

Cotner, Sharon R MVS

From: Cotner, Sharon R MVS
Monday, May 19, 2003 3:22 PM
'Darryl.Piggee@mail.house.gov'
Subject: Kellett, Joseph P MVS; Ziino, Julie MVS; Mattingly, Jacqueline MVS
FW: Congressional Questions - Piggee

Darryl,

Attached are two files. One contains a cover letter to you (Piggee Questions tx.doc). The cover letter has a website and indicates we will mail a copy of the environmental monitoring report to you. The second file contains answers to your questions.

If you have any additional questions, please feel free to contact us.



Sharon

-----Original Message-----

From: Mattingly, Jacqueline MVS
Sent: Monday, May 19, 2003 2:59 PM
To: Cotner, Sharon R MVS
Subject: Congressional Questions - Piggee

requested.



JM - Piggee
Questions tx.doc



JM - Piggee
Questions & Answer.

Cotner, Sharon R MVS

From: System Administrator [postmaster@mail.house.gov]
Monday, May 19, 2003 3:22 PM
Cotner, Sharon R
Subject: Delivered: FW: Congressional Questions - Piggee

FW: Congressional
Questions - ...

<<FW: Congressional Questions - Piggee>> Your message

To: Piggee, Darryl
Cc: Kellett, Joseph P MVS; Ziino, Julie MVS; Mattingly,
Jacqueline
MVS
Subject: FW: Congressional Questions - Piggee
Sent: Mon, 19 May 2003 16:21:30 -0400

was delivered to the following recipient(s):

Piggee, Darryl on Mon, 19 May 2003 16:22:09 -0400
MSEXCH:MSExchangeMTA:U.S. House:HRM07



DEPARTMENT OF THE ARMY
ST. LOUIS DISTRICT, CORPS OF ENGINEERS
8945 LATTY AVENUE
BERKELEY, MISSOURI 63134

REPLY TO
ATTENTION OF:

May 16, 2003

Formerly Utilized Sites Remedial Action Program

Subject: Response to Questions from Congressman Clay's Office Regarding FUSRAP

Mr. Darryl A. Piggee
District Director and Counsel for
Congress William Lacy Clay
625 North Euclid, Suite 200
St. Louis, Missouri 63108

Dear Mr. Piggee:

Thank you for the opportunity to address concerns and questions concerning the U. S. Army Corps of Engineers (USACE) administration and execution of the Formerly Utilized Sites Remedial Action Program (FUSRAP). Enclosed, you will find the USACE's responses to your questions. A CD copy of the most recent annual environmental monitoring report, the *Annual Environmental Monitoring Data and Analysis Report for Calendar Year 2001* dated June 2002 will be mailed to you.

Although not provided with the list of FUSRAP-specific questions, you also requested information regarding how local businesses can participate in the competition for contracts on the project. Interested businesses should register in the Central Contractor Registration (CCR) database located online at www.mvs.usace.army.mil/ct/ct.htm to receive notices of solicitation from the USACE. Any questions or requests for additional information should be directed to Ms. Brenda Wynne-George, St. Louis District Chief of Contracting at (314) 331-8500.

If you have any additional questions regarding the St. Louis FUSRAP Sites, please contact the FUSRAP Project Office at (314) 260-3905 to speak with myself, Lou Dell'Orco or Jacque Mattingly.

Sincerely,

Sharon Cotner
FUSRAP Program Manager

Enclosures

FUSRAP QUESTIONS

1. *Has the cleanup work on the North County Vicinity Properties been completed? If not, why was there no cleanup work done there during the first quarter, 2003?*

No, cleanup of the North County VPs has not been completed based in part on the need for the final cleanup criteria for the North County Site.

In order to obtain the final cleanup criteria, the Corps has released the *Feasibility Study for the St. Louis North County Site*, which identifies six alternatives to address site contamination. The Corps's preferred alternative based on currently available information has been identified in the *Proposed Plan for the St. Louis North County Site*. These documents were released to the public for a 30-day review period on May 1, 2003. The final remedy for the North County Site will be selected based in part on public input on alternatives presented in these documents.

Meanwhile, the Corps supports property development and utility companies that must work in the subsurface of potentially impacted properties under Engineering Evaluation/Cost Analysis documents. Letters have been sent to property owners/tenants advising them of the potential radiological contamination on their property and explaining how to request assistance during their work. If contamination is present in the development area, the Corps works with the owner/tenant to ensure timely removal and subsequent disposal of FUSRAP contamination prior to initiation of their development project. A letter is provided to the property owner reporting what work was performed on their property, the result of the work, and whether any areas remain to be addressed.

Similarly, agreements are in place with local utility companies to protect their workers and ensure contamination is appropriately addressed. Utilities have been provided current maps of FUSRAP contaminated areas (North County and downtown St. Louis) and a 24-hour contact list of personnel that they may contact to request support. FUSRAP personnel support the utility workers by reporting to the area in question to assure that personnel and equipment are protected and monitored for potential exposure to FUSRAP contamination. A report is issued to the utility company within 30-days identifying the work performed and levels of radiological exposure, if any.

Are any residences included in this group of properties?

Yes, the North County Site includes residential properties along Nyflot Avenue and Heather Lane (both adjacent to Hazelwood Avenue). The frontages of the properties along Nyflot were among the first properties addressed by the program in 1994. Investigations of properties along Coldwater Creek indicate that FUSRAP contamination is limited to the creek bed.

2. *According to MDNR, the cleanup at the Hazelwood Interim Storage Site (HISS) has not been completed. Why was no work done on this site during the first quarter, 2003?*

All work on FUSRAP sites must be "authorized" by site specific documentation. The only authorizing document at HISS is the Corps's 1998 *HISS Engineering Evaluation/Cost Analysis* document, which authorized the removal of the piles but did not authorize subsurface soils to be addressed. Under the 1998 *HISS Engineering Evaluation/Cost Analysis* document, the Corps removed 58,000 cubic yards of stockpiled material from HISS using a local small-business contractor. A rail spur was also installed on the site to provide for shipment of contaminated materials.

Further work on HISS has been limited by the need for a final remedy for the North County Site. Public input on the North County Site Feasibility Study and the Proposed Plan will assist with the selection of the final remedy and facilitate additional work on the site.

3. *Why is deep soil sampling being performed at the Downtown site? What are the results of this sampling?*

Deep soil sampling is being conducted to assure complete remediation of contaminants in accordance with the 1998 Record of Decision for the St. Louis Downtown Site. Activities associated with the Manhattan Project took place between 1942-1946. The Corps found through research and experience that the surface elevation of the site changed since the completion of Manhattan Project. Properties along the Mississippi River were prone to flooding. Over time, the elevation of these properties was subsequently raised to mitigate the impacts of high water flow, some properties by as much as 30 ft. Therefore, the Corps collects deep soil samples to assure that the 1942 surface elevation is examined for potential radiological contamination and addresses any contamination found. Data from these and all samples are shared with the site's regulatory agencies (Missouri Dept. of Natural Resources [MDNR] and U.S. Environmental Protection Agency [EPA]) and are available for inspection upon request.

4. *What methods and means are being used to ship contaminated waste material out of the St. Louis area? How is the material being packaged for shipment?*

Contaminated material is shipped by railcar to properly permitted or licensed out-of-state disposal facilities. The waste is packaged in "strong, tight containers" consisting of a gondola rail car with a special impermeable plastic liner, called a burrito bag, that lines the bottom and sides of an empty railcar. Once the car is loaded, the overlapping sides are then wrapped around the loaded material (like a burrito wrap) and sealed shut to ensure the material does not escape in transit. The Corps has not experienced any leakage from these containers.

5. *According to MDNR, the Corps wants to use crushate as deep backfill material at the Downtown site. Why have you failed to respond to DNR's concerns regarding notification of intent to use the crushate in this way, opportunities to observe and/or sample the crushate, implementation of a long-term management plan as to the placement of the crushate?*

The Record of Decision for the St. Louis Downtown Site (SLDS) dated October 1998, which addresses accessible soils and ground water at the site, authorizes use of below criteria material for areas four or six feet below ground surface on the Mallinckrodt portion of the site.

The Corps continues to work with MDNR to address their concerns on this issue as they are expressed (both formally through letters and informally through verbal requests and emails). MDNR is provided opportunities to observe and/or sample crushate (i.e. concrete from foundations crushed to a diameter of 4" or less) upon request. Most recently, the Corps received a letter in March from MDNR expressing their disagreement with the Corps's interpretation of the SLDS Record of Decision. Due to its workload associated with preparing and releasing the North County Feasibility Study and Proposed Plan for public review and the subsequent preparation required for a public meeting, the Corps sent an interim response to MDNR advising that a response would not be issued until later. Until a response to this most recent letter is issued, no crushate will be used as deep backfill at the site.

The Corps has initiated the process of developing a long-term stewardship plan for SLDS. This plan will address the long-term management and monitoring needs of SLDS upon completion of remedial activities. The specific details of this plan are under development and will be dependent upon evaluation of residual risk in accordance with the existing ROD.

6. *We understand that stormwater holding basins are being constructed in connection with removal actions on the McDonnell Boulevard shoulder. What will ultimately happen to this water and how is it being prevented from reaching the groundwater?*

The underlying principle of the Corps FUSRAP team is to "do the right thing". As such, all water that comes in contact with contaminated soil in an excavation is pumped to a containment device, isolating that water from surficial rainwater and groundwater. Before this water is released to the environment or MSD, it is tested for a variety of parameters. For environmental release, the parameters the water is tested for are those in the NPDES permit equivalent as well as others like selenium, which the Corps tests since its presence was found in our monitoring wells. It should be noted that in an effort to be thorough in its examination of discharges, the Corps sampled for the presence of selenium, although MDNR did not identify selenium as a contaminant of concern in its NPDES permit. For the last three years the Corps has been actively coordinating a method of establishing a feasible, protective, site-specific discharge limit for selenium with MDNR. To date, a site-specific limit has not been established. In the meantime, the Corps continues to pursue treatment methods. One method is treating the water with a microbial process before release from the site. Unfortunately, this process slows as the temperature decreases, becoming impractical during the winter months, thus requiring storage of collected water.

Regarding impacts to groundwater, during construction activities, water periodically collects on the excavation floor. This water is pumped to onsite holding tanks and plastic-lined basins. Because they are lined with plastic, the water in these basins would not be able to reach the ground-water horizon.

7. *What is the Corps' response to the discovery of elevated levels of uranium in one of the groundwater monitoring wells at the St. Louis Airport Site (SLAPS)?*

MDNR forwarded a letter dated March 21, 2003 concerning elevated uranium levels found in one decommissioned monitoring well (MW-33) at SLAPS, to which the Corps responded on April 22, 2003. As explained to MDNR, the presence of elevated levels of uranium in well MW-33 was expected based upon the shallow depth of this well, historical contaminant location and previous sampling events.

The well was located downgradient of the most highly contaminated portion of SLAPS, the Radium Pits, the last portion of which was removed in November 2002. As part of the cleanup of the site, well MW-33 was decommissioned (or removed) to allow for the removal of contamination about the well. After completion of the cleanup, a new monitoring well was selectively placed in the Radium Pits to monitor the effectiveness of the removal action. Data from this and the other site monitoring wells are shared with the EPA and MDNR annually, as agreed to in the *Environmental Monitoring Implementation Plan for the St. Louis Sites*. The replacement well has indicated a marked reduction in Total Uranium.

8. *Why has the Corps requested that MDNR terminate stormwater monitoring controls at HISS?*

The Corps did not request MDNR terminate stormwater monitoring controls at HISS. Rather, the Corps requested MDNR terminate the National Pollutant Discharge Elimination System (NPDES) permit for HISS. The Clean Water Act controls the discharge of pollutants to surface waters through the NPDES program. An activity such as a removal action where site runoff is channeled directly to a surface water body (such as Coldwater Creek) through a ditch would require an NPDES permit. The permit includes discharge limitations, monitoring requirements and best management practices.

At HISS, a permit was obtained by DoE as part of the removal action that created the HISS piles. The Corps continued to monitor the site in accordance with the permit after responsibility for the site was transferred from DoE to the Corps in 1997. In 2002, the Corps completed an interim action that resulted in removal of the piles and shipment off-site. After the removal, site soils were covered with a plastic geo-fabric, rock and vegetation. Until subsurface work begins again, no contaminated sediments can migrate offsite -- a statement that has been supported in the quarterly discharge monitoring reports submitted to MDNR. Because no active excavation activities are currently underway at the site, the Corps does not believe a permit is necessary. Termination of an NPDES permit after completion of activities is standard industry practice.

Further, the Corps pays approximately \$50,000 per year to meet the requirements of this permit through fees, sampling, analyses, data management and reporting requirements to complete the quarterly and annual reports for HISS. Until subsurface work resumes at HISS, the Corps believes this money could be better spent actively removing and disposing of contaminated soils from SLAPS or SLDS.

9. *What dust control measures have been and are being taken at remediation sites?*

The Corps uses two measures to control dust at the FUSRAP sites -- water and tarps. During the cleanup of an area, water is sprayed on the ground to suppress dust. Additionally, at the end of the workday, the excavations are covered with tarps. The effectiveness of these measures is checked using air monitors placed around the perimeter of the site and the active work area. (Air monitors are also used when addressing higher activity contaminated soils.) The monitors are checked quarterly and data reported annually in the *Annual Environmental Monitoring and Data Analyses Report*, copies of which are provided to EPA and MDNR. To date, no violations have been identified and the sites have not reported a dust control problem.

Please note that once an area has been sampled and found to be free of contamination, dust control measures (water and tarps) are no longer implemented so that backfill of the area may begin.

10. *Does the public have access to any areas which have not been completely cleaned up?*

Yes, the public has access to the vicinity properties in North County and at the Downtown Site. Most of these properties are used for commercial or industrial purposes. The contaminated materials present have relatively low concentrations. Although the contamination levels on these properties do not pose an immediate health risk, risks could increase if the use of the land were to change. Vegetative cover in the case the North

County properties and concrete/asphalt at the Downtown site limit the risk of inadvertent exposure posed to the public.

As stated in item #1 above, the owners and tenants have been issued letters notifying them of the potential presence of subsurface contamination. These letters reassure owners/tenants that the Corps is committed to removing contamination from their property and advise owners/tenants how to request assistance should they wish to make capital improvements to their property. Similarly, agreements have been developed with local utility companies to protect their workers and ensure contamination is appropriately addressed.

11. Is any radioactive contamination getting into public drinking water?

No. Although we have identified uranium in the uppermost layer of ground water at SLAPS and SLDS, neither would be used for drinking water due to the presence of other contaminants both from industry and from natural sources. This layer of water does not connect with the deep water aquifer that may be used as a drinking water source.

One river and one creek run past the St. Louis Sites. In North County, Coldwater Creek runs past both SLAPS and HISS. Levels of measured radionuclides in surface-water samples from Coldwater Creek were consistent with background levels. The Mississippi River runs past SLDS. Although historical data indicates that contamination may have been present in the sediment along the river, the Corps has not found FUSRAP contamination in the Mississippi River. Contamination is suspected to have washed away in subsequent high water events, such as the flood of 1993.

Work on Coldwater Creek has been limited by the need for a final remedy for the North County Site. Public input on the North County Site Feasibility Study and the Proposed Plan will assist with the selection of the final remedy and facilitate the cleanup of radioactively contaminated Coldwater Creek sediments.

12. Has air sampling been done at the sites and Vicinity Properties? What were the results of the sampling?

Air samples are collected from the air monitors placed around the perimeter of sites with active excavations (and again around the active excavations). Because soils are not being disturbed on the vicinity properties, no air monitoring is being performed for these properties. However, air monitoring is being performed at the Downtown Site, SLAPS and HISS. (Although no subsurface work is being performed at HISS, the Corps recently finished supporting a capital improvement project by an adjacent property owner. The air monitors at HISS were used to support this work.)

The results of the Corps's air sampling efforts are published in the Annual Environmental Monitoring and Data Analyses Report, copies of which are provided to the EPA and MDNR.

13. How are the workers at the remediation sites being protected from contamination? Is there a system in place for compensating them in the event of such injury?

Workers at the FUSRAP sites must undergo 40-hour Hazardous Waste Worker Training (HAZWOPER), Radiation Worker Training and site-specific orientation before entering the field. These trainings are updated annually.

Before workers are sent into an area, the Corps assesses the levels of radiation present to determine what level of protective clothing is required. Dependent upon the level of contamination present, workers may be required to wear as little as protective boot covers and gloves or wear as much protective clothing as a self-contained breathing apparatus and tyvek suit. The area is checked to assure the workers in the area are not be exposed to dust as a result of their work. If necessary, water is then sprayed on the area in accordance with dust control procedures. Air monitors are placed around the perimeter of the work area. Before leaving the work area, workers must systematically remove their protective outer gear. Employees, with support from health physics personnel, scan themselves and their equipment with radiation survey instruments for contamination. All contaminated articles must be decontaminated or turned over for disposal before completely exiting the work area. The training mentioned above teaches them how to do this safely and effectively.

The Corps uses data from the air monitors, thermoluminescent detection (TLD) badges worn by workers, and radiation measurements to further determine the levels of radiation to which the worker is exposed and the maximum dosage of radiation the worker could have received. This information is provided to the worker.

Worker's Compensation is the only program available to compensate contract workers in the event of an injury from exposure to radiation at the site. (Federal employees may receive benefits under the Federal Employee Compensation Law.) The federal limit of radiation to which a worker may be exposed is 5,000 mrem/yr above background (in comparison, the exposure limit for a member of the public is 100 mrem/yr above background). To date, no worker at the FUSRAP sites has been found to receive over 10 mrem from the sites.

14. *Has the St. Louis levee been completely cleaned up? What is the area now being used for? Has the levee been tested post-cleanup? What are the results of such testing?*

With regard to the City-Owned Property, of which the levee is a part, the area south of the McKinley Bridge landside of the levee has been remediated under the St. Louis Downtown Site Record of Decision dated 1998. The effectiveness of this cleanup was checked through the systematic collection of post-remediation samples and documented in the Post Remedial Action Report for the St. Louis Downtown Site City-Owned Vicinity Property, dated September 1999. This property has been returned to the City of St. Louis for its use. Presently, it is used as part of the Riverfront Bicycle Trail.

A sewer, which is buried approximately 30 ft. below the ground surface and passes beneath this section of the City-Owned Property, may contain contamination. The Corps is developing a plan to study the sewers and determine whether the sewers are in fact impacted by FUSRAP contamination. Dependent upon funding levels and workloads, this study is slated to begin within the next two years.

Please recall that during our conversation, this question was unclear to meeting attendees. The information provided above was the response that you were given. Subsequent discussions with other area stakeholders has lead the Corps to believe that in fact this question is concerning only the levee. Although part of the levee has been addressed as part of the City-Owned Property, some contamination does remain. Contaminated soil

within the area of the levee is considered inaccessible due to flood deterrent requirements and will be addressed as part of the Inaccessible Soils Record of Decision.

15. *When does the Corps expect all to be completely remediated and environmentally restored?*

The completion schedule will depend on the cleanup standards established for the St. Louis Sites (North County and Inaccessible Soils at SLDS) and overall funding constraints. Assuming adequate funding and selection of its preferred alternative for cleaning up the North County Sites, the Corps estimates completing the accessible areas of the St. Louis Sites in 2010/2011.

16. *Will all areas be monitored after cleanup? For how long? What agency will be responsible for this monitoring?*

Until a site meets "unlimited use and unrestricted exposure requirements", CERCLA requires the lead agency to review the action taken at the site no less often than every five years after the initiation of the selected remedial action. The purpose of the review is to assure that human health and the environment continue to be protected by the remedial action being implemented. The performance and protectiveness of the selected remedy will be reviewed for the entire site.

Under the final *Memorandum of Understanding Between the U. S. Department of Energy (DOE) and the U. S. Army Corps of Engineers (USACE) Regarding Program Administration and Execution of the Formerly Utilized Sites Remedial Action Program (FUSRAP)*, signed March 17, 1999, execution and administration responsibilities of the USACE and DOE for the lifecycle of the FUSRAP sites is delineated. Per this agreement, responsibility for the St. Louis FUSRAP Sites will transfer to the DOE two years after completion of the remedial action at the site. Therefore, the Corps is responsible for any five year reviews to be conducted prior to the transfer to the DOE. In fact, the Corps is currently conducting the first five-year review for each of the St. Louis FUSRAP sites.

There is no set end point for the cessation of monitoring and performance of the five-year reviews. Such a determination is site-specific. Any determination to cease monitoring and performance of five-year reviews for the St. Louis sites will be done by the Corps or DOE in close consultation with EPA and MDNR.

17. *The USDOE has reported elevated levels of radioactive contamination in manholes at the Downtown site. What has been or will be done to cleanup this contamination?*

As discussed in Item #14 above, the Corps is developing a plan to study the sewers and determine whether the sewers are in fact impacted by FUSRAP contamination.

Dependent upon funding levels and workloads, this study is scheduled to begin within the next two years. To assist with this work, the Corps has requested sewerline videos and data from Mallinckrodt. Mallinckrodt has declined to share this information with the Corps to date.

18. *Has Coldwater Creek been cleaned up? Does it flow through any residential areas?*

How is air dispersion of radioactive contamination being contained during periods of dry weather when the contaminated sediment turns to dust?

As indicated in the response to Item #11 above, further work on Coldwater Creek has been limited by the need for a final remedy for the North County Site. Public input on

the North County Site Feasibility Study and the Proposed Plan will assist with the selection of the final remedy and facilitate the cleanup of radioactively contaminated Coldwater Creek sediments.

Coldwater Creek does flow through residential areas. The Corps knows of no airborne contamination from dry soils. The creek is currently sampled at 7 locations between SLAPS and I-270.

19. Is cleanup of the Mississippi River part of the FUSRAP program?

Impacted land along the Mississippi River (i.e. the St. Louis Downtown Site [SLDS]) contaminated with FUSRAP material will be addressed. During the remedial investigation of the SLDS, sediments containing radioactivity were found in a small area of the Mississippi River bed. A subsequent investigation could not re-locate radioactivity on the riverbed. Presumably it was carried downstream during high flows (such as the flood of 1993.) The SLDS ROD states that the location of the riverbed where radiological contamination was detected will be revisited. If radiological contamination criteria established in the 1998 SLDS ROD are exceeded, the remediation of the riverbed will be addressed under a subsequent response action. If no contamination is present above the ARAR-based composite criteria, the remedy will be considered the final remedy for this portion of SLDS.

20. Will any radioactive material remain in the St. Louis area after remediation is completed? If so, how will it be contained to prevent direct and indirect human exposure?

Whether radioactive material remains in the St. Louis area after the completion of the remediation will depend upon the final remedial criteria selected. The final action taken at these sites will be based on input from the local community and achieve remedial goals outlined in site Records of Decision (RODs). (See response to item #22 below for further clarification.)

Presently, the St. Louis Downtown Site is the only St. Louis Site with a ROD in place. Under the Downtown Site ROD, accessible soils on the Mallinckrodt Inc. property are being remediated for industrial land use. Because this cleanup level would not allow for unlimited use and unrestricted exposure levels, the Corps is working with community leaders to develop a long-term stewardship plan. This plan will address the long-term management and monitoring needs of SLDS upon completion of remedial activities. The specific details of this plan are under development and will be dependent upon evaluation of residual risk in accordance with the existing ROD.

21. Explain the Corps relationship with MDNR and with St. Louis City and County officials in connection with this project.

At the direction of Congress, the U.S. Army Corps of Engineers is the lead agency for FUSRAP sites. The Corps, therefore, is responsible for identifying, investigating and taking appropriate cleanup action at sites with radioactive contamination resulting from the nation's early atomic weapons development program. The Corps executes the program in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

The EPA and MDNR are support agencies. The EPA is responsible for implementing CERCLA and its regulations. At FUSRAP, the EPA assures the requirements of CERCLA are fulfilled and ultimately has final decision authority at National Priorities List (NPL) sites. In 1990, a Federal Facilities Agreement, which describes the management process that is to be used to cleanup the FUSRAP sites and further reinforces the EPA as the final decision authority for NPL sites, was negotiated with the EPA. MDNR assures compliance with state regulations are met and provides independent state oversight of activities carried out at the St. Louis FUSRAP Sites. The Corps funds the MDNR, through a Cooperative Agreement, for their efforts at the St. Louis Sites. St. Louis City and County officials are most directly involved with the site through the St. Louis Oversight Committee. They receive monthly updates on the progress made at the sites and ensure the concerns of the local community are addressed and the site complies with local ordinances.

22. *Who determines what the cleanup standards should be?*

The method for determining the cleanup standards for a site is dictated by CERCLA and guided by the NCP. The later steps in identifying the final cleanup standards for a site require the release of a Feasibility Study and Proposed Plan. The Feasibility Study presents detailed descriptions of various alternatives designed to address site contamination. The Proposed Plan identifies the lead agency's preferred alternative. Together, these documents are released for public review and comment. The Corps, as the lead agency, selects the final remedy for the site after reviewing public comments received on these documents. The EPA's concurrence with the selection of the final remedy is required. Responses to the public's comments and selection of the final remedy are identified in the site Record of Decision.

How will the government know when remediated areas are clean?

To ensure the site meets remediation goals established in the Record of Decision, a final status survey is performed. After the site contractor believes the remedial goals have been achieved, the Corps sends an independent contractor to the site to conduct a radiological walkover and collect samples to verify that the remediation goals have been achieved. The Corps reviews the sample data to determine whether the area meets the Record of Decision goals and can be backfilled with compliant material, or whether additional work is necessary.

The effectiveness of the cleanup, and compliance with the Record of Decision are documented in the Post Remedial Action Report (PRAR). Further, the PRAR also documents the condition of the site after the cleanup, and whether any restrictions for future land use (such as deed restrictions, or restrictions on the installation of wells) are necessary. Copies of the draft report are given to the property owner, the EPA and the MDNR for review and comment prior to being issued in final form.

Once all of the areas comprising the site meet the remedial goals set forth in the Record of Decision, the site can be closed out. The PRARs are compiled into a single document called the Final Closeout Report. If a property meets the "unrestricted use and unlimited exposure" requirement, no further action is necessary. If a property does not meet this scenario, 5-year reviews are required to determine whether the remedy identified in the Record of Decision continues to be fully protective of human health and the environment.

23. *Could the Corps do the remediation faster and better with more money? How much additional finding would be needed to meaningfully accelerate the pace of the cleanup and to maximize environmental restoration?*

Until a final remedy for the North County Site is identified, the cleanup of the St. Louis Sites is going as fast as it can. Assuming that the selection of the final cleanup criteria is completed this fall, an additional \$15 million would allow the Corps to accelerate work on the Vicinity Properties and/or HISS.

FUSRAP Document Management System

Year ID
00 3550

Further Info?
☐

Operating Unit
St. Louis Sites

Site

Area

MARKS Number
FN:1110-1-8100g

Primary Document Type
Congressional Relations

Secondary Document Type
Correspondence

Subject or Title

Emailed Responses to Congressman Clay Questions (c/o Darryl Piggee)

Author/Originator
Sharon Cotner

Company
CEMVS-PM-R

Date
5/19/2003

Recipient(s)
Darryl Piggee

Company (-ies)
Cong. Clay

Version
Final

Original's Location
Central Files

Document Format
Paper

Confidential File?
☐

Comments

SAIC number

Bechtel ID

Include in which AR(s)?

- ☒ North County
- ☐ Madison
- ☐ Downtown
- ☐ Iowa

ETL
9.1

Filed in Volume
9

