



United States
Environmental Protection
Agency

Office of Superfund
Remediation and Technology
Innovation (OSRTI)

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Superfund Alternative Approach Baseline Assessment

Section 1: Purpose

This baseline assessment provides a summarized description of the Superfund Alternative Approach (SAA), including a brief history of its evolution, its current use, recent SAA evaluation findings, the current practice on seeking state concurrence on National Priorities List (NPL) listings, NPL-listing factors, and recommendations for the future use of SAA.

Section 2: History

The “polluter pays” principle is a fundamental tenet of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, commonly known as “Superfund”). Starting in 1989, EPA initiated its “Enforcement First” policy and began to first look to potentially responsible parties (PRPs) to investigate and clean up Superfund sites before using Fund money. Under this policy, PRPs conduct the majority of remedial actions.

In the 1990s, situations arose where PRPs or communities preferred that a site be addressed without listing on the NPL. At some of these sites eligible for, but not listed on, the NPL, PRPs were willing to perform a site cleanup with EPA oversight and enter into CERCLA agreements to ensure work would be completed. This concept became known as the “NPL-equivalent” approach, and by 2000, the Superfund Program Implementation Manual (SPIM) had formally incorporated the concept of an “NPL-equivalent” approach to site remediation.

In 1997, EPA issued the “State Coordination” memo, which confirmed EPA’s intent to consult and coordinate with states governments prior to proposing a site be included on the NPL in their state. In practice, EPA has only proposed (never finalized) one site without state agreement.

Starting in 1999, and continuing through the early part of the following decade, EPA began to place fewer sites on the NPL. For example, in 1999, 2000, and 2001, EPA listed 43, 38, 29 sites, respectively, on the NPL, and by 2006 and 2007, EPA only listed 11 and 12 sites, respectively. As noted in the SPIM and congressional testimony, listing sites on the NPL became an “option of last resort.” Further, as many other cleanup programs (*e.g.*, state voluntary cleanup programs, state Superfund programs, and various state and federal Brownfields programs) evolved over the

prior two decades, the need for NPL listing somewhat decreased as these other programs' ability to address contaminated sites became available.

In 2002, the practice of entering into remedial agreements at NPL-equivalent sites was captured in the guidance, "*Response Selection and Settlement Approach for Superfund Alternative Sites*," as an alternative to NPL listing. This SAA guidance supports a continued focus on listing sites on the NPL. Prior to the 2002 SAA guidance, EPA entered into CERCLA agreements for remedial-action work at more than 46 non-NPL sites in nine regions. The SAA guidance, which was revised in 2004, promotes national consistency among agreements by ensuring that CERCLA settlements at sites not listed on the NPL:

- ✚ achieve cleanups equivalent to those at NPL sites;
- ✚ place EPA in the same enforcement posture as at NPL sites; and
- ✚ provide the states, natural resource trustees, tribal governments and communities opportunities for involvement as equivalent to that provided for NPL sites.

The threshold criteria for considering SAA are whether:

- ✚ the site would qualify for listing on the NPL;
- ✚ the site is expected to need long-term remedial action; and
- ✚ there is viable, capable, and cooperative PRPs willing to enter into an enforceable agreement with EPA and conduct the remedial work.

EPA routinely seeks out the best way to accomplish cleanups at NPL-caliber sites. While this often calls for placement of the site on the NPL, sites are also often directed toward other federal or state approaches—SAA is one of those alternative approaches.

When discussing the SAA we refer to SAA agreements, rather than SAA sites. The SAA is agreement based. Sites with SAA agreements may also have other non-SAA agreement activity.

Section 3: Current SAA Use

In the nine years since the 2002 SAA guidance was issued, there have been **51** SAA agreements addressing **66** sites (see *Figure 1, Sites with SAA Agreements Since 2002*). These SAA agreements account for about **2%** of all Superfund enforcement actions during that time period. In this same time period, there have been **136** sites proposed to the NPL and **149** sites finalized on the NPL.

Figure 1, Sites with SAA Agreements and SAA Agreements Since 2002

	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	Total
# of sites with SAA	0	0	2	22	34	2	1	1	2	2	66
# of SAA agreements	0	0	2	22	19	2	1	1	2	2	51

When were the SAA agreements been finalized?

Figure 2 shows the total number of SAA agreements that were reached in all Regions in the years since the SAA guidance was issued. The number of SAA agreements peaked at nine in 2004, and has averaged six/year since 2007.

Figure 2, Number of SAA Agreements by Year

	'01	'02	'03	'04	'05	'06	'07	'08	'09	'10	Total
# of SAA agreements	1	5	6	9	4	2	7	6	6	5	51

How are sites with SAA agreements distributed among regions?

Since 2002, Region 4 (with about **33%** of SAA agreement sites) and Region 5 (with about **52%** of SAA agreement sites) have used SAA agreements to address sites in their Regions more than all other Regions combined (see *Figure 1, Sites with SAA Agreements Since 2002*).

The two regions' use of the approach is best evaluated within the context of the work conducted at each of the Region's Superfund programs. Since the SAA guidance was issued, Region 4 Superfund completed **834** non-SAA actions, and Region 5 completed **796** non-SAA actions. Also, these two Regions continue to be the most active in listing sites on the NPL since 2002 (see *Figure 3, Sites Proposed and Finalized on the NPL Since 2002*), demonstrating that they continue to use all available routes to cleanup.

Figure 3, Sites Proposed and Finalized on the NPL Since 2002

	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	Total
Proposed	5	22	13	25	23	16	13	8	5	6	136
Finalized	7	29	13	25	22	17	15	9	6	6	149

Aside from SAA, what have been other avenues taken to clean up sites?

Since 2002, of sites entered into the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), over **858** sites have been deferred to states for further evaluation and cleanup, **146** sites have been deferred to Resource Conservation and Recovery Act (RCRA) programs, and **405** sites have been deferred to other federal programs.

Figure 4, Avenues to Site Evaluation and Cleanup Since 2002

Deferral to State Programs	858
Deferral to other Federal Programs	405
NPL Listing (final)	149
Deferral to RCRA corrective action	146
Sites with SAA agreements	66

Where are SAA agreement sites in the remedial process?

Many of the sites with SAA agreements currently are in the initial stages of the remedial process. See *Figures 5 and 6* for a detailed look, by region, at where SAA agreement sites are in the remedial process, and where PRP-lead sites listed on the NPL since the enactment of SAA are in the remedial process.

Figure 5, SAA Agreement Sites in the Remedial Process

	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	Total
RI/FS	n/a	n/a	2	11	29	1	1	0	2	2	48
RD/RA	n/a	n/a	0	9	5	1	0	1	0	0	16
											64¹

¹ Note: For the Region 4 site, Lyman Dyeing and Finishing, a “No Action” Record of Decision was issued. In addition, the Kerr McGee-Navassa SAA site was listed on the NPL in April 2010, so it was not included in the count. Kerr McGee-Navassa is, however, included in the counts for the total number of sites with SAA agreements (66) and the total number of SAA agreements (51).

Figure 6, PRP-lead NPL Sites (since 2002) in the Remedial Process

	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	Total
RI/FS	1	15	3	2	6	5	1	1	4	3	41
RD/RA	1	0	1	4	1	0	5	2	1	0	15
Post. Const. ²	0	0	0	1	0	0	1	0	0	0	2
											58

How are SAA agreement sites tracked?

Similar to NPL sites, information on sites with SAA agreements is put into CERCLIS by regional programs. EPA tracks most of the same key site and operating unit (OU)-level SAA agreement events as those that are tracked for NPL agreements.

As of 7/13/10, the following measures were currently being tracked in CERCLIS for sites with SAA agreements:

- ✚ Remedial Investigation/Feasibility Study Start
- ✚ Record of Decision (ROD) Completed
- ✚ ROD Amendments Completed
- ✚ Remedial Design (RD) Start
- ✚ RD Completion
- ✚ Remedial Action (RA) Start
- ✚ Final Site Assessment Decisions
- ✚ PRP Removal Completions
- ✚ RA Completions
- ✚ Construction Completions
- ✚ Human Exposure Environmental Indicator (EI) Under Control
- ✚ Groundwater Migration EI Under Control
- ✚ Site-wide Ready for Anticipated Use

Further, all CERCLIS site status indicators are included for sites with SAA agreements (*e.g.*, “Proposed to the NPL,” “Native American Interest”).

Has there been any congressional interest in SAA?

Since fiscal year (FY) 2008, EPA has reported annually to the House Appropriations Committee (HAC) fiscal year intramural and extramural expenditures at sites with SAA agreements (see **Attachment 1** for FY09 report). In the FY09 annual report, it is noted that approximately \$10 million was spent at all SAA agreement sites in FY09. Direct site expenditures at sites with

² Refers to the stage of EPA’s remedial process known as “Post Construction Completion.” Post Construction Completion activities involve optimizing remedies to increase effectiveness and/or reduce cost without sacrificing long-term protection of human health and the environment.

SAA agreements include both intramural and extramural expenses. As of FY10, *cumulative* direct site expenditures at all SAA agreement sites were approximately \$80 million. By comparison, since its inception, EPA's Superfund program has spent approximately \$14 billion in direct site expenditures at NPL sites (current and deleted).

In the FY09 HAC report, EPA also responded to the committee's request for additional information on why Regions 4 and 5 have a large share of the sites with SAA agreements (approximately 85%). For EPA's full response to the HAC, please see **Attachment 1**. As at NPL sites, EPA costs at sites with SAA agreements are recoverable.

Do SAA agreements differ from agreements at NPL sites?

Agreements at NPL sites and SAA agreements start with the same model document. Depending on the work involved (RI/FS, RD, RA) there are two or three additional provisions added to SAA agreements to help keep EPA, communities, and natural resource trustees in a position equivalent to that they would be in if the sites were listed on the NPL.

The Technical Assistance Plan (TAP) provision makes technical assistance available to local communities. As Technical Assistance Grants (TAGs) are only available to sites proposed to or listed on the NPL, TAPs are used to facilitate an equivalent level of community involvement at sites with SAA agreements. A TAP is funded by the PRP pursuant to EPA oversight and is available to a qualified community group upon application.

The *Agreement Not to Challenge Listing after Partial Cleanup*, or "Listing" provision helps ensure human health and the environment are not jeopardized by an inadequate cleanup or an interruption in response actions caused by unforeseen events. This provision places EPA in a position equivalent to that it has at sites already proposed for listing or listed on the NPL with respect to EPA policy on rescoring sites after partial cleanup, and prevents a PRP from challenging the listing of a site after a partial cleanup. A partial cleanup may result in an HRS score that would not qualify the site for inclusion on the NPL. This provision is included in agreements for RA, where changing site conditions are expected, and generally is not included in RI/FS agreements unless there is work in those agreements that may lead to changed site conditions.

The Financial Assurance (FA) provision places EPA in a position roughly equivalent to that it would be in if the site were listed on the NPL and PRP(s) stopped work. If PRP-financed work at a NPL site stopped, EPA would have immediate access to the Fund to ensure there was no stoppage of work. The FA provision is designed to provide a similar level of immediate access to funds in the event a PRP stopped work at an SAA agreement site. The provision provides quick-access "bridge-funding" to continue site work until EPA lists the site on the NPL and the Fund is available for use. EPA only negotiates for this provision in RA settlements because the Fund can be accessed prior to RA without listing the site.

The natural resource damages (NRD) provision clarifies that sites with SAA agreements for RI/FS are considered to have a ROD scheduled for purposes of bringing NRD claims. A general statute of limitations (SOL) provision for NRD claims at NPL sites is that a claims action must start within three years after the discovery of the loss and its connection with the release. The exception to this SOL period is that an action for NRD claims at an NPL site, *or any facility "at which an [RA]... is otherwise scheduled"*, must start within three years after completion of the RA. As EPA anticipates a RA will be performed at any site using SAA, the NRD provision clarifies that the SOL exception applies to sites under SAA agreements. The provision should be included in RI/FS agreements regardless of whether NRD claims are known at the time.

How does community involvement at SAA agreements sites vary from NPL sites?

The community involvement process at sites with SAA agreements and NPL sites is similar. As at NPL sites, Regions will assign a community involvement coordinator to each site under a SAA agreement to respond to community concerns and explain EPA activities at a site, and the public is invited to participate and provide comments at various stages of the remedial process (*e.g.*, commenting on a proposed remedy), with EPA responding to such comments in a manner consistent with that at NPL sites.

However, there are some positive variations to the community involvement process at sites where the technical assistance plan (TAP) provision is used in lieu of Technical Assistance Grants (TAGs)³, such as sites with SAA agreements, and there are two steps that are unique to NPL sites only. Community groups receiving TAPs do not have to provide matching funds, as they do for TAGs, nor do they necessarily have to incorporate like groups receiving TAGs, or submit an equivalent level of paperwork. Finally, the TAP provision requires the PRP, rather than EPA, to provide technical assistance funds if a qualified community group applies. Just as with TAGs, a qualified community group can receive up to \$50,000 (in some cases, more) to hire a technical advisor to assist in explaining the process and reviewing documents, and to keep the rest of the community informed.

Community involvement processes unique to NPL sites are the opportunity for the public to comment on the proposed site listing and the proposed "deletion" of a site from the NPL. The site is first proposed to the NPL in the *Federal Register*. EPA then accepts public comments on the site, responds to the comments, and may place the site on the NPL if it continues to meet the requirements for listing. After the cleanup is completed, EPA publishes a notice of intent to delete in the *Federal Register* and in a major newspaper near the community involved. A public comment period is provided during prior to the deletion as well.

³ TAGs are available at sites proposed to, or listed on, the NPL. EPA may also negotiate for TAPs at NPL sites.

Does the Agency for Toxic Substances and Disease Registry (ATSDR) perform public health assessments (PHAs) at sites with SAA agreements?

CERCLA requires ATSDR to perform a health assessment for each site proposed for listing on the NPL. ATSDR has also performed PHAs or health consultations (HCs) at 29 sites with SAA agreements. ATSDR has recently agreed to perform PHAs and HCs at all forthcoming sites under SAA agreements. Further, it will evaluate sites with SAA agreements from FY09-10 to determine whether performing PHAs or HCs is feasible.

For more detail on SAA sites without ATSDR PHAs or HCs by Region, please see **Attachment 2**.

What are some of the characteristics of sites with SAA agreements?

The Office of Policy (OP) study (further discussed in **Section 5**), albeit based on a limited site universe, found no significant differences between the demographics of sites with SAA agreements and those on the NPL. Sites with SAA agreements address a similar range of issues seen at NPL sites, including: groundwater, sediment and soil contamination, active community groups and no community groups, NRD issues and no NRD issues, single PRPs and multiple PRPs, large/complex cleanups, and relatively straightforward cleanups. There are SAA agreements at landfills, dumps, manufacturing plants, mines, sediments, residential areas, and refineries.

A unique application of SAA in Region 5 has resulted in multiple sites with the same history and PRP being addressed under a few RI/FS agreements.⁴ Nineteen former manufactured gas plant sites (in Wisconsin and Illinois) are being addressed under three SAA agreements with two PRPs for RI/FS work. There is time and cost savings for the listing, negotiation, and oversight processes as a result of addressing these sites together.

Section 4: Factors Effecting Listing Decisions & Use of Alternatives

A variety of factors, regulatory, policy and practice, are considered in making listing decisions. Decisions not to list sites eligible for listing may be a result of combinations of these factors:

- | | |
|----------------------------------|------------------------------------|
| ✚ State concurrence on listing | ✚ Available funding |
| ✚ Eco risk vs. human health risk | ✚ Community involvement |
| ✚ Presence of EJ community | ✚ Size/complexity of site problems |
| ✚ Deferral to other programs | ✚ Presence of viable, capable PRPs |
| ✚ Federal property | ✚ Redevelopment concerns |
| ✚ International issues | ✚ Likelihood of litigation |

⁴ Specifically, one agreement for six WPSC sites, one agreement for two Illinois manufactured gas plant sites, and one agreement for 11 other Illinois manufactured gas plants were reached.

State concurrence on NPL listing

EPA’s 1997 memo addressing state coordination on NPL-listings contains the flexibility for EPA to list a site without a state’s concurrence. In practice, however, EPA has only once proposed a site without the state’s concurrence.

The lack of state concurrence for site listing, however, is not always the reason Regions use SAA. The two Regions with the highest use of SAA—Regions 4 and 5 (85% of sites with SAA agreements)—both have noted that a lack of state concurrence is not a universal reason for using SAA. For both these regions, the decision to use SAA was based on a variety of factors, including community input. In contrast, some other Regions’ use of SAA has been driven by the lack of state concurrence (see *Figure 7* for more detail.) Regions 7 and 10, for instance, have used SAA because of the lack of state concurrence, while Region 6 uses SAA on a “case-by-case” basis, having decided to use SAA at one site because of a lack of state concurrence, but, at its other SAA agreement site, because of community concerns.

Figure 7, Response to Question: “Is the lack of state concurrence for listing a site the main reason your region used the Superfund Alternative Approach?”

	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
Response	n/a	n/a	N	Y&	Y&	Y&	Y	N	Y&	Y
# SAA	0	0	2	22	34	2	1	1	2	2

Section 5: 2010 Office of Policy (OP) Study on SAA Sites in Region 4

In 2009-2010, OP funded a program evaluation of the use of SAA in Region 4. The evaluation’s goals were to “examine the factors influencing the use of the SA approach; assess the effectiveness of the SA approach in achieving the goals of the Superfund program; assess the efficiency of the SA approach in terms of potential time and cost savings; [and] identify strategies to improve the implementation, efficiency and effectiveness of the SA approach.”

In its evaluation, OP evaluated 11 SAA agreements, and interviewed 11 Region 4 staff and managerial personnel, two EPA HQ staff members, representatives of three PRPs, one developer, and three community representatives in two communities. OP’s research on Region 4 sites with SAA agreements produced the following general findings:

- Existing data do not reveal a significant difference between NPL and SAA sites with regard to the time the negotiations or work take and/or monetary savings.

- ✚ PRPs are willing to negotiate with EPA to avoid the "stigma" of listing and enter a more cooperative process than NPL listing (though respondents noted PRP cooperation varies among sites on the NPL and those under SAA.)
- ✚ To community members, SAA is viewed as positive or neutral.
- ✚ Data do not reveal any significant difference between NPL sites and sites with SAA agreements with regard to future land use options.

While based on a limited data set, the study found no obvious trends that distinguished SAA sites from NPL sites—including any significant time or cost savings related to the remedial process (apart from the listing process) — and the overall sense from the community members, EPA community involvement coordinators (CICs), remedial project managers (RPMs), PRPs, and lenders interviewed, was that the general response to SAA is positive.

The one facet of the study that was comprehensive in its sample size was the analysis of minority and low-income populations and their geographic distance to NPL and SAA agreement sites. OP's analysis found no difference in the concentration of minority or low-income populations near NPL and SAA sites.

The "Effectiveness Assessment of the Region 4 Superfund Alternative Approach" is available on the Agency's website at http://www.epa.gov/evaluate/pdf/SAA_evaluation_report.pdf. A fact sheet on the report is available at http://www.epa.gov/evaluate/pdf/SAA_evaluation_factsheet.pdf.

Section 6: Summary of Regional Perspectives on SAA

In discussions, EPA regions have described the benefits and the proper caution that should be exercised when using SAA.

Benefits

There is a regional view that the benefit of having the approach available for use where appropriate has clear advantages. Overall, the availability of SAA as a viable option has allowed for some sites to be addressed by EPA when listing was a source of contention. Regions have worked closely to ensure state support for utilizing the SAA, noting that in some instances states will be unwilling to bring sites to federal attention if the SAA were not available. Several regions believe SAA is a critical component of their site assessment process. The regions also believe there are benefits of using SAA for communities. In the regional experience of using SAA when working with communities, the advantages include the ability to: address a site sooner, provide a seamless EPA presence, and offer more flexible technical support.

Cautions

The Regions believe SAA should be used only in limited circumstances. Regions noted that the SAA process does not provide the public with a formal opportunity to participate in the decision about whether to place the site on the NPL. Also, some regions feel that the decision of whether and when to manage a site using one of the alternatives to listing (e.g., deferral, SAA) is not based on any predictable or verifiable independent criteria—rather, it is sometimes based on the interests of the PRP(s) or communities.⁵ Some Regions are concerned that the availability of SAA as an option creates the likelihood that there may be procedural inconsistencies among otherwise similarly situated sites. Whether those procedural inconsistencies also translate into substantive inconsistencies or inequities is harder to predict, but some regions believe there is at least the potential for such substantive inconsistencies.⁶

Although it has not happened to date, there is concern about the possibility of: 1) a PRP defaulting on its responsibilities during the remediation phase at a site under an SAA agreement when the liquid FA provision in the agreement was not properly monitored to keep funds available, resulting in a delay in immediately accessing remedial funding to keep the work going while the site is listed; and 2) a PRP performing under a SAA agreement doing substandard work when the FA provision was not adequately monitored to keep funds available, the agency being unwilling to remove the PRP and take over the work because of the inability to immediately access remedial funds at a non-NPL site. These concerns can be mitigated by properly negotiating and monitoring liquid financial assurance that EPA can access to continue work while EPA proceeds to place the site on the NPL.

Another area of regional concern is that SAA can relieve a community from the "stigma" of having a Superfund site. In the instances where the Regions have been asked to consider managing a site through SAA, avoiding the purported stigma has often been key part of the discussion. Without conceding that NPL listing in fact creates a stigma, there is concern about an inherent unfairness in allowing the stigma argument to be a factor in a community where, there happens to be a willing, capable PRP, while at a similarly situated community where there is no such PRP the NPL listing would proceed and the purported stigma would attach. Regions caution that EPA should monitor the situation to ensure that this possibly unfair outcome does not occur more frequently in environmental justice (EJ) communities.⁷ Finally, there is also regional concern that the more common it becomes to address a site using an SAA agreement, the more "uncommon" and undesirable it may appear to address a site through listing on the NPL.

⁵ The SAA guidance includes threshold criteria that must be met before a site can even be considered for an SAA agreement.

⁶ The OP evaluation was unable to identify any statistically significant substantive inconsistencies to date, based on a limited data set.

⁷ The OP evaluation found no statistical difference in the minority and low-income populations surrounding NPL sites and sites with SAA agreements.

Section 7: Integrated Cleanup Initiative (ICI) SAA Workgroup

In February 2010, the ICI SAA Workgroup evaluated the current use of SAA, reviewed current sites with SAA agreements to determine if they were better suited for listing on the NPL, and identified areas of SAA that could be improved.

The following general findings were generated from the workgroup meetings:

- ✦ Regions 4 and 5, the two regions with the largest number of sites with SAA agreements, generally use SAA as a last resort and the number of SAA agreements/year is relatively steady.
- ✦ No current site within the workgroup's SAA universe (aside from the Kerr-McGee, Navassa site, which was listed on the NPL in April 2010, is viewed by Regions 4 or 5 as a candidate for upcoming NPL rulemakings.
- ✦ There are RPMs assigned to SAA agreements to ensure the terms of administrative order on consent (AOC) and/or consent decree (CD) are being implemented consistent with the National Contingency Plan (NCP).
- ✦ The use of the SAA is small in comparison to the total number of other Superfund actions.
- ✦ Eliminating alternatives to NPL listing may increase the risk of states choosing not to disclose information on sites to the regional offices.
- ✦ Multiple PRPs being involved with an SAA agreement does not impede successful negotiations with EPA. (As at NPL sites, a single representative from a PRP group often serves as a liaison for communication among the parties.)

The workgroup members also reviewed "regionally-identified" NPL-equivalent agreements at non-NPL sites (agreements that pre-date the guidance or are not consistent with the SAA guidance) to determine whether any of these sites are candidates for addition to NPL. After evaluating these agreements for potential site listing, it was found that in Regions 2, 4, and 5 such sites were:

- ✦ past the stage in which a more formal SAA agreement would be useful for cleaning up the site;
- ✦ planned to be managed under an SAA agreement consistent with the national guidance in the next few years; or
- ✦ in the process of being prepared for NPL listing.

Workgroup Recommendations to Improve SAA Process

- ✚ Develop agreement between EPA and ATSDR for ATSDR to perform public health assessments—equivalent to those performed for NPL sites—at all current and future SAA agreement sites.
- ✚ Develop new “Attainment of Remedial Action Objectives” site status (analogous to site “deletion”).
- ✚ Develop intermediate steps for tracking progress of remedial work under SAA.
- ✚ Bring potential SAA agreement sites to NPL listing panel for discussion regarding site characteristics and planned use of SAA.
- ✚ Update SAA guidance.
- ✚ Continue to review universe of non-NPL, “regionally-identified” sites with CERCLA agreements pre-dating the 2002 SAA guidance.

Section 8: SAA Case Studies

The following are a few recent examples of how SAA has been used to facilitate site cleanup. The first example, in Region 4, reveals how the bankruptcy of a party to an SAA agreement did not hinder listing the site on the NPL so remediation could proceed. The second example in Region 5 shows how a single SAA agreement can effectively address multiple sites. The final example provides insight into how an SAA agreement was used to best accommodate one of Region 9’s tribal communities.

Region 4: Kerr-McGee Navassa site (Navassa, N.C.)

Under a 2004 SAA agreement for an RI/FS, Kerr-McGee (PRP) completed an expanded site investigation (ESI) in 2005 and began a RI in 2006. To manage site remediation efforts at the site, Kerr-McGee established a subsidiary company, Tronox. Tronox filed for Chapter 11 bankruptcy protection in January 2009. As bankruptcy proceedings and associated lawsuits could take years to be resolved, Region 4, in the interest of starting remedial work at the site after the ROD is signed, listed the site on the NPL so work could continue under fund-lead action until the bankruptcy was settled and site trustees resumed responsibility for the work. The site was listed on the NPL in April 2010.

Region 5: Wisconsin Public Service Sites (Wis.) and Peoples Gas Sites (Ill.)

EPA was approached by Wisconsin Public Service Corp. (WPSC) in 2005, about investigating and cleaning-up seven former manufactured gas plant sites (MGPs) in Wisconsin using SAA. EPA entered into two agreements with WPSC for RI/FS work at the seven sites (one agreement addresses six sites).

When WPSC merged with Peoples Energy to form Integrys Energy Group (Integrys), EPA was approached by Peoples Energy in 2007, to address thirteen former MGPs in Illinois using SAA. EPA and Integrys entered into an agreement for an RI/FS at two sites and another agreement for Engineering Evaluations and Cost Analyses (EE/CAs) at 11 more sites.

Since the 20 sites have similar conditions and contaminants, and Integrys is responsible for each, the agreements allowed a streamlined approach to site investigation and remedy development. Some benefits of the agreements include the use of multi-site documents, a mechanism to review the adequacy of past work, and scheduling flexibility to allow progress on the worst problems first. By the end of 2008, all of the multi-site documents had been approved, and site-specific work had begun at several of the sites. In October 2008, EPA and Integrys entered into an SAA RI/FS AOC for the 11 former MGP sites where the EE/CAs had been completed.

Region 9: Cyprus Tohono Mine (North Komelik, Ariz.)

At the request of the Tohono O’odham Nation, EPA performed a PA/SI and EE/CA at this mining site located within the Tohono O’odham Nation in Arizona. The Tohono O’odham Nation started the NRD process with the Department of the Interior, Cyprus Tohono Corp. (CTC), and Phelps Dodge Corp. In 2006, CTC signed an agreement to perform removal actions addressing surface contamination and source materials. EPA determined that an RI/FS was needed to further characterize groundwater contamination. The Tohono O’odham Nation, which owns the site and leases it to CTC, requested in writing that the RI/FS proceed without listing the site on the NPL. Taking into consideration the tribe’s request and the PRP’s willingness to work cooperatively with EPA and the tribe on previous site work, in 2009 Region 9 negotiated an SAA agreement for RI/FS with the CTC. The RI/FS, focused on uranium contamination in groundwater, is proceeding under the agreement.

Section 9: Conclusion

This assessment shows SAA to be an effective tool for getting private parties to conduct site assessments and remedial activities.

It can also be noted from this assessment:

- ✚ The number of sites with SAA agreements, when compared to other EPA enforcement activities, is small (2%).
- ✚ Comparing the number of sites Regions 4 and 5 have listed on the NPL with the number of sites with SAA agreements in those regions and the total number of non-SAA actions in both those regions, reveals the use of SAA is limited in both regions.
- ✚ SAA gives regions an approach that allows for several sites to be managed under one agreement (*e.g.*, Wisconsin Public Service Sites and Peoples Gas sites in Illinois).

- ✦ The number of sites that have been deferred to other programs (state, federal, RCRA, NPL listing) demonstrates that many site clean-up options are considered in addition to SAA.
- ✦ The community involvement process at sites with SAA agreements is equivalent to that at NPL sites.
- ✦ Funding for community technical assistance is available for SAA site communities as it would be for those at NPL sites.
- ✦ Key provisions in SAA agreements (*i.e.*, listing, financial assurance, and NRD) protect EPA, the trustees and community from the possibility of a PRP renegeing on its commitments.
- ✦ There are ways the approach can be improved (*e.g.*, performing ATSDR PHAs at sites with SAA agreements) to better parallel the NPL process.
- ✦ No SAA agreement sites in Regions 4 and 5 (85% of total sites with SAA agreements) are at a point to be evaluated for the NPL.
- ✦ There are a variety of factors that account for regions deciding to use SAA (*e.g.*, community involvement, redevelopment concerns).
- ✦ State concurrence is not a universal reason for regions choosing to use SAA.
- ✦ Regions 4 and 5 rarely use SAA because of a lack of state concurrence; among the other regions, lack of state concurrence is not a primary reason for using SAA.

Further, OP's research findings on sites with SAA agreements in Region 4, albeit based on a limited data set, have shown SAA to be a sound tool for use in certain situations to address sites that are not listed on the NPL. OP's research also revealed community sentiment toward SAA is nearly equivalent to that for NPL sites, suggesting communities are more concerned with seeing a site cleaned up than with the cleanup vehicle. However, as OP's quantitative analysis of the remedies selected at sites with SAA agreements was based on limited data, additional research on remedies selected at SAA sites should be conducted as many of the SAA agreements mature to ensure equivalency with the NPL process. It may also be beneficial to expand OP's research to include sites with SAA agreements in Region 5.

For information on this report, contact David Yogi, OSRTI, yogi.david@epa.gov.

Attachment 1

**Fiscal Year 2009 Report to U.S. House Appropriations Committee on
Direct Site Expenditures at Sites with SAA Agreements**

**Response to House Appropriations Committee (HAC) FY 2009 Report
Annual Superfund Alternative Approach: Status Update for FY 2009**

On page 112 of the House Appropriations Committee Report 110-187 accompanying the FY 2008 Department of the Interior, Environment, and Related Agencies Appropriations Bill (H.R. 2643), the Committee has requested the Agency "to report, at the end of each fiscal year, the number of sites using the Superfund Alternative approach funded, by Region; the intramural and extramural costs associated with those sites; and information on each site listed including the risk posed by each site." On page 108 of the House Appropriations Committee Report 111-180 accompanying the FY 2010 Department of the Interior, Environment, and Related Agencies Appropriations Act (P.L. 111-80), the Committee continued "to direct the Agency to report annually, by region, on the sites using the Superfund Alternative Approach Agreements, including intramural and extramural costs." In addition, the Committee noted "that in fiscal year 2009 over 75 percent of the funds attributed to the alternative approach were used by only two EPA regions and questioned why these two regions rely so heavily on the alternative approach and urges the Administrator to review this program." In May 2009, EPA provided the second annual report with cumulative information through the end of FY 2008. This document updates that report with cumulative information through the end of FY 2009 and responds to the Committee's question regarding why two regions use the Superfund Alternative (SA) approach.

EPA uses the SA approach as an administrative alternative to listing sites on the National Priorities List (NPL). By EPA definition, the SA approach is used at sites where: 1) site contaminants are significant enough that the site would be eligible for listing on the NPL, 2) a long-term response (*i.e.*, a remedial action) is anticipated at the site, and 3) there is a willing, capable potentially-responsible party (PRP) who will sign an agreement with EPA to perform the investigation or cleanup consistent with the National Contingency Plan (NCP). Since the June 2002 guidance "Response Selection and Enforcement Approach for Superfund Alternative Sites" was issued, EPA has negotiated 45 SA approach agreements addressing the 61 sites in the table below.

The NCP (40 CFR 300.425(b)(1)) limits the use of federal Superfund remedial action funds to sites listed on the NPL. While some Superfund response funds may be spent at these sites for the initial identification and screening work, these costs are included in the terms of SA agreements for recovery from the PRP. Any Superfund response funds spent on early removal actions or oversight are also cost-recoverable.

SA sites may pose risks to human health and the environment which require further investigation and possible remediation. EPA has listed the nature of threat¹ at each site in the table below.

There is no requirement for regions to use the SA approach; rather, it is a tool that regions may choose to use in appropriate circumstances to encourage responsible parties to perform and fund Superfund actions with EPA oversight. Since 2002, EPA Regions 4 and 5 have used

¹ The nature of threat presents the hazardous substances, pollutants or contaminants identified at each site.

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the SA approach more than other regions; however, these Regions do not rely heavily on the approach relative to other Superfund actions in their regions. To help put these Regions' use of the SA approach in perspective, from FY 2002 through FY 2009: Region 4 Superfund had 20 SA approach agreements and 466 other Superfund PRP-lead actions¹ and 368 fund-lead actions (834 non-SAA actions); Region 5 Superfund had 15 new SA approach agreements, 415 other PRP-lead actions and 381 fund-lead actions (796 non-SAA actions). Further, Region 4 and 5 together proposed as many sites to the NPL during FY 2009 (11) as all other regions combined. Due in part to the willingness of Regions 4 and 5 to try the SA approach early and their large number of Superfund sites (the two largest Superfund regions in the country), they now have the most experience using the SA approach. Additionally, many of the States and PRPs within those Regions have become familiar with the approach, making it easier to use in appropriate circumstances. In Region 5, the circumstance of PRP's committing to perform Superfund investigations at 19 sites under only 3 agreements (one agreement each for 2 sites, 6 sites, and 11 sites), greatly increased the number of sites under SA approach agreements, but not the number of agreements.

¹ In this report, actions include removals, remedial investigations/feasibility studies (RI/FS), remedial designs (RD), and remedial actions (RA).

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Sites with Superfund Alternative Approach Agreement(s): Cumulative Expenditures through 9/30/09¹

CERCLIS Site Name	City, State	EPA Site ID	Nature of Threat	Cumulative Direct Site Expenditures Through FY 2008 (A)	FY 2009 Intramural Costs ² (B)	FY 2009 Extramural Costs ³ (C)	Cumulative Direct Site Expenditures Through FY 2009 (A) + (B) + (C)
REGION 3							
68 th Street Dump	Rosedale, MD	MDD980918387	VOCs, semi-volatile organic compounds, PCBs, metals	\$1,447,738	\$75,861	\$6,759	\$1,530,358
Foster Wheeler Energy Corporation/Church Road TCE (New)	Mountain Top, PA	PAD003031788	TCE	n/a	\$398,960	\$674,222	\$1,073,182
Region 3 Totals							
				\$1,447,738	\$474,821	\$680,981	\$2,603,540
REGION 4							
Admiral Home Appliances	Williston, SC	SCD047563614	Heavy metals, mercury	\$629,086	\$24,978	\$7,056	\$661,120
Anniston PCB Site	Anniston, AL	ALD000400123	PCBs	\$8,108,523	\$274,050	\$844,937	\$9,227,510
Brown's Dump	Jacksonville, FL	FLD980847016	Lead, arsenic, other inorganics, organics, pesticides/PCBs, dioxins/furans	\$754,403	\$14,741	\$16,507	\$785,651
Copper Basin Mining District	Copper Hill, TN	TN0001890839	Metals, acid mine drainage, PCBs	\$14,080,066	\$123,414	\$433,473	\$14,636,953
Coronet Industries	Plant City, FL	FLD001704741	Inorganic constituents and organic compounds, acidic groundwater, radionuclides	\$612,962	\$116,509	\$139,012	\$868,483
Ecusta Mill	Pisgah Forest, NC	NCD003166675	Mercury	\$536,695	\$55,984	\$306,414	\$899,093

¹ Costs generally include costs over the life of the site to date, from initial site identification, screening, PRP-search, evaluation, coordination, negotiation, oversight, and removal actions. Costs/expenditures reflect disbursements (e.g., outlays) of appropriated and special account funds.

² *Intramural Costs* include the information provided in the Integrated Financial Management System (IFMS) for "Personnel Compensation and Benefits," "Expenses," and "Travel."

³ *Extramural Costs* include "Contracts," "Grants/loans," and "Interagency agreements (IAGs)."

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CERCLIS Site Name	City, State	EPA Site ID	Nature of Threat	Cumulative Direct Site Expenditures Through FY 2008 (A)	FY 2009 Intramural Costs ¹ (B)	FY 2009 Extramural Costs ² (C)	Cumulative Direct Site Expenditures Through FY 2009 (A) + (B) + (C)
Gurley Pesticide Burial (New)	Selma, NC	NCD986172526	Pesticides, organics, inorganics, heavy metals, VOCs	n/a	\$211,632	\$294,127	\$505,759
Henry's Knob	Clover, SC	SCN000407376	Metals	\$439,348	\$14,377	\$70,917	\$524,642
Holtra Chem/Honeywell Inc.	Riegelwood, NC	NCD991278631	Mercury, PCBs	\$1,279,566	\$41,369	\$29,568	\$1,350,503
Illinois Central Railroad Company's Johnston Yard	Memphis, TN	TND073540783	Metals, solvents, pesticides	\$128,222	\$17,736	\$2,317	\$148,275
Jacksonville Ash	Jacksonville, FL	FLSFN0407002	Lead, arsenic	\$1,013,290	\$38,201	\$34,496	\$1,085,987
Kerr-McGee	Navassa, NC	NCD980557805	Organics	\$227,101	\$12,597	\$8,316	\$248,014
Lyman Dyeing and Finishing	Lyman, SC	SCD987584653	Dye residues, solvents, hydraulic liquids	\$681,901	\$22,916	\$3,949	\$708,766
National Fireworks	Cordova, TN	TNSFN0407047	TCE, DCA, perchlorate	\$433,870	\$17,498	\$151,545	\$602,913
Orlando Gasification Plant	Orlando, FL	FLD984169235	Organics, inorganics	\$286,305	\$34,879	\$21,477	\$342,661
Sanford Gasification Plant (New)	Sanford, FL	FLD984169193	Metals, VOCs, PAHs, dioxins/dibenzofurans	n/a	\$598,682	\$766,440	\$1,365,122
Sixty One Industrial Park	Memphis, TN	TND987790300	Metals, pesticides, PAHs, PCBs	\$637,794	\$38,779	\$38,040	\$714,613
Solitron Devices, Inc.	West Palm Beach, FL	FLD032845778	Volatile organics, metals, 1-4 dioxane	\$771,762	\$12,213	\$0	\$783,975
Sprague Electric	Longwood, FL	FLD004072658	TCE	\$139,577	\$41,852	\$2,027	\$183,456
Weyerhaeuser Co / Plymouth Wood Treating Plant	Plymouth, NC	NCD991278540	Mercury	\$3,079,044	\$42,877	\$31,047	\$3,152,968
Region 4 Totals				\$33,839,515	\$1,755,284	\$3,201,665	\$38,796,464

¹ *Intramural Costs* include the information provided in the Integrated Financial Management System (IFMS) for "Personnel Compensation and Benefits," "Expenses," and "Travel."

² *Extramural Costs* include "Contracts," "Grants/loans," and "Interagency agreements (IAGs)."

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CERCLIS Site Name	City, State	EPA Site ID	Nature of Threat	Cumulative Direct Site Expenditures Through FY 2008 (A)	FY 2009 Intramural Costs ¹ (B)	FY 2009 Extramural Costs ² (C)	Cumulative Direct Site Expenditures Through FY 2009 (A) + (B) + (C)
REGION 5							
Alcoa Properties	East St. Louis, IL	ILSFN0508010	Metals, cyanide	\$451,467	\$21,061	\$30,561	\$503,089
Burnham Canal- Miller Compressing	Milwaukee, WI	WIN000510222	Inorganics, PAHs, asbestos containing material, benzene, other organics	\$12,987	\$28,044	\$9,724	\$50,755
Cedar Creek	Cedarburg, WI	WID988590261	PCBs in sediment	\$716,679	\$22,488	\$56,784	\$795,951
Ellsworth Industrial Park	Downers Grove, IL	ILN000508246	TCE, PCE	\$3,651,463	\$39,153	\$182,775	\$3,873,391
Evergreen Manor	Winnebago, IL	ILD984836734	TCE, PCE	\$3,543,113	\$13,071	\$2,049	\$3,558,233
Ford Road Landfill (New)	Elyria, OH	OHD988590261	PAHs, PCBs, benzene, vinyl chloride, metals, pesticides	n/a	\$203,392	\$263,940	\$467,332
North Shore Gas (North)	Waukegan, IL	ILD984807990	PAHs, volatiles, metals <i>(One agreement for both sites)</i>	\$87,223	\$3,296	\$4,323	\$94,842
North Shore Gas (South)	Waukegan, IL	ILD984809228		\$10,206	\$1,454	\$21,626	\$33,286
Old American Zinc Plant	Fairmont City, IL	IL0000034355	Metals, pesticides	\$556,440	\$15,065	\$69,437	\$640,942
Peoples Gas Former Manufactured Gas Plant, Crawford Station (New)	Chicago, IL	ILN000510192	Cyanide, metals, VOCs (including TCE), PAHs, PCBs, tar, oil, grease, metals <i>(11 sites under one agreement)</i>	n/a	\$7,090	\$9,060	\$16,150
Peoples Gas Former Manufactured Gas Plant, Hawthorne Ave (New)	Chicago, IL	ILN000510195		n/a	\$2,826	\$3,973	\$6,799
Peoples Gas Former Manufactured Gas Plant, Hough Place Station (New)	Chicago, IL	ILN000510190		n/a	\$9,166	\$87,062	\$96,228

¹ *Intramural Costs* include the information provided in the Integrated Financial Management System (IFMS) for "Personnel Compensation and Benefits," "Expenses," and "Travel."

² *Extramural Costs* include "Contracts," "Grants/loans," and "Interagency agreements (IAGs)."

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CERCLIS Site Name	City, State	EPA Site ID	Nature of Threat	Cumulative Direct Site Expenditures Through FY 2008 (A)	FY 2009 Intramural Costs ¹ (B)	FY 2009 Extramural Costs ² (C)	Cumulative Direct Site Expenditures Through FY 2009 (A) + (B) + (C)	
Peoples Gas Light & Coke, 22nd St. (New)	Chicago, IL	ILD982074767	Cyanide, metals, VOCs (including TCE), PAHs, PCBs, tar, oil, grease, metals (11 sites under one agreement)	n/a	\$31,306	\$158,171	\$189,477	
Peoples Gas Light & Coke, Division St. (New)	Chicago, IL	ILD982074783		n/a	\$8,177	\$5,585	\$13,762	
Peoples Gas Light & Coke, North Station (New)	Chicago, IL	ILD982074775		n/a	\$8,752	\$3,879	\$12,631	
Peoples Gas Light & Coke, Willow St. Station (New)	Chicago, IL	ILD982074759		n/a	\$5,300	\$4,435	\$9,735	
Peoples Gas Former Manufactured Gas Plant, North Shore Ave. Station (New)	Chicago, IL	ILN000510193		n/a	\$4,184	\$7,374	\$11,558	
Peoples Gas Former Manufactured Gas Plant, Pitney Court (New)	Chicago, IL	ILN000510196		n/a	\$28,952	\$103,845	\$132,797	
Peoples Gas Former Manufactured Gas Plant, South Station (New)	Chicago, IL	ILN000510191		n/a	\$18,324	\$4,748	\$23,072	
Peoples Gas Former Manufactured Gas Plant, Throop St. (New)	Chicago, IL	ILN000510194		n/a	\$1,344	\$3,067	\$4,411	
Peters Cartridge Factory	Kings Mills, OH	OHD987051083		Metals	\$409,699	\$49,756	\$120,194	\$579,649
Solvay Coke & Gas Co.	Milwaukee, WI	WIN000508215		Metals	\$697,210	\$28,268	\$217,068	\$942,546

¹ *Intramural Costs* include the information provided in the Integrated Financial Management System (IFMS) for "Personnel Compensation and Benefits," "Expenses," and "Travel."

² *Extramural Costs* include "Contracts," "Grants/loans," and "Interagency agreements (IAGs)."

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CERCLIS Site Name	City, State	EPA Site ID	Nature of Threat	Cumulative Direct Site Expenditures Through FY 2008	FY 2009 Intramural Costs ¹	FY 2009 Extramural Costs ²	Cumulative Direct Site Expenditures Through FY 2009
				(A)	(B)	(C)	(A) + (B) + (C)
South Dayton Dump and Landfill	Dayton, OH	OHD980611388	Lead, copper, antimony, arsenic, barium, beryllium, cadmium, mercury, PCBs, organic compounds, vinyl chloride, TCE, other VOCs	\$561,926	\$37,807	\$116,772	\$716,505
Town of Pines Groundwater Plume	Town of Pines, IN	INN000508071	Molybdenum, boron	\$723,742	\$34,492	\$40,881	\$799,115
Tremont City Landfill	Tremont City, OH	OHD980612188	Metals, organics	\$2,729,810	\$67,713	\$89,833	\$2,887,356
WPSC Camp Marina MGP	Sheboygan, WI	WIN000510058	Benzene, toluene, xylene, PAHs, metals, cyanide	\$116,773	\$23,917	\$45,201	\$185,891
WPSC Green Bay MGP	Green Bay, WI	WIN000509948	Benzene, toluene, xylene, PAHs, metals, cyanide	\$12,100	\$832	\$943	\$13,875
WPSC Manitowoc MGP	Manitowoc, WI	WIN000509949		\$50,788	\$2,481	\$9,521	\$62,790
WPSC Marinette MGP	Marinette, WI	WIN000509952		\$12,600	\$1,022	\$3,435	\$17,057
WPSC Oshkosh MGP	Oshkosh, WI	WIN000509947		\$59,230	\$10,491	\$3,058	\$72,779
WPSC Stevens Point	Stevens Point, WI	WIN000509983		\$70,659	\$8,193	\$6,463	\$85,315
WPSC Two Rivers MGP	Two Rivers, WI	WIN000509953		\$12,305	\$208	\$559	\$13,072
Region 5 Totals				\$14,486,420	\$737,625	\$1,686,346	\$16,910,391
REGION 6							
Falcon Refinery	Ingleside, TX	TXD086278058	Tank wastes	\$419,067	\$37,073	\$22,337	\$478,477
Highway 71/72 Refinery	Bossier City, LA	LAD981054075	Lead, hydrocarbons, benzene	\$4,605,722	\$25,600	\$91,195	\$4,722,517
Region 6 Totals				\$5,024,789	\$62,637	\$113,532	\$5,200,994

¹ Intramural Costs include the information provided in the Integrated Financial Management System (IFMS) for "Personnel Compensation and Benefits," "Expenses," and "Travel."

² Extramural Costs include "Contracts," "Grants/loans," and "Interagency agreements (IAGs)."

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CERCLIS Site Name	City, State	EPA Site ID	Nature of Threat	Cumulative Direct Site Expenditures Through FY 2008 (A)	FY 2009 Intramural Costs ¹ (B)	FY 2009 Extramural Costs ² (C)	Cumulative Direct Site Expenditures Through FY 2009 (A) + (B) + (C)
REGION 7							
Iowa City FMGP	Iowa City, IA	IAD984591172	Benzene, PAHs	\$438,011	\$23,129	\$983	\$462,123
REGION 8							
Kennecott (South Zone)	Copperton, UT	UTD000826404	Lead, arsenic	\$2,007,566	\$9,556	\$90,901	\$2,108,023
REGION 9							
Asarco-Hayden Plant	Hayden, AZ	AZD008397127	Arsenic, lead, copper, cadmium, chromium	\$5,056,735	\$175,101	\$727,018	\$5,958,854
Cyprus Tohono Mine	Tohono O'odham Nation, AZ	AZD094524097	Sulfate, uranium, perchlorate	n/a	\$127,338	\$33,559	\$160,897
Region 9 Totals				\$5,056,735	\$302,439	\$760,577	\$6,119,751
REGION 10							
Alaska Railroad / Anchorage Yard	Anchorage, AK	AKD980983241	Metals, benzene, toluene, ethyl benzene xylene, TCE	\$839,279	\$12,333	\$73,701	\$925,313
Grand Totals				\$63,140,053	\$3,377,860	\$6,608,686	\$73,126,599

Contaminant Acronyms

VOC: volatile organic compounds

PCB: polychlorinated biphenyls

TCE: trichloroethylene

DCA: dichloroethane

PAH: polycyclic aromatic hydrocarbons

PCE: perchloroethylene

¹ *Intramural Costs* include the information provided in the Integrated Financial Management System (IFMS) for "Personnel Compensation and Benefits," "Expenses," and "Travel."

² *Extramural Costs* include "Contracts," "Grants/loans," and "Interagency agreements (IAGs)."

Attachment 2

Analysis of Public Health Assessments and Health Consultations at Sites with SAA Agreements

FY10 SAA Sites with ATSDR Public Health Assessments or Health Consultations

Prepared by: *Office of Superfund Remediation and Technology Innovation (OSRTI)*

Contact: David Yogi, OSRTI, yogi.david@epa.gov

April 14, 2011

- In total, 29 of 65 sites with SAA agreements have either PHAs, HCs, or both
- Of these 29 sites, 14 have PHAs only, 12 have HCs only, and 3 have both
- There are 11 new sites from FY09 & FY10 (Peoples counting as one) – 5 of these do not have a PHA or HC

CERCLIS Site Name	City, State	EPA Site ID	Nature of Threat	Public Health Assessment (PHA)	Health Consultation (HC)	PHA & HC
Region 3						
68 th Street Dump	Rosedale, MD	MDD980918387	VOCs, semi-volatile organic compounds, PCBs, metals	Nov. 2009		
Foster Wheeler Energy Corporation/Church Road TCE (New-FY09)	Mountain Top, PA	PAD003031788	TCE		HC 2010	
Region 4 (21 sites total, 11/21 w/PHA or HC) – 5/21 PHA only; 5/21 HC only; 1/21 PAH & HC						
Admiral Home Appliances	Williston, SC	SCD047563614	Heavy metals, mercury	Nov. 2006		
Anniston PCB Site	Anniston, AL	ALD000400123	PCBs		Oct. 2006	
Brown's Dump	Jacksonville, FL	FLD980847016	Lead, arsenic, other inorganics, organics, pesticides/PCBs, dioxins/furans	June 2000		
Copper Basin Mining District	Copper Hill, TN	TN0001890839	Metals, acid mine drainage, PCBs		May 2005; HC 2010 Draft	
Coronet Industries	Plant City, FL	FLD001704741	Inorganic constituents and organic compounds, acidic groundwater, radionuclides	Jan. 2007 PHA 2010 Draft	2003-2005	X
Ecusta Mill	Pisgah Forest, NC	NCD003166675	Mercury			

Gurley Pesticide Burial (New-FY09)	Selma, NC	NCD986172526	Pesticides, organics, inorganics, heavy metals, VOCs			
Henry's Knob	Clover, SC	SCN000407376	Metals			
Holtra Chem/Honeywell Inc.	Riegelwood, NC	NCD991278631	Mercury, PCBs			
Illinois Central Railroad Company Johnston Yard	Memphis, TN	TND073540783	Metals, solvents, pesticides			
ITT Thompson (New-FY10)	Madison, FL	FLD043047653	TCE, DCE, vinyl chloride, lead, zinc, chromium			
Jacksonville Ash	Jacksonville, FL	FLSFN0407002	Lead, arsenic			
Lyman Dyeing and Finishing	Lyman, SC	SCD987584653	Dye residues, solvents, hydraulic liquids			
National Fireworks	Cordova, TN	TNSFN0407047	TCE, DCA, perchlorate			
Nocatee Hull Creosote (New-FY10)	Hull, FL	FLD980709398	PAHs, BTEX, aluminum, iron		Sept. 2002	
Orlando Gasification Plant	Orlando, FL	FLD984169235	Organics, inorganics			
Sanford Gasification Plant (New-FY09)	Sanford, FL	FLD984169193	Metals, VOCs, PAHs, dioxins/dibenzofurans	May 2000		
Sixty One Industrial Park	Memphis, TN	TND987790300	Metals, pesticides, PAHs, PCBs		July 2003	
Solitron Devices, Inc.	West Palm Beach, FL	FLD032845778	Volatile organics, metals, 1-4 dioxane	May 2001		
Sprague Electric	Longwood, FL	FLD004072658	TCE	PHA 2010 Draft		
Weyerhaeuser Plymouth Wood Treating Plant	Plymouth, NC	NCD991278540	Mercury		Aug. 2008 (most recent)	
Region 5 (34 sites total, 10/34 w/PHA or HC) – 3/34 PAH only; 5/34 HC only; 2/34 PHA & HC						
Alcoa Properties	East St. Louis, IL	ILSFN0508010	Metals, cyanide			
Burnham Canal- Miller Compressing	Milwaukee, WI	WIN000510222	Inorganics, PAHs, asbestos containing material, benzene, other organics		Sept. 2009	
Cedar Creek	Cedarburg, WI	WID988590261	PCBs in sediment		HC 2010 Draft	
Chemical Recovery Systems (New-FY10)	Elyria, OH	OHD057001810	Toluene, TCE, PCBs, cadmium, copper, arsenic, PAHs			

Dow – Tittabawassee River/ Saginaw River/Saginaw Bay (New-FY10)	Bay City, Carrollton, Essexville, Freeland, Midland, Saginaw, Shields and Zilwaukee, MI	MID000724724	Dioxin, PCBs		June 2004 Feb. 2008	
Ellsworth Industrial Park	Downers Grove, IL	ILN000508246	TCE, PCE			
Evergreen Manor Groundwater Contamination	Winnebago, IL	ILD984836734	TCE, PCE	Dec. 1999	Mar. 2002	X
Ford Road Landfill (New-FY09)	Elyria, OH	OHD988590261	PAHs, PCBs, benzene, vinyl chloride, metals, pesticides		Jan. 2002	
North Shore Gas (North)	Waukegan, IL	ILD984807990	PAHs, volatiles, metals <i>(One agreement for both sites)</i>			
North Shore Gas (South)	Waukegan, IL	ILD984809228				
Old American Zinc Plant	Fairmont City, IL	IL0000034355	Metals, pesticides	June 2003	Feb 1996	
Peoples Gas Former Manufactured Gas Plant, Crawford Station (New- FY09)	Chicago, IL	ILN000510192				
Peoples Gas Former Manufactured Gas Plant, Hawthorne Ave (New- FY09)	Chicago, IL	ILN000510195				
Peoples Gas Former Manufactured Gas Plant, Hough Place Station (New-FY09)	Chicago, IL	ILN000510190	Cyanide, metals, VOCs (including TCE), PAHs, PCBs, tar, oil, grease, metals			
Peoples Gas Light & Coke, 22nd St. (New-FY09)	Chicago, IL	ILD982074767				
Peoples Gas Light & Coke, Division St. (New-FY09)	Chicago, IL	ILD982074783				
Peoples Gas Light & Coke, North Station (New-FY09)	Chicago, IL	ILD982074775				
Peoples Gas Light & Coke, Willow St. Station (New-FY09)	Chicago, IL	ILD982074759				
Peoples Gas Former Manufactured Gas Plant, North Shore Ave. Station (New-FY09)	Chicago, IL	ILN000510193	<i>(11 Peoples Gas sites under one agreement)</i>			
Peoples Gas Former Manufactured Gas Plant, Pitney Court (New- FY09)	Chicago, IL	ILN000510196				

Peoples Gas Former Manufactured Gas Plant, South Station (New-FY09)	Chicago, IL	ILN000510191				
Peoples Gas Former Manufactured Gas Plant, Throop St. (New-FY09)	Chicago, IL	ILN000510194				
Peters Cartridge Factory	Kings Mills, OH	OHD987051083	Metals	March 2006		
Solvay Coke & Gas Co.	Milwaukee, WI	WIN000508215	Metals		Jan. 2003 August 2008	
South Dayton Dump	Dayton, OH	OHD980611388	Lead, copper, antimony, arsenic, barium, beryllium, cadmium, mercury, PCBs, organic compounds, vinyl chloride, TCE, other VOCs	Sept. 2008		
Town of Pines Groundwater Plume	Town of Pines, IN	INN000508071	Molybdenum, boron	June 2002		
Tremont City Barrel Fill Site	Tremont City, OH	OHD980612188	Metals, organics			
WPSC Camp Marina MGP	Sheboygan, WI	WIN000510058	Benzene, toluene, xylene, PAHs, metals, cyanide			
WPSC Green Bay MGP	Green Bay, WI	WIN000509948	Benzene, toluene, xylene, PAHs, metals, cyanide			
WPSC Manitowoc MGP	Manitowoc, WI	WIN000509949				
WPSC Marinette MGP	Marinette, WI	WIN000509952				
WPSC Oshkosh MGP	Oshkosh, WI	WIN000509947				
WPSC Stevens Point	Stevens Point, WI	WIN000509983				
WPSC Two Rivers MGP	Two Rivers, WI	WIN000509953				
Region 6						
Falcon Refinery	Ingleside, TX	TXD086278058	Tank wastes	April 2004		
Highway 71/72 Refinery	Bossier City, LA	LAD981054075	Lead, hydrocarbons, benzene	June 2000		
Region 7						
Iowa City FMGP	Iowa City, IA	IAD984591172	Benzene, PAHs		Sept. 2006 (most recent)	
Region 8						
Kennecott (South Zone)	Copperton, UT	UTD000826404	Lead, arsenic	Aug. 1996		
Region 9						
Asarco-Hayden Plant	Hayden, AZ	AZD008397127	Arsenic, lead, copper, cadmium, chromium	Sept. 2002		

Cyprus Tohono Mine (New-FY10)	Tohono O'odham Nation, AZ	AZD094524097	Sulfate, uranium, perchlorate			
Region 10 (2 sites total, 1/2 w/PHA or HC) – 1/2 PAH only; 0/2 HC only; 0/2 PHA & HC						
Alaska Railroad /Anchorage Yard	Anchorage, AK	AKD980983241	Metals, benzene, toluene, ethyl benzene xylene, TCE			
Boeing Company Tulalip Test Site (New-FY10)	Marysville/Tulalip, WA	WAD98063956	TCE, PCBs	June 1993		