

ATTACHMENT A

1. What is the current status of the State's removals program and the relationship between the State and Regional OSCs?
2. How has this relationship changed or the process to transition sites changed since 2001 (i.e., has it improved, worsened, remain unchanged)? Specifically, how has it changed (i.e., what has improved, have things worsened, and what areas may warrant improvements)?
3. What is the level of the State's involvement at EPA removal action sites?
 - a. Does the State work with EPA to review priorities and select sites for removal actions? If yes, how?
 - b. Does the State meet regularly with EPA to discuss removal action priorities and review status of ongoing removal actions? If yes, how often?
 - c. Does the State send written requests for EPA assistance? Does the State have an informal referral system (or no involvement) for EPA's selection of TCRAs? If yes, describe.
 - d. Does the State program have an active on-site role when EPA is conducting TCRAs? If yes, describe.
 - e. Has the State entered any written agreement(s) regarding State and EPA responsibilities during removal actions and the transition of sites? If yes, is it a site-specific agreement or a programmatic agreement? If yes, please provide language in the agreement.
 - f. What types of work does the State perform at EPA removal action sites?
 - g. Does the State provide cost share for EPA removal actions? If yes, under what circumstances?
 - h. What information does EPA provide the State upon turnover of a removal site and does the information allow for effective and efficient transition to long-term remedial activities?
 - i. How does the State coordinate with EPA regarding enforcement actions at removal sites?
4. Are there federal agencies (e.g., DOD, DOE, BLM) other than EPA taking the lead at removal action sites in your state? If so,
 - a. Which federal agency (or agencies)?

- b. How do you coordinate?
 - c. Are there any differences in the removal action process?
5. Does EPA (or other lead agency) request State ARARs? If so, is the State able to provide in the timeline specified?
 6. Are ICs in place at post-removal sites? If so, what plans are in place for inspection/follow-up to ensure the ICs are implemented and remain protective?
 7. Does the State account for projected reuse of the property when a removal action is being planned and conducted? If so, how?
 8. Are there other considerations/actions taken by the State during the removal that would take into consideration a designated property reuse, e.g., use of borrow pit as constructed wetlands?
 9. Are most of the removal actions being conducted at Superfund NPL sites or non-NPL sites (which generally require a greater post-removal action role for States)?
 10. Has the Brownfields law of 2002 changed when and how removal actions are conducted and how sites transition to a State cleanup program(s) after completion of the removal actions (e.g., timing of use of Brownfield funds)? Describe.
 11. Do some removal action sites transition to the State's Brownfields or Voluntary Cleanup Program or complete cleanup under another State cleanup program?
 12. What additional actions could States take to improve the effectiveness and efficiency of site transitions?
 13. Are there any/other specific State concerns?

ATTACHMENT B
Summary of 2007 State Questionnaire Responses by Region

REGION 1

Four of the six Region 1 States responded.

1. All four States reported they have a good to very good working relationship with EPA's Removal Program. Several States cited close working relationships with EPA OSCs. One State reported that they request assistance from the EPA Removals Program for high risk sites where there is no other alternative; responsible parties are either absent, not viable or recalcitrant.

2. All four States indicated that the working relationship with EPA's Removals Program has improved since 2001. One State responded that they learn and improve based on successful case after successful case and each removal action is a learning opportunity. Another State reported improvements have occurred due to that State actively seeking out assistance from EPA's Removals Program since 2001 but that communication with EPA could be improved. Another State indicated that while there is an annual meeting between managers to discuss priorities, resources of the programs and coordination issues that arise, one area that could use improvement is the working relationships between EPA OSCs and State project managers. The State felt that the relationship between OSCs and State project managers was critical to the success of projects. Several other States also indicated that their relationship individual OSCs can make a significant difference in the actual implementation on a site specific basis.

3a. Three of the four States reported that they are involved with establishing priorities. The fourth State indicated that removal actions are decided on a "case by case" basis. The process to set priorities and the level of State involvement varies between the States.

3b. Three of the four States responded that they meet regularly with EPA to review priorities and ongoing removals actions. One of the four States reported that they do not regularly meet with EPA. One State indicated that the EPA Removal staff generally meet with the State's regional offices on an annual basis, and sometimes more frequently to discuss current projects, potential projects, and lessons learned. Another State responded that the communication between the agencies works well, serving to provide status reviews while a removal action is being implemented. In one State they have designated a point of contact for EPA's removals program and EPA has assigned an OSC to be a liaison for EPA's removal action and emergency response program within that particular State.

3c. All four States indicated they send a written request for EPA assistance. Three States indicated there are informal communications, and in some instances a site visit is conducted with EPA, prior to their written request to EPA. One State indicated that they felt they could make improvements in this area

3d. All four States responded that they are involved when EPA is conducting the removal. The involvement ranges from active involvement in planning to involvement with many phases of the removal action (providing input on the scope of the removal action, offering alternatives for managing wastes, assisting with community relations, coordinating between EPA and the municipality, identifying ARARs, and serving as liaison between EPA and other State programs). One State indicated they are involved to the extent their resources allow. Another State commented that they were involved but sometimes not as involved as much, or as in timely a manner, as desired, especially if long term operation and maintenance is anticipated.

3e. None of the States currently has written agreement(s) with EPA although one State indicated that they are seeking agreements on two sites where removals actions are involved. A second State responded that they are beginning to delineate joint responsibility on a case-by-case basis but it is still informal at the moment. The same State indicated that on a recent case they agreed to take care of all oil issues while EPA handled hazmat issues, and are also in the process of deciding how to go forward with general assessment of the property.

3f. All four States are involved to some extent, but the work they perform varies from State to State. States reported assisting with planning, reviewing of work plans, providing field oversight and site security, providing ARARs, supplying mobile lab, helping with sample collection, identifying alternatives to manage wastes, acting as liaison to other environmental programs and State agencies, arranging local participation and assisting with community relations. Some States have the ability on a site specific basis to conduct a portion of the work (e.g., State may take on that portion of the work at a site with both oil and hazmat). One State indicated that the may also be involved in PRP lead removal actions such as providing input on PRP documents (scope of work and sampling plans) and, at non-NPL sites, developing solution to address long term remedial issues after the removal action has been completed.

3g. All four States responded that they do not provide a direct cost share. Most States provide in kind assistance and some States can provide other services on a site specific basis.

3h. Three States reported that they receive information such as action memo, closure memo, PA/SI report, POLREPs, press releases and draft data packages. EPA now posts removal documents to a web page for each action so the information is very easy to access and work with. Often EPA gives the States opportunity to review the drafts which helps States tailor the final disposition of the case. One State commented that sometimes the information may not be presented in a format that is usable for establishing institutional controls (such as a map showing the extent of residual soil contamination that requires future activity and use restrictions) and other remedial activities.

3i. Three of the States reported that there is some level of coordination between the States and EPA on enforcement. Often enforcement is handled on a case by case basis and generally EPA takes the lead on enforcement for removal actions.

4. One of the four States indicated that there a federal agency other than EPA that has taken the lead in performing removal actions. The other three States indicated that there are no other federal agencies conducting removal actions in their respective States.

4a. The one State reported DOD has conducted TCRA and NTCRA and US Coast Guard has also taken the lead on at least one removal action at an NPL site.

4b. With respect to DOD the State coordinates with them through a review and comment process. The State attempts to stay involved in all aspects of the decision making and implementation, including the decision on whether to conduct a removal action, what that action will be, review of all implementation plans, and oversight of the work.

4c. Yes there is a difference in the removal action process. The decision to implement a removal action is less collaborative. DOD generally makes the decision to implement a removal action without much input from the State.

5. All four States reported that they provided ARARs in a timely manner. One State reported that in some instances the process may be informal. Another State questioned how the ARARs were applied to EPA's removal actions.

6. Most States responded that IC's are not typically put in place at the completion of a removal action. Some States indicated that IC's are typically put in place at the completion of all final remedial actions and are the responsibility of the PRP, if one is present, to ensure that the ICs remain in place and are followed. Several States also indicated that there should be more discussion of ICs during the removal action. One State reported that they have an audit system to ensure the ICs remain in place and are complied with.

7. All four States reported that projected property reuse is considered when a removal action is being planned and conducted. Several States reported that often additional remedial work is required to achieve site conditions that are compatible with making a final decision on property reuse. Some States have risk based cleanup regulations that allow for consideration of current and future property use, and IC's are an integral part of the process where cleanup is based on a less than unrestricted future use scenario. One State responded that they account for projected reuse in comments to EPA, through the State site manager interaction with OSC.

8. Two States responded that they consider those types of proposals. One State indicated that they would consider on a case by case basis, if needed to tailor a removal action to accomplish multiple objectives. One State indicated that they would not consider these types of proposals.

9. Most States responded that the majority of removals actions are conducted at non-NPL sites. One State indicated that there not many removal actions are being conducted

at NPL sites any more. Another State indicated that removal actions are conducted at both NPL and non-NPL sites.

10. All four States responded that overall they haven't noticed any impact on removals as a result of the Brownfields law. One State responded that because federal brownfield funds cannot be used while an EPA removal action is being conducted, some sites may require more careful planning.

11. Most of the States reported that the majority of removal action sites transition into the State remedial program. One State reported limited experience with removal actions transitioning to State remedial program. One State indicated that while most of the removal actions transition to the State remedial program, there are some sites where there is no viable responsible party and are no States funds to address the long term remediation issues.

12. One State responded that it may help to reinforce that all sites that require additional cleanup after a removal action is completed to meet the standards under the State's waste site cleanup program. Another State responded that more money and human resources for the programs would help with timely transitions. A third State suggested establishing training between EPA OSCs and State project managers to promote a better understanding of the responsibilities, resources and limitations of the respective programs. The fourth State indicated that prospective purchaser/redeveloper outreach may help.

13. Two States responded that they had no additional concerns. One State indicated that the lack of EPA Removal funding and getting EPA interested in removal actions in their State was a concern. Another State indicated that currently there is little discussion of ICs/PRSC as they relate to EPA removal actions and this area may warrant additional discussion.

REGION 2

1. NY and NJ both report a good working relationship with EPA Region II Removals program.

2. No changes in the relationship since 2001.

3. What is the level of the State's involvement at EPA removal action sites?

3a. In both States site discovery results in a referral process for EPA involvement.

3b. Yes, minimum of once per year.

3c. Communication with EPA precedes the formal written request in both States and facilitates EPA involvement.

3d. Often yes. States assist local communications, site discovery, site security.

3e. NJ yes, NY no.

3f. Discovery, characterization, security.

3g. No. NJ MOA has a \$25K threshold for EPA.

3h. POLREPs

3i. Both States provide enforcement related information to EPA.

4. NY no, NJ yes

4a. DOD and DOE (NJ)

4b. no answer

4c. no answer

5. NJ yes, NY unknown

6. No NJ, Unknown NY.

7. NJ no, NY indirectly.

8. No

9. Non-NPL

10. no answer

11. NJ yes, NY unknown

12. Better communication, dedication of additional staff.

13. no answer

REGION 3

1. Overall the responses in Region 3 was that the relationship with the states and OSCs was good to very good.

2. Most states agreed that the relationship has improved since 2001 with better communication between the states and the OSCs. However, it is dependent on the experience of the OSC and can vary between OSCs.

3a. As sites come to the attention of either EPA or the state, the information is shared through correspondence, phone calls and updates. There is an open dialog as to the appropriate prioritization.

3b. The response to this question varied widely from two states saying no; two states saying on a site by site basis and one state (Maryland) saying that they have routine monthly meetings.

3c. All of the states have sent written requests to EPA. Informal referrals are also made. One state (Delaware) may execute the work through contractors on behalf of EPA.

3d. The responses varied from no involvement (West Virginia), to assisting EPA on TCRAs and providing support (Maryland), as needed. Other states just provide ARARs.

3e. All states have no formal written agreement.

3f. Delaware conducts field oversight to TCRA implementation which can include generating the Purchase Orders for funding, selecting a contractor, approving removal cost. Three states primarily provide oversight of activities and coordination with local governmental agencies, as needed. The states provide comments on documents when requested previous discovery and investigative work. West Virginia stated that the involvement can vary greatly from no involvement to providing analytical assistance to providing personnel.

3g. All state in Region 3 do not provide cost share. However, Delaware can use program funds for implementing the TSCA upon EPA reimbursement.

3h. All states in Region 3 receive or expect to receive copies of reports for their records. Pennsylvania and EPA share any available information when combining site work efforts. Currently, Pennsylvania is not taking the lead on remedial cleanups due to funding issues. To date, Pennsylvania says required state O&M transitions at NPL sites have been satisfactory

3i. The response was usually on a site-by-site basis. Besides providing background information such as inspection reports, West Virginia will provide witnesses when necessary and appropriate. They also provide technical assistance when requested.

4. Three of states in Region 3 reported other federal agencies taking the lead at removal actions.

4a. The federal agencies included DOE, DOD, NASA and the Army Corps of Engineers.

4b. Pennsylvania has an agreement with the DOD that identifies the work to be performed at specific sites. DOE sites are handled on a case by case effort. In Virginia,

the work with DOD is conducted under the DSMOA. In West Virginia, the removal action was conducted under an administrative order.

4c. Yes. Due to differences in policies, procedures and chains of command; the process is usually different from agency to agency. Pennsylvania noted that funding appears to be more critical than at the EPA level.

5. All Region 3 states provide ARARs to EPA within the timeframe specified.

6. The response was generally, ICs are not in place at post-removal sites. If environmental concerns remain, then these sites are processed through the remedial process and ICs are implemented and managed as part of the remedial action.

Delaware has an O&M program and inspections that manage any ICs concerns. Pennsylvania is relying on their legal staff for monitoring and in the future the pending legislation on the Environmental Covenants Act to enforce this requirement. West Virginia may have groundwater monitoring requirements but it varies on how it is done either by EPA (or their contractors) or sometimes, by State personnel.

7. Of the states that responded to this question, it was divided half yes and half no.

8. The response to this question was again divided with no and two states giving consideration to commercial industrial reuse and groundwater impacts.

9. The majority of Region 3 states said most removal actions are conducted at non-NPL sites. One State said both NPL & non-NPL.

10. The response to this question was again divided with more nos. One state; Pennsylvania cited their state program had more of an impact while West Virginia thought it gave an opportunity to facilitate redevelopment.

11. The majority of states say some removal sites transitioned over to the state cleanup programs.

12. All states agreed that early coordination and communication helps keep the sites moving through the programs.

13. None were really expressed except that if there was not a removal program states' interaction would be limited and sites may not be adequately addressed because of states' limited resource.

REGION 4

1. Alabama's relationship with the assigned OSCs has improved markedly over the last two years. Kentucky heavily relies on EPA assistance and has great relationships with the OSCs. Florida's removal actions are generally limited to immediate or emergency

actions. They work with EPA to identify and establish priorities for non-emergency removal actions. They have a good relationship with EPA with recent improvements due to EPA outreach. South Carolina is very actively involved in State-lead and Federal lead projects. They have a good working relationship with EPA at the management and OSC level. Georgia has a good relationship with EPA. Coordination with OSCs mostly involves PRP-lead removal actions that transition from EPA oversight to longer-term state-lead remedial actions.

2. In Region 4, South Carolina, Kentucky, Florida, and Alabama report improvements to communication and prioritization of sites. Georgia's relationship remained good, but improvements could be made to prioritizing Brownfield sites that may not benefit from EPA removal oversight.

3. South Carolina's level of involvement varies with more involved at large, complex sites that have a higher likelihood of becoming State-lead remedial sites, and at those sites where there is likely to be public involvement.

3a. In Region 4, states are generally less involved with setting priorities and more involved with referral of sites. Referral of sites between EPA and the states is more informal through meetings, emails, and phone calls.

3b. In Region 4, Georgia and South Carolina does not have a set schedule but will meet on an "as needed" basis. Kentucky meets every two to three months. Florida meets twice per year at Regional Response Team Meetings, and EPA regularly attends their yearly hurricane response exercise. Florida has recently started meeting more consistently with EPA and they are attempting to establish quarterly meeting between EPA and their district offices. Alabama has on-site meetings with EPA to track progress of removals, and they coordinate closely with their EPA PA/SI Coordinator.

3c. In Region 4, the responding states reported that sites are initially referred informally with phone calls, emails and meetings, and then followed up with written requests. Florida and Alabama report that they are working to develop a more formal referral process.

3d. In Region 4, South Carolina, Kentucky, Florida, and Alabama have active on-site roles for the larger complex sites with previous or anticipated state involvement. Georgia usually does not have much of an active on-site roll unless it is a PRP lead site that will transition to state remedial oversight.

3e. None of the states that responded reported that they had any written agreements.

3f. In Region 4, the responding states reported they mostly provide technical assistance with reviewing reports and coordinating public participation. South Carolina, Florida, and Alabama may provide field support through sampling or providing equipment.

3g. In Region 4, states do not provide any cost sharing for the removal action. South Carolina and Kentucky might provide funds to achieve a higher level of cleanup.

3h. In Region 4, all states reported they receive final pollution reports by EPA. Only Alabama believes the information in the POLREP is sufficient. Closure reports can be obtained when sites are transitioned to state remedial programs.

3i. Region 4 states generally share PRP information used in enforcement actions.

4. no answer

4a. In Region 4, two federal agencies including the Department of Energy and the Department of Defense (including the Army Corp of Engineers) are federal agencies that are or have performed removal actions.

4b. In Region 4, states coordinate directly with the lead federal agency usually under federal facility agreements.

4c. Region 4 states did not report any major differences in removal actions.

5. In Region 4, states are able to provide ARARs in a timely manner. Alabama reports some difficulty providing meaningful or very specific ARARs when requested to do so too early in the process. Georgia and Florida expressed concern that state ARARs may not get enough consideration as clean up goals for the removal action.

6. In Region 4, ICs are not generally used at removal action sites, and are more likely used by state or federal remedial programs with consent by property owners. ICs may be used at DOD sites in South Carolina, and Florida. Kentucky reports that ICs are put in place if needed. Alabama does not have funds to maintain ICs.

7. In Region 4, states account for projected reuse of properties when removal actions are conducted, but they have little control as to whether EPA's final removal action goals are protective of future uses. Additional post-removal action remedial activities might be needed.

8. In Region 4, with the exception of Alabama, designated property reuse is a factor that is considered during removal actions.

9. In Region 4, removal actions are conducted almost exclusively at non-NPL sites with the exception of some DOD sites.

10. In Region 4, with the exception of Kentucky states did not report any major changes since enactment of the federal Brownfield law in 2002. Kentucky reported that targeted Brownfield assessments have lead to removal actions at some municipally owned sites.

11. In Region 4, with the exception of Kentucky, all states report that removal action sites typically transition to the states under various state superfund programs. Kentucky reports that just about all the removal sites have been completely addressed by EPA.

12. In Region 4, better coordination and transfer of information from EPA is needed. South Carolina would like EPA to provide all information about a removal action without having to ask for it. Kentucky desires to have contractor selection and removal activities expedited. Florida has developed procedures to improve effective transition of removal sites, and would like increased consideration of state ARARs during the removal process. Alabama has scanned all files into electronic format to allow easier information transfer. Georgia would like to work more closely with EPA and PRPs to ensure removal action do not hinder future state remedial requirements, and to provide more information as to what remedial actions will be needed after transition.

13. Region 4 states did not really provide any other specific concerns that weren't covered above.

REGION 5

1. Three states within Region 5 report that they have an active removal program. Most states report that they work closely with the OSC to ensure that removal sites are conducted in order to address state concerns if possible. All states provide a single point of contact for the OSC's to communicate with the state on removal activities within the state. Some states also provide a single removals coordination individual to act as a liaison with the Region.

2. Most states report that relationships have remained relatively unchanged since 2001 with one state reporting a slightly better relationship. Since most states within the region, generally reported a good relationship before, this does not affect much. Two states reported that decreased funding within the Region has decreased the states ability to conduct removal assessment activities for the Region. Another difference was that there has been a major shift toward emergency preparedness that has taken some emphasis away for time critical removal activities.

3a. The relationship (between each state and Region) is such that all states feel they can routinely discuss and refer sites to U.S. EPA.

3b. All reporting states indicate that regular meetings do not take place but are not necessarily needed due to the fact that if discussions need to take place, they have the ability to discuss directly with the Region. Region 5 conducts superfund mid-year and year-end meetings for all superfund programs, including removals. During those meetings removal issues are discussed but are usually not site specific.

3c. All states indicate that formal written requests are submitted to Region 5 that request removal activities. Once an OSC has been assigned, three states indicated that they

assign a coordinator to work with the OSC on each specific removal action. One state also mentioned that if site discovery forms are needed, they assist in the process.

3d. All Region 5 states indicate that they have an active role in each time-critical removal action. The “coordinator” will monitor the progress and assist the OSC in decision making. The level of involvement varies with the site and the circumstances, but it is generally agreed that at a minimum each state will assign a coordinator that works with the OSC. Beyond that level of involvement, it will vary from case to case and site by site.

3e. One state has recently drafted a program specific MOU with EPA. All of the states indicate that site specific agreements can be and are used when needed.

3f. All reporting states indicate that they provide technical expertise on all sites in which they are needed. Three states have programs that do allow for some field support ranging from Geoprobe sampling, analytical services, soil gas, indoor air, and eco evaluations. These activities are conducted as needed.

3g. Three states, indicated that generally the answer is no. Two states indicated that on a site specific basis there may be a need for cost sharing. Three states indicated that in-kind services and activities have been used to provide some cost sharing activities. These services are generally provided through state funds.

3h. One state mentioned that the OSC web site has provided a lot of site specific information following the removal action. Over the past several years, the implementation of the OSC web site has proved to be a valuable asset to the states. Three states mentioned that a structured process is not necessarily used on each site, but information is passed down (such as POLREPS, action memo’s, final reports) on a site by site basis and but is mostly dependent upon the specific OSC.

3i. It was generally agreed upon by each state that enforcement at each site is handled on a case by case basis. Having the “gorilla in the closet” has been a valuable asset to each state.

4. no answer

4a. no answer

4b. no answer

4c. Three states mentioned no (or not that they are aware of). One state indicates that DOD performs removal or interim removal actions at numerous facilities within the state. Coordination on these sites is pursuant to the DSMOA and there is coordination between DOD and the state.

5. All states agree that, when requested by EPA, the states will provide ARAR's in a timely manner. Two states mentioned that a generic ARAR letter is used to respond to EPA and it can be modified to meet site specific requirements.

6. Answers from the states were generally all over the board.

- The state project manager will determine if an IC is needed.
- Most sites do not require IC, but if they do it is handled on a site specific basis.
- Typically no.
- This has just become an emerging issue.

7. Two of the states indicate that through their state specific cleanup standards (residential, commercial, industrial), their reuse can somewhat be accounted for. One state indicates that it focuses mostly on removals that pose an immediate risk to public health and the environment. If the future end use of the site is known, that information is passed along to the OSC for cleanup considerations.

8. Three states listed this as not being an issue. One state mentioned that the use/reuse situation will be conveyed to the OSC prior to the removal action.

9. All states generally mention that most of the removal actions are conducted at non-NPL sites.

10. Two states mention that the Brownfields law has not affected the time critical removal sites. Two states mention that they are slightly more cautious about referring sites for removal actions due to the Brownfields law. This is due to a concern that the site may not be eligible in the present or future for federal Brownfield money if there is a removal action currently conducted on the site. One issue that was brought up by one state is "what marks the end of the removal, and when could the site once again be eligible for federal Brownfield funds?"

11. The general answer by all states is that "yes" that some removal actions transition into a state cleanup program. One state noted that not all TCRA's meet state cleanup standards. If upfront communication takes place between the state and EPA, a smooth transition can occur to obtain a more thorough cleanup.

12. All states agree that when there has been communication and coordination up front, transitions can most effectively be managed. One state brought up that there is a need for better coordination with local governments which can increase participation and get more sites into the Brownfield/Redevelopment phase.

13. Listed below are specific suggestions by each state:

- EPA needs to "close out" removal actions more quickly, given the federal Brownfields eligibility issues.
- Continue the coordination and communication before, during, and after the removal action. Otherwise the sites will slip through the cracks.

- Recommend that EPA continue to aggressively fund the removal program as it has made, and will continue to make, a significant positive contribution to the quality of life within the state.
- Encourage EPA to allow states to use the Cooperative Agreement to fund some removal assessment activities during and immediately after the removal actions. This would result in a more complete removal and/or a better idea of what's left behind to promote redevelopment.

REGION 6

1. All Region 6 states replied that they have a good working relationship with EPA. States are able to refer sites to EPA if the TCRA will be too costly or complex. 2 states replied that they will provide a cost share to EPA on removal actions referred to them; either in funds or in-kind services.

2. States felt that generally their relationship with EPA has remained roughly the same since 2001. One state, Louisiana, replied that improvements could be made in communication and determining what levels of contamination will remain after the TCRA.

3a. All states work with EPA on removal action sites. Methods included: Holding regular meetings and conference calls; direct referral of sites for removal action if it is beyond state capability; working closely with individual OSCs assigned to a removal action.

3b. Three states conducted regular meetings with EPA to discuss removal actions either monthly, semi-annually, or annually. Two states replied that they did not have regular meetings and that removal action follow-up was done on a site-by-site basis.

3c. All Region 6 states formally request removal action assistance in writing, although the state and EPA have already informally discussed the site at length prior to the written request.

3d. Three states replied that their onsite role is determined on a site-by-site basis. The remaining two took a more active role onsite during removal actions – assisting with property access, taking the lead on community relations, direct oversight, performing additional sampling to reach consensus on cleanup levels.

3e. Three states do enter into written agreements with EPA. In each case it is a site specific agreement which describes state and federal roles. (example agreement from Oklahoma)

3f. States provide a wide range of services at removal action sites: Preliminary site assessments, community relations, property access, technical input, laboratory analysis, cost share, oversight, additional sampling for state purposes, and coordination with local officials.

3g. Four states provide some sort of cost share for removal actions. They may take the form of cash or at larger sites may be a combination of cash and onsite services. Texas will provide a 10% cost share to EPA for referred sites. Texas will also provide a cost share for sites headed for the NPL and the removal action would occur as part of the remedy but must be completed as a TCRA in order to protect human health.

3h. EPA provides a variety of information upon site turnover: Initial removal assessments, post removal action reports, GIS database of sample locations, sample results, site recommendations, SSSRs for NFRAP sites.

3i. Generally, states provide whatever assistance EPA requests. Most often the coordination involves gathering and sharing PRP information and monitoring the property for changes in ownership.

4a. 2 states did not have any other federal agency performing TCRAs. 3 states did. TCRAs were performed by the USACE and USFS.

4b. Responses ranged from “no formal process” to the agency informing the state of the proposed action and soliciting information about applicable state and federal laws. Texas in particular has increased its knowledge of munition related sites and has reviewed, commented and approved remedial action documents and investigation reports, including EECAs.

4c. Of the states with the USACE performing removal actions the response was that communication was less, and although the state was kept informed of site progress the federal agency was getting its “orders” from far up the chain and the state had little input into decision making. No comments were made regarding the USFS.

5. States are able to provide ARARs to EPA (or other federal agency) in a timely manner even though a formal process to request them may not exist.

6. Two states responded that ICs were not in place at post-removal sites. The other state responses ranged from negotiating one with EPA if the site is headed toward the NPL, to the state not being certain of what ICs were placed on what site and they were developing a system to track them.

7. Two states replied that they do not account for the projected reuse of a property before/during a removal action. Two other states have risk based standards that dictate cleanup levels based on the current property use and a future owner is provided the opportunity to remediate a site to a more protective standard if the property use has changed. One state, Oklahoma, replied that often cities are interested in acquiring a property to alleviate environmental contamination and general blight. In these cases Oklahoma DEQ works proactively with cities to clean up the site. If the intended reuse of the property is unknown, DEQ and the city will attempt to determine the most likely future used based on current growth trends.

8. Two states replied “no”; Texas cited cost recovery issues and an inability to improve property. Two states replied that site specific conditions would determine any other considerations at removal sites. One state replied that in one case they created farm ponds on nearby properties where the owner agreed to donate clean soil. In another case a city obtained a Superfund Redevelopment Grant for a site and subsequent removal actions took into account the city’s plans for property reuse.

9. Four states replied that most removal actions occurred at non-NPL sites. Texas replied that removal actions may occur at NPL and non-NPL sites. A site undergoing a removal action may have been proposed to the NPL but not actually listed.

10. All Region 6 states replied that they have not seen any changes.

11. Four states replied that sites do transition to a state program(s) for remediation. One state replied that their sites did not.

12. All states replied that open and frequent communication with EPA was key in improving effectiveness and efficiency of site transitions. Themes included: Establish a process for site transition ahead of time; leverage federal response actions (and \$) to meet individual state cleanup standards; states can facilitate interaction between EPA and local communities where a removal action is underway.

13. States cited various concerns: Improve the consistency of documentation for completed removal actions especially at older sites where contamination was left in place; explanation by EPA on why a removal action was not performed; state inclusion/review of removal assessment workplans and reports (especially when waste will be left in place); dwindling funds for TCRAs and subsequent competition among Region 6 states for federal \$, which in turn may delay protection of human health; responses to natural disasters, acts of terrorism, or other homeland security incidents could decrease the \$ available for EPA to perform TCRAs. An on a positive note, Oklahoma felt that being invited to OSC Readiness Training was a valuable opportunity and wanted to continue participating.

REGION 7

1. In Region 7, Nebraska and Iowa noted they do not have a formal removal program. Kansas and Missouri use their Management Assistance Cooperative Agreement (MACA) to work and coordinate removal activities in their state with EPA. Nebraska noted they are performing some emergency removal actions (drum removals) with EPA and has performed some smaller emergency removals under state authority. Iowa, generally, provides comments to EPA for the larger removal sites. Missouri and Kansas communicate and coordinate with EPA on all removal sites in their state. All four states noted their coordination and cooperation has been good with Region 7 EPA. But it was noted by one state that the amount of coordination and cooperation is based on the EPA OSC that is assigned to the removal site.

2. In Region 7, Iowa and Missouri believe the relationship and process has not changed much from 2001. Kansas and Nebraska believe the relationship has changed for the better. Nebraska noted that they have increased their capability in emergency responses and they now conduct and exercise with EPA for emergency responses. Kansas noted they have executed a removal agreement with EPA that promotes communication and coordination at removal sites. Missouri notes that better coordination with certain OSC's for new removal sites needs to be improved and that EPA should conduct some in-house training sessions to help OSC's understand the necessity of good communication and coordination with the states.

3a. In Region 7, Iowa provides inputs for only the larger removal sites. Kansas, Missouri and Nebraska have more involvement with EPA at their removal sites. Most of Nebraska's involvement occurs during the site referral period. Kansas and Missouri take a more active roll with Region 7 throughout the removal action.

3b. In Region 7, Iowa, Kansas and Nebraska meet with EPA on an "as needed" schedule. Missouri tries to meet quarterly with EPA to discuss removal actions. All four states indicated that meetings or teleconferences could be arranged quickly, if needed.

3c. In Region 7, Iowa does not believe a request for a removal action was ever generated by the state. Kansas and Nebraska both utilize a written request to EPA for assistance. The 2 states use the "Request for Federal Action" form to ask EPA for a removal action. Missouri does refer sites to EPA for removal actions but Missouri did not indicate the use of a specific form.

3d. In Region 7, Iowa and Nebraska does not have an active role in EPA removal actions, although Nebraska did indicate they could if they thought it was necessary. Kansas and Missouri are active for EPA lead removals. Both states meet with EPA to discuss the removal actions, review the Action Memorandum, provide comments on site documents, and provide field oversight, when needed.

3e. In Region 7, Kansas is the only state to have a signed agreement with Region 7 for removal actions at a program level. Below is the agreement language:

Purpose

The purpose of this Memorandum of Understanding (MOU) is to document an agreement between the U.S. Environmental Protection Agency (EPA), Region VII, Superfund Division and the Kansas Department of Health and Environment (KDHE), Bureau of Environmental Remediation. Both parties have agreed to implement elements described in the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) guidance document Guide for Coordination of Federal Removal Actions with State Remedial Activities.@ This document outlines the need for communication and coordination between EPA and KDHE for EPA lead removal activities and it facilitates the transition of a removal completion to another remedial program. The use

of this document will establish a forum for discussion and a mechanism to document the needs of one party to the other.

Goal

The goal of this MOU and the use of the ASTSWMO guide is to establish a formal mechanism to communicate and coordinate EPA lead removal activities with KDHE. With improved communication and coordination each party will understand the needs or requirements of the other party. This understanding will enhance the current communication and coordination system and will document the proposed actions to be taken by both parties. This enhancement will save time and money and will facilitate the transition from a removal activity to long-term care and maintenance or to another remedial program.

Scope

The guidance document provides a series of subjects that should be discussed prior, during, and after an EPA removal action. Some of the subjects include, but are not limited to: State and EPA objectives and responsibilities, site access, integrated assessment actions, clean-up standards, land use assumptions, community relations, liability assurances, schedules, notifications, documentation, institutional controls, and post-closure activities. The EPA and KDHE have agreed to have a minimum of one formal site planning meeting to discuss these subjects prior to the signature of the removal action memorandum for large removal sites. For purposes of this MOU large removal sites are defined as those sites identified by EPA which are believed to be more than \$50,000 dollars. This formal meeting can occur face-to-face or with a teleconference. For the small removal sites (less than \$50,000) EPA and KDHE have agreed to a minimum of a telephone notification or teleconference. The type and manner of communication will be decided by KDHE and EPA based on time constraints and the complexity of the removal activity.

This document represents our mutual intent to cooperate, communicate and coordinate in the area of removal activities in the State of Kansas.

Missouri includes the removal action sites for which it provides the EPA management assistance in its workplan for the management assistance portion of the Superfund consolidated cooperative agreement (MACA), and is improving coordination to keep the MACA Workplan current.

3f. In Region 7, all states provide ARARs to EPA. Nebraska also will help EPA with disposal options and on as "as needed bases" will perform site visits and review documents. Kansas and Missouri are involved throughout the removal action. Both states meet with EPA to discuss the removal actions, review the Action Memorandum, provide comments on site documents, and provide field oversight. Also noted by Kansas is the coordination of the post-removal long-term care for the site. Missouri also

coordinates with EPA on post-removal long-term care, primarily at removal sites where the state agrees to be the grantee in restrictive covenants.

3g. In Region 7, all 4 states (Iowa, Kansas, Missouri, and Nebraska) indicated they do not provide any cost sharing for the removal action.

3h. In Region 7, Iowa does not typically receive any information from EPA after the conclusion of a removal action. Kansas, Nebraska, and Missouri do receive Polreps, and various removal documents. If additional remedial actions were necessary the information would be provided to the remedial group. In Region 7, Iowa and Nebraska do not provide long-term assurances to EPA prior to or after the removal action. Kansas will provide some assurance the removal action will have a long-term maintenance agreement (for sites with waste left in place). Missouri will address long-term maintenance by a restrictive covenant on a case-by-case scenario. Kansas, Missouri, and Nebraska noted due to tight state funding that the states can not take on too much financial responsibility for long-term maintenance at removal sites.

3i. In Region 7, Iowa rarely becomes involved with EPA regarding enforcement actions. Kansas, Missouri, and Nebraska all try to have the responsible party voluntarily perform the removal action. If the responsible party is recalcitrant or there is no viable responsible party, the site is forwarded to EPA for the removal action. Once the site is forwarded to EPA the states communicate and coordinate with EPA as needed for the enforcement activities.

4a. In Region 7, all the states Iowa, Kansas, Missouri, and Nebraska noted that the Department of Defense (including the Army Corp of Engineers) is a federal agency that is or has performed removal actions in their state. Missouri also noted the Department of Energy and General Services Administration has performed removal actions within the state.

4b. In Region 7, Iowa does not coordinate with the other federal agency because EPA has the lead on these sites. Kansas, Missouri, and Nebraska use the Defense / State Memorandum of Agreement (DSMOA) Program to coordinate and communicate removal actions with the state. Missouri also will use Federal Facility Agreements at NPL sites, Memorandum of Agreements with funding agreements, and Federal Facility Compliance Agreements to provide for the necessary communication and coordination activities.

4c. In Region 7, all the states (Iowa, Kansas, Missouri, and Nebraska) indicated there is no process difference in the removal actions for these other federal agencies. A different name for a document may occur but the process is the same.

5. In Region 7, Iowa, Kansas, Missouri and Nebraska all receive requests from EPA or other federal agencies requesting ARAR's and the states, in most cases, are able to respond the specified timeframe.

6. In Region 7, Iowa, Missouri and Nebraska have limited or no IC's in place for past removal actions unless they were part of a listed Superfund site. Kansas has reviewed all the past sites and verified there are IC's in place for any removal action that has left waste in place. Recently, Missouri has begun IC's at removal sites by becoming the grantee of the restrictive covenant. Iowa, Missouri, and Nebraska have no plans to inspect or follow-up at past removal sites. Kansas has already reviewed all the past removal sites and have or are working on instituting IC's at those sites where waste was left after the removal action. Kansas plans to have IC's in place for all future removal sites where they are appropriate.

7. In Region 7, Iowa does not consider future reuse of the property for removal actions. Nebraska expects the EPA OSC to coordinate with the local government for future property use. Kansas and Missouri have an active role with EPA to discuss future property use to determine cleanup standards and possible IC needs.

8. In Region 7, Iowa and Nebraska do not look at property reuse for removal actions. Kansas and Missouri try to integrate the removal action with future use.

9. In Region 7, Iowa, Kansas, Missouri and Nebraska have responded that most of the removal actions are taken at non-NPL sites.

10. In Region 7, Iowa, Kansas, Missouri, and Nebraska have all responded that the Brownfields law has not changed the removal actions or their transition to other state cleanup programs.

11. In Region 7, Iowa has not had any sites transition from an EPA-lead removal action to a state program. Kansas, Missouri, and Nebraska have sites transition from an EPA-lead removal action to a state program.

12. In Region 7, Iowa, Kansas, and Nebraska had no additional actions to improve the effectiveness of site transition. Missouri states the EPA regions need to understand how the state programs work and therefore, the sites could transition easier.

13. In Region 7, Iowa, Kansas and Nebraska did not have any additional state concerns related to removal actions. Missouri states they are concerned about the reductions of federal funding to the states for participation in the Superfund Program. Iowa, Kansas, Missouri, and Nebraska also noted they do not have a state funding source to conduct post-removal activities.

REGION 8

1. In Region 8, Montana and South Dakota have state authorities and conduct state removal actions. All states coordinate with EPA when a federal lead removal is conducted in their respective states. States will provide input and comments on planning documents and removal activities. The degree of coordination varies and appears to be largely dependant on the OSC.

2. Some states reported that communication at the management level has improved and EPA provides regular reports of activities. Other states do not believe that much has changed. It was mentioned again that the degree of communication is largely dependant on the individual OSC that is responsible for the removal action. One state specifically expressed concern about EPA activities on tribal lands. It was reported that EPA will do removal work on tribal lands and will not inform the state.

3a. The degree of coordination varies between states. No state has a routine forum to discuss sites and establish priorities. Most states report that EPA will sometimes conduct removal actions without coordinating with state contacts.

3b. Some Region 8 states report that regular meetings occurred in the past but they are not currently meeting on a regular basis. Some states do receive regular reports about ongoing EPA removal actions in their states.

3c. Montana reported that a formal written request signed by the state division administrator is required prior to a removal action. Other states reported that the referrals are informal and can be accomplished through written or verbal requests.

3d. All states report that they have an active on-site role for removals that are conducted at NPL sites. Montana and Colorado report that they do not have an on-site role at non-NPL removals. Utah and South Dakota report that they do have on-site roles.

3e. Some states will enter site-specific agreements for removal projects. None of the Region 8 states have entered agreements for the removal program. Utah has a Superfund Memorandum of Agreement (SMOA) that includes responsibilities for removal projects, but the SMOA is very old and outdated.

3f. States generally review planning documents, reports, and decision documents and provide ARARs. Some states will provide field oversight as necessary and assist with community relations activities.

3g. Most states report that they do not cost share on removal actions. Colorado reported that they have provided a cost share on a very limited basis and it was a result of site-specific considerations. The general policy at Colorado is to not provide cost share for removal actions.

3h. Region 8 states report that generally removal actions do not require long term remedial activities and they are not provided anything more than what the OSC has provided during the removal action. The amount of information they receive is dependant on the OSC and their willingness to coordinate with the state.

3i. Region 8 states universally report that EPA does not coordinate enforcement activities for removal actions with the state.

4a. BLM, USFS, DOD, DOA, DOE.

4b. Coordination with other federal agencies is generally very poor with some exceptions noted by South Dakota. States typically provide ARARs and have requested funding from the other agencies to support state involvement. Mixed ownership sites typically require better communication.

4c. Some states report that there are differences and that non-EPA agencies consider removal actions final actions when additional work is necessary. Other states report that there isn't much difference, but that non-EPA agencies do not have a thorough understanding of the process.

5. States generally do provide ARARs. However, in some cases the information about the site is incomplete and it is difficult to be sure that the ARARs list is comprehensive for the individual site conditions.

6. Some states report that they do not have removal sites that require ICs. Other states report that this is a problem. When ICs are necessary the states do not have the resources to inspect and maintain these sites.

7. All states reported that this is an important consideration but not all states include this factor in determining the appropriate cleanup. It was also noted that in most cases EPA is mitigating an immediate threat, which does not lend itself to considering the ultimate reuse of the property.

8. There are situations when other factors effect decisions during the removal actions process. In most cases however the land use and risk are the driving forces behind the decisions.

9. Most of the states reported that the majority of removals are conducted at non-NPL sites.

10. No states have observed any changes in removal actions as a result of the 2002 Brownfields Law.

11. Colorado and Montana have each had one site transition from removal to a state program. All states indicated that they would consider transition from removal to state programs a viable option.

12. Most states did not answer the question. Utah stated that they need to facilitate seamless transitions.

- 13.
- a. Increased funding for civilian federal agencies to perform removal work.
 - b. Improved coordination within EPA when sites transition between the removal and remedial programs.
 - c. Consistent compliance with cleanup requirements between sites.

REGION 9

1. California and Arizona both have independent removal action programs. California and EPA jointly decide which agency will conduct a TCRA. Arizona screens sites for either the NPL or the State's Water Quality Assurance Revolving Fund (WQARF) cleanup program. There is limited joint EPA and State involvement on TCRAs unless EPA removal actions are conducted on or near a site that the State has involvement. Joint involvement on a TCRA is identified as occasional by California and rare by Arizona.

2. California considers that the relationship between DTSC and EPA has improved since 2001 with a good working relationship between staff of both agencies. Currently, all local requests for TCRAs are reviewed by California Department of Toxic Substances Control (DTSC) and EPA. Arizona considers their relationship productive but unchanged since 2001.

3a. Yes, EPA and California review each state and local agency proposed TCRA and decide the appropriate agency to conduct the removal. In some instances, EPA and California jointly conduct aspects of a larger removal action. Arizona does not work with EPA to review priorities for removal actions. However, Arizona may refer sites to EPA.

3b. California meets with EPA and local agencies regularly to coordinate on removal actions that will be conducted. Arizona does not have non-site-specific removal action meetings.

3c. Neither California nor Arizona have formal referral processes. California together with EPA, decide which agency will take the lead on TCRAs.

3d. In general, the states do not have an active on-site role for the majority of removal actions. However, in California, occasionally, both EPA and the State conduct activities, especially at large removal sites.

3e. None were reported in Region 9.

3f. California may conduct a portion of the investigation or removal activities. Arizona has not been involved.

3g. No.

3h. In California, a minority of sites are turned over to the State and these are usually sites with previous State involvement. Arizona is not aware of any site turned over to the State. The States are provided the information about the removal actions that they request. There is no post removal coordination on sites that EPA is the sole lead agency.

- 3i. Generally, the States are not involved with enforcement at EPA lead removal sites. In California, if both EPA and the State are involved with a site and have costs, if EPA litigates, it would ask whether the State would like to join the cost recovery litigation.
- 4a. California reports that at a minimum, DOD, BLM, USDA Forest Service, and DOE are conducting removal actions on their current or former properties. Arizona is not aware of other federal agencies conducting removal actions.
- 4b. California coordinates with DOD, through formal agreements. There is little coordination with other federal land management agencies. Some federal agencies such as USDA sometimes request ARARs, but there is not adequate communication to refine the state ARARs for the sites.
- 4c. California reports that DOD conducts activities in a manner similar to EPA. The other federal agencies appear to be adhere much less to the NCP and guidance than EPA.
5. Yes. Yes, EPA allows reasonable periods of time to respond to ARARs requests.
6. Generally not. Generally, there is not follow-up on ICs.
7. In most cases removals are conducted to meet the general requirements for protection of public health and the environment. However, if details of the reuse are known they may be factored into the cleanup.
8. No.
9. The statistics have not been gathered. However, California believes that there are more TCRAs being conducted on non-NPL sites.
10. It is not apparent.
11. Sites are more likely to transition to the State's enforcement or orphan programs than to the VCP.
12. California notes that EPA and the State could coordinate regarding all EPA ER removals and could consider post removal site care.
13. No.

REGION 10

1. The relationship is generally ok. Not much has changed since the 2001 report. Some states have good communication and coordination, but for many it is project-specific. For others, the level of communication/coordination is dependant on the OSC.

2. Some states have had no changes in the relationship or transition process since 2001. For others, it is dependent on external issues, such as court decisions (resulting in improved coordination) or level of political involvement (can be positive or negative). For those states that have experienced changes, it has been primarily in the way states evaluate their level of involvement (availability of funding, personnel, etc)

3a. Most states maintain their own internal lists of priority sites, and then have discussions at a site-specific level to determine if a removal action may be justified or to request assistance. One state does not.

3b. All states do not have any regularly-scheduled meetings. One state does meet annually with the EPA for a specific set of sites around a marine water body, but does not for any other sites. If discussions take place about priorities or status of actions, it is usually through email and phone. Some states report having face-to-face meetings specifically for an update on an ongoing action. These are usually more informal and occur directly between the state site managers and OSCs.

3c. Only one state sends written requests for assistance, usually after an initial phone conversation. Answers to this varied from “kind of” to “no.” Some states felt they had informal referral systems based on personal one-on-one conversations with OSCs. Many used an informal process such as this before moving a site up for a higher level of consideration.

3d. There is always a state representative, or liaison, that may be present on-site at some point during the removal action. States responded that they usually chose their own level of involvement. At “problem” sites or ones where there are significant community concerns, then the state might choose to be there more frequently. At a minimum, states are in communication with OSCs during a removal action

3e. Two states have no written agreements about state/federal responsibilities during removal actions or for transitions. One state uses the Action Memo to document the expectations of the state, and one uses an MOU (Alaska, provided).

3f. Extremely varied. Items that were generally covered by all states are: input on work plans; limited site visits or inspections; input on state rules or application of ARARs. Items that were included by more than one state: review of EE/CAs; review of other specific documents such as removal action reports; meetings with EPA to discuss work scope and objectives. Items that were only included by one state: permit exemptions; sampling; participation in public meetings; meetings with local entities. It was pointed out that in some cases, even though the state and EPA have come to agreement on work plans or actions, those agreements are not abided by EPA.

3g. Only one state responded yes, and they provided some level of funding, in-lieu labor, or utilization of existing state resources (laboratory contracts, consultants, other subcontractors).

3h. All states received removal action reports. Some states received lab analyses/data, other miscellaneous reports from federal contractors, and specifics on the final disposition of any waste (volumes, disposal locations). One state pointed out that these reports are often late or of poor quality.

3i. It hasn't been an issue for two states. The other two states indicated that they are separate processes; one stated they let EPA do any follow-up enforcement actions, and the other pointed out that they had their own enforcement options.

4. All states replied yes. Agencies listed were USFS, BLM, DOD, DOE, NPS, and FAA. There were a wide degree of responses as to the level of coordination. One state gets no outreach or coordination at all and have balked at letting states be involved, while one other state has good communication and coordination. The other two states had intermediary responses, indicating good relationships with some agencies but poor with others. Alaska has an agreement with DOD that they comply with the Munitions Response Committee Charter which requires state consensus prior to an action at a munitions site, with an option for formal dispute resolution.

5. All states responded yes. One state pointed out that the EPA asks them for "targeted cleanup levels" while federal agencies request ARARs. All states responded that they can respond to requests in the specified timeline.

6. All states responded "sometimes" with an inclination towards "usually not." States all required some sort of deed notice or restriction, but the method of achieving that is inconsistent or varied. A few pointed out that this is better addressed under remedial programs.

7. All states responded yes. In most cases, the future use was addressed through the recommendation of ARARs (residential or industrial cleanup levels). In some site-specific cases, a future use was planned prior to the removal action, so the work was specifically tailored for that reuse. In another state, the selected removal action was guided by the state towards minimizing long-term maintenance.

8. All states responded no. States said that they are sometimes considered, but not typically implemented as part of the removal action. It hasn't yet come up in two states, but they indicated that they would take that into account if they could foresee a future use.

9. One state had only non-NPL, one had only NPL, and the other two had both.

10. All states responded either no, or that it hasn't yet come up. Many responded that reuse is more often considered now because of Brownfields.

11. Varied responses. One state responded no (once federal, always federal); two states responded yes; one state was unknown.

12. Most responded that good, upfront communication was key. One stated that well-defined cleanup standards upfront helped make the process go smoother. One responded that a federal willingness to work with the EPA would make the state's job much easier.

13. Two responded no. One expressed a need for continued funding to get action at sites that the state can't afford to take action at. One expressed a need for better continuity at sites; removal actions are only one small part of the overall site cleanup, so if no other action was taken then the cleanup was insufficient because it left high levels of contamination remaining at sites.