resources, and tools to solve problems that arise at Superfund sites. Close coordination of the site assessment and response processes and initiation of any appropriate enforcement responses through the RDT mechanism will enable the Superfund Program to achieve risk reduction and site response goals quickly and efficiently.

### Implementation

The RDT concept offers a new approach for determining Superfund response actions. The RDT provides for broad participation across all program elements while placing emphasis on teamwork and Regional and staff empowerment for developing response strategies and solving site problems. The RDT also has the responsibility for ensuring that response actions are fully consistent with the requirements contained in CERCLA and the NCP. Regions have flexibility in designing an RDT process that meets their specific needs, recognizing that a specific formal structure is not as critical as the overall goal of program integration.



Accordingly, Regions should design a process that, at a minimum, ensures effective communication across the removal, site assessment, remedial, enforcement, and community involvement program elements, and provides for the full and active participation of the Office of Regional Counsel. Further, Regions should ensure that the RDT works in concert with the Region's management structure, and with those designated site managers (e.g., Site Assessment Managers (SAMs), On-Scene Coordinators

(OSCs), Remedial Project Managers (RPMs), and/or individual site management teams) that are responsible for handling the site on a day-to-day basis. In addition, the Region should discuss and establish with the State a process for State involvement during the SACM decision-making process.

Each Region should develop guidelines for the operation of the RDT so that it will function as smoothly and effectively as possible, while facilitating the involvement of representatives from various offices, both within and outside the Regional office. In addition, it will be important for the Regional divisions to fully plan out what they hope to achieve with their RDT, and initiate early dialogue to establish roles and responsibilities throughout the re-

sponse process. The following list of possible start-up actions should be considered by each Region:

1. Assign roles and responsibilities of selected members;
2. Establish coordination process with the States;
3. Establish decision criteria for determining response decisions, including response authority;
4. Identify the universe of Superfund sites within the Region and the plan of action for integrated assessment of such sites;
5. Develop approach for designation of response priorities;
6. Establish a process for quick initiation of potentially responsible party (PRP) search activities and enforcement efforts; and
7. Develop process for early coordination with Headquarters, and support agencies/organizations (e.g., Agency for Toxic Substances and Disease Registry (ATSDR), Department of Justice (DOJ)) providing technical/legal assistance to the RDT.

### RDT Operations

The RDT is empowered by the Region to make those decisions that are delegated to its level. This body serves as a tool to ensure early and effective communication and should provide input for the traditional line decision-making authorities. The RDT should provide policy and strategic direction to designated site managers (SAM, OSC and RPM), to ensure the integration of program authorities (Fund-lead vs. PRP-lead, removal vs. remedial), resources, and tools to solve site-specific problems. (The RDT is not responsible for true emergencies, which the removal program will continue to handle.) The RDT should convene either routinely or on an as-needed basis, to receive status reports and strategy options from the site manager(s), establish response priorities, and provide both advice and direction on appropriate response actions (e.g., scope and sequence of projects). RDT involvement in a site response should follow the process or recommend actions as de-

scribed below:

#### 1. Early Assessment Stage:

Following receipt of initial site information (e.g., Preliminary Assessment/Removal Assessment or Site Inspection), the RDT would convene to assess optional next steps for all sites where a Site Evaluation Accomplished (SEA) decision is not appropriate. Specific options available to the RDT include:

- ◆ **Recommend/Develop an Early Action Response Plan**
  - **Emergency/Time-Critical Removal Action** — situations where prompt action is required to mitigate a risk to human health or the environment. RDT involvement initiating these actions may be limited based on the time available; however, the RDT should participate in evaluating the response after the action has been taken and identifying the next steps required to complete the response, if any. Time-critical actions, which must be initiated quickly to protect human health and the environment, should be reserved for situations where an action must be initiated quickly to protect human health and the environment.
  - **Non-Time-Critical Removal Action** — less urgent action intended to stabilize the site and/or eliminate contamination. The RDT should assess the opportunity for response and initiate the preparation of the Engineering Evaluation/Cost Analysis (EE/CA) and Action Memo with prior public comment (and for Fund-financed removals, the required justification for exemptions to exceed statutory removal time and dollar limits). Also, the RDT should determine whether proposed actions are time-critical or non-time-critical, or whether the site requires remedial action (including expedited National Priorities List (NPL) evaluation if Fund-financed remedial action is expected).
  - **Early/Interim Remedial Action** — actions at NPL sites intended to achieve site remediation and risk reduction. The RDT should initiate a Remedial Inves-

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tigation/Feasibility Study (RI/FS) leading to an early or interim action Record of Decision (ROD).

◆ **Direct The Acquisition of Additional Data**

- The RDT may require that additional data be collected prior to deciding on a course of action for a site. If at any point in the process of collecting site information, the site appears to be an NPL-caliber site, the RDT should consider initiating RI activities, and, where appropriate, early actions.

◆ **NPL Listing**

- Where sufficient data exist to list a site and where remedial response actions are envisioned, the listing process should be concurrent with early response action or expanded Site Investigation/Remedial Investigation (SI/RI) data collection. Fund-lead early remedial actions can only be conducted after the site is on the NPL.

◆ **Enforcement Strategy**

- Initiate early PRP search activities to aggressively pursue enforcement first and define the role of PRPs in response action and/or data collection. Negotiations with PRPs should be conducted as appropriate during the assessment process as well as for removal or remedial response actions. The RDT will have input on the selection of the appropriate enforcement document (Administrative Order on Consent/Unilateral Administrative Order (AOC/UAO), consent decree, etc.) and maintaining coordination with Headquarters and DOJ, where appropriate, regarding the enforcement strategy.

**2. Advanced Assessment Stage:**

As additional site information is received (e.g., after or during either the early action, or the focused or expanded SI/RI part of the integrated site assessment), the RDT should assess next steps for sites warranting additional response action. Specific options would be similar to those identified above. At this stage, response actions generally would fall in the non-time-critical removal, early remedial

action category, or in the long-term action category. The RDT should direct the initiation of the appropriate support actions. Also, the RDT should assess the relative priorities of the proposed response actions and allocate resources accordingly, if delegated this authority. If not, recommendations should be made if additional resources are necessary.

**3. Public Participation/Community Involvement**

The success of SACM will depend to a large degree on public acceptance of our actions at the site level. Maintaining a strong focus on the local community (*our primary "customer"*) will contribute immensely to this success. The administrative record file, a primary vehicle for public participation, must be made available to the public for inspection according to the schedule set out in the NCP Subpart I. This is a necessary component for cost recovery.

The decisions that the RDT makes about the future of a site will be important to the local community. The RDT, therefore, should take community concerns into account when making decisions on a site response strategy. The community should be promptly informed once those decisions are made. Community relations planning should be included in the site response strategy as an equal element with technical and legal considerations, including due consideration of CERCLA and NCP requirements.

Using non-time-critical removal actions, as compared to time-critical removal actions, will allow prior public comment, and are encouraged where time allows.

**4. Follow-up:**

The Regions should develop protocols defining the role of the RDT in monitoring and evaluating ongoing response and assessment activities.

**Organization**

As described above, the RDT is designed to ensure effective communication and coordination across the Superfund program. The RDT provides policy advice and strategic direction to site managers and sets priorities to promote efficient site response. RDT generally consists of manage-

ment level personnel, as opposed to the make-up of site management teams. The RDT generally will develop response strategies for sites (e.g., the decision to take a "removal" versus a "remedial" action). Individuals authorized to sign Action Memos or RODs may be on the RDT. The RDT will not have responsibility for the day-to-day site project management, which will remain with OSCs/RPMs and site-management teams.

Regions have flexibility in developing an organizational structure for the RDT, and may decide to develop multiple RDTs. In Regions where all program elements report to a single manager, (e.g., Deputy Director for Superfund), the RDT might consist of the line managers reporting to that manager, along with a representative from the Office of Regional Counsel. In Regions where program responsibilities are dispersed, a more formal arrangement would be appropriate. In these instances, a typical model for start-up might include the following senior level participants:

- Senior Manager
- Remedial Person
- Removal Person
- Site Assessment Person
- Cost Recovery Person
- Risk Assessor/Biological Technical Assistance Group (BTAG) Representative
- Attorney from Office of Regional Counsel
- Community Involvement Coordinator

The Regions should involve the States as often as possible in an appropriate manner. Typically, States would be consulted in concert with RDT deliberations or in preparation for an RDT meeting. The RDT also should meet periodically or on an as needed basis, with support agencies and organizations (i.e., ATSDR, Corps of Engineers, Office of Research and Development, BTAG, PRP search, contract management staff, DOJ, etc.) to receive advice and input on response options or enforcement actions as appropriate.

### Headquarters Consultation

Regions must consult with Headquarters prior to taking an action which will require funding beyond what the Region has in its allowance. Regions must also consult before committing to a PRP-lead or Fund-lead non-time-critical action costing over \$5 million. Regions must always follow the existing rules for justifying and obtaining exemptions for removal actions estimated to cost over \$2 million or exceed one year duration. Regions are also strongly urged to discuss with Headquarters any situations which present particularly difficult issues or may be controversial with State or other interested parties.



**NOTICE:** The policies set out in this fact sheet are not final Agency action, but are intended solely as guidance. They are not intended, nor can they be relied upon, to create any rights enforceable by any party in litigation with the United States. EPA officials should follow the guidance provided in this fact sheet, or may act at variance with the guidance, based on an analysis of site-specific circumstances. The Agency also reserves the right to change this guidance at any time without public notice.

### SACM Regional Decision Teams - Interim Guidance

This paper is one of five fact sheets published by EPA under publication number 9203.1-05I (Volume 1, Numbers 1-5) to describe the Superfund Accelerated Cleanup Model (SACM) and should be reviewed in conjunction with the other SACM fact sheets. Comments on this document should be directed to Robin Anderson of the Hazardous Site Control Division (703) 603-8747.

There are two other important sources of information: "SACM concept paper" (8/5/92) and *Guidance on Implementation of the Superfund Accelerated Cleanup Model Under CERCLA and the NCP* [OSWER Directive No. 9203.1-03 (7/7/92)]. General SACM information can be obtained by calling the Superfund Document Center (202) 260-9760.





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

JUL 10 1992

OFFICE OF  
SOLID WASTE AND EMERGENCY RESPONSE

**IMPORTANT--ALL READ**

**MEMORANDUM**

**SUBJECT:** Transmittal of Superfund Accelerated Cleanup Model  
(SACM) Legal Directive

**FROM:** Henry L. Longest, II *H.L.L.*  
Director, Office of Emergency and Remedial Response

**TO:** All Superfund Staff and Managers

Attached is a copy of the Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP. This important memorandum is an excellent point-by-point analysis of SACM vis a vis current legal requirements, and it does maximize the flexibility in the NCP.

This will serve as a great reference tool as we move forward to implement SACM. A National SACM Meeting is planned for late August including staff and management from Headquarters and all ten Regions. I will continue to forward you information on SACM as it develops.

**Attachment**

**cc:** Bruce Diamond, OWPE  
Tim Fields, SRO  
Sylvia Lowrance, OSW  
Walter Kovalick, TIO  
James Makris, CEPPO





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

JUL 7 1992

OSWER Directive No. 9203.1-03

**SUBJECT:** Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP

**FROM:** Don R. Clay (Signature)  
Assistant Administrator for Solid Waste  
and Emergency Response

Lisa K. Friedman (Signature)  
Associate General Counsel  
Solid Waste and Emergency  
Response Division

**TO:** Waste Management Division Directors  
Regions I, IV, V, VI, VII, VIII  
Emergency and Remedial Response Division Director  
Region II  
Hazardous Waste Management Division Directors  
Regions III, IX  
Hazardous Waste Division Director  
Region X  
Superfund Branch Chiefs  
Regions I-X  
  
Superfund Branch Chiefs,  
Office of Regional Counsel  
Regions I-X

**PURPOSE**

To provide a more precise description of the Superfund Accelerated Cleanup Model (SACM), in order to ensure its consistent application in compliance with CERCLA and the National Contingency Plan (NCP).<sup>1</sup>

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<sup>1</sup> This Directive does not address the unique issues associated with the implementation of the SACM model at federal facility sites. Supplemental guidance on those issues is under development.

## BACKGROUND

In broad terms, the SACM model seeks to accomplish four objectives: establish a continuous process for the assessment of site-specific conditions and the need for action; create cross-program Regional Decision/Management Teams responsible for initiating appropriate actions as information is developed about a site; achieve prompt risk reduction through early actions (removal or remedial); and ensure the appropriate cleanup of long-term environmental problems. The overall goal of SACM is to accelerate cleanups and increase efficiency in the Superfund process within the framework of CERCLA and the NCP, while ensuring that cleanups continue to be protective and to allow for appropriate public involvement.

Since the announcement of SACM, there has been considerable interest and enthusiasm about the model. Active discussions continue among Headquarters offices and the Regions, and views have been solicited from the Corps of Engineers, the Department of Justice, and States in an effort to further develop the guiding principles of SACM. Now that the model has been outlined conceptually, it is important to discuss the details of the approach in order to ensure that all participants are working from a consistent starting point, and that the model is carried out in compliance with CERCLA and consistent with the NCP.

## DISCUSSION

Relationship to CERCLA and the NCP. SACM is intended to help the Agency accomplish the goals of expedited cleanup and increased efficiency in the Superfund process within the framework of the current statute and NCP. The Agency believes that there is adequate flexibility under the current law and regulations to accomplish these goals; however, SACM does not provide independent authority to carry out actions that are not authorized by the CERCLA and the NCP regulations.

For instance, the use of the terms "early actions" and "long-term actions" in SACM should not be read to mean that actions may be implemented under the SACM model that are other than removal or remedial actions. Any action taken under CERCLA must fall into the category of a removal action or a remedial action, and then must conform to applicable NCP requirements. The categorization in SACM of early removal actions and early remedial actions as "early actions" is meant to better communicate the timing and nature of actions designed to achieve rapid reduction of risk, although not necessarily cleanup of all contamination. (Given the large number of sites with contaminant problems that may require long-term solutions, e.g., sites requiring groundwater restoration, it is anticipated that many sites will have both early and long-term action components.)

At the same time, however, the NCP affords the Agency considerable discretion in many instances. For example, the numerous data collection efforts contemplated by the NCP could be performed as part of one large site assessment (as discussed later in this Directive). CERCLA and the NCP also provide the Agency with the flexibility to proceed with many types of cleanup actions using either removal or remedial action authorities. See CERCLA sections 101(23) and 101(24); and 40 CFR 300.415(d) (a partial list of actions that may be carried out using removal action authority).

In addition, some SACM pilots may involve specific deviations from current Agency policies in order to test a new approach to site evaluation or response (where this is the case, such deviations should be properly justified and documented). Experience from the SACM pilot projects may also prompt changes in national policies. (Further, SACM pilot projects may identify regulatory or statutory requirements that would prevent the Agency from pursuing a given approach; such information may be referred to Headquarters for consideration as part of regulatory reform, or for study by CERCLA reauthorization workgroups.)

Site Assessment. One of the major initiatives of SACM is to break down institutional barriers within the Agency, and to establish an operational scheme under which data are collected and used to serve multiple purposes. For instance, samples taken as part of an evaluation for possible removal action may often be used to support, or begin, an evaluation of the need for remedial action, site scoring using the Hazard Ranking System (HRS), or in some cases, the remedial investigation (RI). Although the NCP regulations contemplate that the Agency will perform (as warranted) a removal preliminary assessment (PA), a removal site inspection (SI), a remedial PA and SI, and ultimately an RI, some or all of these various studies can be consolidated in appropriate cases under the SACM model, such that one site assessment can be performed and one site assessment report written. However, the report should include any findings required by the NCP for moving from one phase of site assessment to another (e.g., from a remedial PA to a remedial SI; see 40 CFR 300.420(b)(4)(iii)).<sup>3</sup>

By using data for multiple purposes, economies can be achieved in terms of the amount of sampling needed, expertise and learning can be shared among agency officials responsible for the various tasks undertaken at a site, and the time between data collection and action (if deemed necessary) can be shortened.

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<sup>3</sup> Note that during the initial phases of the site assessment process, it may be appropriate to issue a finding of "Site Evaluation Accomplished" (SEA), indicating that no further action is planned for the site.

Specifically, if and when sufficient supporting information is gathered during the combined site assessment, work could begin on an early action, an HRS scoring package, or ultimately a long-term action. This consolidation could save years in the site evaluation phase of the Superfund process.

Effect on the NPL. The attempt to evaluate sites more quickly, and to initiate response action earlier, may have some impact on a site's scoring and possible listing on the National Priorities List (NPL).<sup>3</sup> However, as discussed below, that impact is subject to several significant limitations.

Under the current HRS, the physical removal of hazardous substances from a site may reduce the site's HRS score, but only if the action occurs prior to the remedial SI phase of the site assessment.<sup>4</sup> Where early response actions occur after initiation of the remedial SI portion of the site assessment, the risk reduction achieved by the early action would not be considered in the HRS scoring process. (However, the site might be a candidate for a "no further action" decision and then deletion, shortly after being listed on the NPL.)

Moreover, because a range of waste quantity values generally qualifies for the same waste quantity sub-score under the HRS, a physical removal must be significant enough to lower the waste quantity below that range of quantities in order to affect the final waste quantity and HRS scores. (The timely removal of all hazardous substances would always result in an HRS score of zero.)<sup>5</sup>

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<sup>3</sup> Only sites listed on the NPL are eligible for Fund-financed remedial actions. 40 CFR 300.425(b)(1). However, removal actions, and response actions carried out by private parties pursuant to EPA enforcement authorities, may be conducted at NPL or non-NPL sites. 40 CFR 300.425(b)(1) and (b)(4).

<sup>4</sup> See 55 Fed.Reg. at 51568. The remedial SI point was chosen as the dividing line because it is the point at which most of the scoring data is available, and because of the need to provide finality in the listing process (a contrary policy would create a burdensome need to continually recalculate HRS scores).

<sup>5</sup> Note that actions that do not affect the quantity of waste at a site, such as providing alternative drinking water supplies or enhancing containment of a waste pile, would not affect the HRS score. See preamble to final HRS, 55 Fed.Reg. 51532, 51567-69 (Dec. 14, 1990), and HRS Section 2.4.2.2 (40 CFR Part 300, App. A, sec. 2.4.2.2), for a more detailed discussion of the effect removal actions may have on the HRS score.

It should also be noted that most sites requiring action under CERCLA have been found to present long-term problems (such as the need for groundwater restoration) in addition to more acute, short-term problems. Thus, at many sites, risk reduction activities may address only a portion of the contamination problem, and thus the HRS scoring process would often continue even after the early actions.

As part of the SACM initiative, the Agency intends to compile a list of long-term actions. However, that list is not meant to replace the NPL; rather, it will simply be an informational list of sites at which long-term actions are being carried out using the concepts reflected in SACM, and will likely represent a sub-set of all NPL sites.

Effect on Current Response Action Procedures. It is also important to recognize how the SACM model fits within the existing site response process. Although SACM encourages the taking of early action where risk reduction may be accomplished promptly, it is not expected that procedures would change for all categories of CERCLA response actions (although implementation of the Model may result in expedited administrative practices at all sites).

For example, EPA will continue to use removal action authorities to respond to emergency and time-critical situations, and SACM does not intend to change the manner in which these time-sensitive actions are carried out. However, the determination as to whether a situation is "time-critical" (where action must be initiated in less than six months) as compared to "non-time-critical" (where more than six months planning time is available) will have an important impact on the level of analysis, timing of administrative record development, and extent of public participation that is required under the NCP regulations.<sup>6</sup> Thus, especially in close cases, the finding that action is "time-critical" should be discussed with the Office of Regional Counsel representative to the Decision Team, and should be explained in the Action Memorandum.

At the other end of the spectrum, the Agency will continue to use remedial action authorities to respond to most contamination problems that are expected to require more than five years to complete ("long-term actions"), such as groundwater restoration projects, large wetland/estuary sites, and extensive

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<sup>6</sup> See 40 CFR 300.415(b)(4) and (m)(4), 300.820(a); 55 Fed.Reg. at 8695-98 and 8805-06 (March 8, 1990).

mining sites.<sup>7</sup> It is also expected that remedial action authorities would generally be necessary to carry out the permanent relocation of individuals, and actions requiring significant, long-term operation and maintenance activities.

The area where the greatest flexibility is available -- and where the SACM model is expected to have the greatest impact -- is for actions that fall between the clear cases of removal and remedial actions: sites for which a planning period of at least six months exists (non-time-critical situations), and at which rapid risk reduction is possible.

In non-time-critical situations, both non-time-critical removal authority, and early action remedial authority, could potentially be used to reduce risk. In making a decision as to which type of authority to use, the Regional Decision Team, including a representative from the Office of Regional Counsel, should consider a number of issues regarding each type of authority.

Non-time-critical Removal Actions. Under the SACM model, it is expected that the Agency would make greater use of its authority to conduct non-time-critical removal actions. The use of such actions promises to accelerate the cleanup process. For example, for Fund-financed actions, non-time-critical removal actions can proceed prior to listing on the NPL; and in the enforcement context, they may be accomplished through administrative orders on consent (AOC's) rather than more time-consuming judicial consent decrees used for remedial actions; see CERCLA section 122(d)(1)(A).

In deciding on the appropriateness of using non-time-critical removal action authority at a site, the cost and duration of the action should be evaluated. If a Fund-financed removal action is expected to exceed statutory limits of \$2 million or one year, then an exemption must be justified based either on the emergency nature of the situation, or a finding that continued removal action is "consistent with the remedial action to be taken" (CERCLA section 104(c)(1)). In non-time-critical situations where a removal action is expected to exceed the time or dollar limitation, we generally expect to rely on the consistency exemption. Sites at which remedial action is likely to be taken (e.g., proposed or final NPL sites) will generally be strong candidates for the consistency exemption; it may also be appropriate to use this exemption at some non-NPL sites, but it must be justified on a site-by-site basis. See 55 Fed.Reg. 8666, 8694 (March 8, 1990).

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<sup>7</sup> Again, to the extent that the Agency plans to take a remedial action using Fund monies, the site must first qualify for listing on the NPL.

Consideration of whether to take a non-time-critical removal action at a site should also include an evaluation of State cost share issues. Although a State cost share is not required under CERCLA section 104(c)(3) for a removal action,<sup>8</sup> the absence of a State's financial participation may limit the capacity of EPA to fully fund certain large dollar value non-time-critical removal actions. The advisability of seeking voluntary participation from the States in the funding of a non-time-critical removal action in order to expedite the cleanup of a site (rather than waiting to perform a remedial action), must be reserved for site-by-site discussions.

Similarly, where a proposed Fund-financed removal action would require the performance of post-removal action measures to maintain the effectiveness of the action, a State's willingness to perform post-removal site control should be evaluated.<sup>9</sup> A decision by a State not to provide for such post-removal controls may limit EPA's capacity to proceed with Fund-financed removal actions that require measures to maintain the completed action's effectiveness. (At enforcement sites, the potentially responsible parties (PRPs) may be required to perform necessary post-removal site control activities.)

The decision to use a non-time-critical removal authority should also follow a review of the applicable requirements. A non-time-critical removal action must include an analysis of alternatives in an engineering evaluation/cost analysis [EE/CA], and the public must be afforded not less than 30 calendar days to comment on the proposed removal alternative ~~before~~ it is selected, as required in the NCP (40 CFR 300.415(b)(4) and (m)(4)).<sup>10</sup>

It is also expected that for non-time-critical removal actions, it will generally be practicable to attain ARARs. The NCP requires removal actions to attain ARARs "to the extent

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<sup>8</sup> Note that before a Fund-financed remedial action can be taken at a facility that was operated by the State, a cost share of at least 50 percent is required for all "response costs," including removal action costs. See CERCLA section 104(c)(3)(C)(ii).

<sup>9</sup> "Post-removal site control" is discussed in the NCP at 40 CFR 300.415(k).

<sup>10</sup> Note that this public comment period will be extended by a minimum of 15 additional days upon timely request. 40 CFR 300.415(m)(4)(iii).

practicable," considering the scope and urgency of the situation." Given the extended planning time available for non-time-critical removal actions, we believe that it will generally be "practicable," in terms of the urgency factor, for non-time-critical removal actions to comply with ARARs. Whether or not the attainment of an ARAR is beyond the scope of a non-time-critical removal action, is a site-specific determination that will depend, in part, on the nature of the removal action, and on the nature of other actions to be taken at the site.<sup>12</sup> For example, a removal action is more likely to be limited in scope where it is to be followed by additional site response actions designed to further address the same problem. (The impracticability of attaining an ARAR based on the scope of a non-time-critical removal action should be discussed with the Office of Regional Counsel's representative to the Decision Team.)

Finally, in order to assure the public that the non-time-critical removal actions taken pursuant to the SACM initiative will be of high quality, Agency policy will be to implement a preference for treatment in these actions, and to conduct a baseline risk assessment, where appropriate, before selecting a non-time-critical removal response.

**Early Remedial Actions.** SACM also encourages the increased use of remedial action authorities to achieve early risk reductions at sites. An early remedial action may be either a final or interim remedial action. An early "final" remedial action involves the final cleanup of an operable unit or portion of a site early in the remediation process for the entire site. For instance, at a large site with several contaminant sources, an early final remedial action might be taken to eliminate or control one of those sources, thereby achieving significant risk reductions.

An "interim" remedial action is generally intended to address a threat in the short term, while a permanent remedial solution is being developed. An example would be the installation of a groundwater pumping system to contain a contaminant plume while the feasibility of aquifer treatment is being studied, or construction of a temporary landfill cap to prevent direct contact with wastes during the remedial

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<sup>11</sup> 40 CFR 300.415(i). The waivers described in 40 CFR 300.430(f)(1)(ii)(C) may also be considered during removal actions.

<sup>12</sup> See NCP preamble discussion, at 55 Fed.Reg. 8695-96 (March 8, 1990).



investigation/feasibility study (RI/FS) process.<sup>13</sup> An early interim remedial action can be taken during scoping or at other points during the RI/FS process (however, remedial construction activities cannot be provided using the Fund until the site has been finally included on the NPL<sup>14</sup>). Less documentation is required for the Record of Decision (ROD) for an interim remedial action than for a ROD covering a final remedial action; however, adequate documentation must be provided to justify the action. (See "Guide to Developing Superfund No Action, Interim Action, and Contingency Remedy RODs," OSWER Public. No. 9355.3-02FS-3 (April 1991), at p. 4.)

Even if early risk reduction could be accomplished through a non-time-critical removal action, it may nonetheless be preferable to pursue an early remedial action in a number of situations. For instance, EPA may decide to use its remedial action authorities -- and therefore to follow the more extensive State and public participation procedures required for such actions -- at certain sites where there is high public or State interest, even if there is some associated delay. It may also be appropriate to use remedial action authorities to accomplish early actions where a site is already listed on the NPL and the remedial process is well underway.

**Enforcement First and PRP Searches.** The SACM goal of accelerating cleanups is not intended to displace other important goals, such as the Agency's general policy of pursuing enforcement efforts first. However, in order to effectuate both goals, it will be necessary to carry out certain enforcement actions in an expedited manner.

For instance, PRP searches must be conducted during the initial phases of the site assessment process in order to allow the Agency to pursue an effective enforcement strategy for early actions. The early identification of and notice to PRPs will also serve to strengthen EPA's cost recovery cases in situations where the action is financed by the Fund in the first instance. (Of course, a full PRP search may be impracticable in emergency and certain time-critical situations where, for instance, the PRPs are numerous or difficult to determine.)

In addition, the decision to proceed with an early action using removal action authorities may trigger shorter statutory deadlines for the filing of judicial cost recovery actions in

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<sup>13</sup> Of course, such actions could also be accomplished, in appropriate cases, under removal action authorities.

<sup>14</sup> Note that Fund monies may be used to pay for the RI/FS and remedial design activities even prior to listing on the NPL. 40 CFR 300.425(b)(1).

some cases.<sup>15</sup> Thus, if the use of removal authorities is increased under the SACM model, it may be necessary to prepare cost recovery cases earlier in the process.

#### CONCLUSION

It is important to ensure that response actions conducted as part of the SACM model are consistent with CERCLA and the NCP. This will strengthen the Agency's ability to recover its costs, to defend the selected response actions on a site-specific basis, and to retain full support for the SACM initiative from Congress and the public.

Questions concerning the issues discussed in this Directive should be addressed to Sherry Hawkins of the Office of Emergency and Remedial Response (OERR) (202-260-2180), Sally Mansbach of the CERCLA Enforcement Division (OWPE/CED) (703-308-8404), or Larry Starfield of the Office of General Counsel (OGC) (202-260-1598).

cc: Richard Guimond  
Henry Longest, OERR  
Bruce Diamond, OWPE  
Tim Fields, SRO  
OERR Division Directors  
Bill White, OE  
Sylvia Lowrance, OSW  
Walter Kovalick, TIO  
James Makris, CEPPO  
Sally Mansbach, CED  
Sherry Hawkins, OERR  
Larry Starfield, OGC

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<sup>15</sup> See CERCLA section 113(g)(2)(A) and (B).



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

OCT 26 1992

OFFICE OF  
SOLID WASTE AND EMERGENCY RESPONSE

**VERY IMPORTANT---PLEASE DISTRIBUTE TO ALL STAFF**

**OSWER DIRECTIVE NO. 9203.1-03A**

**MEMORANDUM**

**SUBJECT:** Exercising Flexibility Through the Superfund  
Accelerated Cleanup Model (SACM)

**FROM:** Don R. Clay  
Assistant Administrator

**TO:** Addressees

The purpose of this memo is to reaffirm the Office of Solid Waste and Emergency Response commitment to support Regional offices in soundly-based decision making while implementing the Superfund Accelerated Cleanup Model (SACM).

At the April SACM planning meeting, I offered Headquarters support to the Regions in making decisions that will improve the Superfund program through SACM. Our new Superfund model is being implemented at a rapid pace, and I am pleased with the direction it is taking. SACM is the way we will be doing business in the future, and although it is exciting and promising, it also poses certain challenges. Any time major changes are implemented, decisions must be made and actions must be taken in order to improve the efficiency of the program. Yet, we must also be conscious of the legal boundaries of CERCLA and the NCP. In order to ensure that SACM actions are fully supported, OSWER has issued jointly with the Office of General Counsel Directive No. 9203.1-03, "Guidance on Implementation of the Superfund Accelerated Cleanup Model (SACM) under CERCLA and the NCP".

Using this directive, I urge Regional personnel to take full advantage of the flexibility that the NCP offers to streamline the program to provide risk-based cleanups at the greatest number of sites; this could include development of consolidated site assessments, the early start-up of RI/FS's at likely NPL sites, and the increased use of removal authorities to more expeditiously address sources of contamination. The Office of Regional Counsel Regional Decision Team (RDT) representative will be essential in identifying the flexibility within the NCP, and ensuring that such flexibility is exercised in a manner that does not pose unacceptable litigation risks. I also urge you to use your discretion and sound judgement in program innovations. The RDT meetings will be an appropriate forum to discuss these types

of issues since the team is made up of experts with cross-program skills.

Further, revision of guidances is underway, and draft "short sheets" have been sent for Regional comment. We have also met with the Office of Inspector General (OIG) to fully apprise them of SACM developments. We have informed the OIG that SACM expedites the Superfund process using the flexibility within our authority per the OSWER/OGC directive, without creating the inconsistencies with the NCP that have been identified in previous audits.

We must continue the communication between Regions and Headquarters on the SACM issues. The benefits from this type of dialogue were clearly seen at the National SACM Meeting held in August. Keep in mind that we are all on the same team, working towards the same goals. I stand ready to support you in taking advantage of the flexibility in the regulations in order to make soundly-based decisions to implement SACM.

**Addressees:**

Regional Administrators, Regions I-X  
Director, Waste Management Division  
Regions I, IV, V, VII  
Director, Emergency and Remedial Response Division,  
Region II  
Director, Hazardous Waste Management Division  
Regions III, VI, VIII, IX  
Director, Hazardous Waste Division, Region X.  
Director, Environmental Service Division  
Regions I, VI, VII  
Regional Counsel, Regions I-X

**cc:**

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Lisa Friedman, OGC  
Henry Longest, OERR  
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