

**Department of Energy**

Field Office, Oak Ridge
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April 29, 1993

Mr. Dan Wall
Site Assessment and Federal
Facility Section - Superfund Branch
U.S. Environmental Protection Agency
Region VII
726 Minnesota Avenue
Kansas City, Kansas 66101

Dear Mr. Wall:

ST. LOUIS SITE - QUARTERLY PROGRESS REPORT FOR THE PERIOD JANUARY-MARCH 1993

The following items represent the significant activities and achievements related to the FUSRAP St. Louis Site for the period January-March 1993:

- All Federal Facilities Agreement activities were completed on or ahead of agreed-to schedules:
 - 1) The first drafts of the Feasibility Study-Environmental Impact Statement and the Proposed Plan were submitted to EPA and the state for review on February 26, 1993.
 - 2) The first quarter project managers' meeting was deferred until early April to accommodate EPA's heavy work schedule during March.
- A report capturing the results of last year's data gap sampling is nearing completion. All laboratory results were received and validated; and the information is being integrated with the previous characterization data. Evaluation of data shows no new significant findings -- the data gap results have served to confirm the previous characterization findings while adding some refinement to the delineation of contamination boundaries.

As originally reported to EPA (Greg McCabe) last summer, efforts to obtain access to two railroad properties at the St. Louis Downtown Site (SLDS) for data gap sampling have not been successful. At the time this was first reported, DOE had concluded that the limited sampling proposed for the railroad properties would not have significant impact on the overall assessment of conditions at SLDS. Mr. McCabe agreed that should difficulty in obtaining access continue, extraordinary efforts to obtain access were not warranted. Subsequent review of the sampling data that was collected across the remainder of SLDS has confirmed the previous conclusions that the railroad property data would not provide significant new information. Therefore, DOE has discontinued efforts to seek access to the properties for further sampling.

Mr. Dan Wall

2

April 29, 1993

- During the first week of January, FUSRAP and Mallinckrodt representatives met to discuss the progress of FUSRAP activities at SLDS as well as the level of site support that FUSRAP expected to provide in the future. DOE advised Mallinckrodt that it will be very selective in undertaking future interim removal actions at SLDS. DOE has continually maintained that it would only undertake removal actions consistent with DOE's long term cleanup objectives for the site. The Feasibility Study-Environmental Impact Statement (FS-EIS) has developed options for leaving inaccessible soils in place at SLDS. Because these options are considered to be technically acceptable remedial alternatives, DOE considers it inappropriate to expend significant dollars to perform interim removal actions to excavate and manage these soils at this time.

Mallinckrodt has, however, indicated their need to continue activities at the site contributing to their expansion and growth. They noted that this would periodically require excavation of soils containing radioactive contamination and/or the demolition or refurbishment of structures and facilities that may be contaminated. DOE has agreed to provide assistance in managing contaminated materials generated by Mallinckrodt; this assistance will be primarily through storage of materials in Building 116 at SLDS. DOE has noted that storage space in Building 116 is limited and that the available capacity must be used prudently between now and the implementation of a final remedy for the site.

During the past quarter, Mallinckrodt has continued significant construction activity at SLDS. Three major construction projects are underway: two new buildings are being constructed in Plant 2 (one immediately north of the Building 50/51 complex, and one immediately south of the Building 50/51 complex), and one new building in Plant 1 (replacing Buildings 19 and 20 which were demolished). During the course of excavation and drilling in Plant 2, Mallinckrodt has generated spoils which it has placed in storage "caddies" and/or bulk storage bags pending radiological analysis of samples taken by Mallinckrodt. It is Mallinckrodt's intent to package all contaminated materials in bulk bags for storage in Building 116.

- Mallinckrodt has advised that it has reorganized its management structure so that a single department will have responsibility for all site environmental activities (e.g., FUSRAP activities, NRC decommissioning, and RCRA assessments, etc.). The restructuring is intended to foster an integrated approach (on Mallinckrodt's part) to the environmental issues at SLDS.
- DOE is making final preparations to demobilize from the St. Louis Airport Site (SLAPS). With the completion of characterization in St. Louis, DOE no longer requires routine access to SLAPS; and responsibility for the management of site will be returned to the City of St. Louis.

Mr. Dan Wall

3

April 29, 1993

Demobilization activities include emptying drums of investigation derived drill spoils on an area of the site adjacent to a pile of dirt that resulted from construction of the gabion wall along Coldwater Creek in 1985. These soils will be covered with erosion control mats that promote vegetative growth. Boxes containing used personal protective equipment and clothing, as well as other contaminated trash, are being relocated to HISS.

- In early February, FUSRAP provided technical and advisory support to a private contractor hired by Futura to remove underground storage tanks from the Futura property (adjacent to the Hazelwood Interim Storage Site (HISS)). Field instrument readings on sampling spoils taken from near the tanks indicated radioactivity levels ranging from background to twice background. These spoils were left onsite (in drums) by the contractor.
- FUSRAP staff also provided information and guidance regarding work in contaminated soils to the Norfolk and Western (N&W) railroad company. N&W had assigned work crews to perform maintenance on railroad sidings adjacent to the Futura and the Wagner vicinity property (north of HISS). The railroad had planned to remove soil, gravel, and ties from the site; but, it decided to leave these materials adjacent to the tracks after FUSRAP personnel advised them of the ramifications of removing potentially contaminated materials from the area.
- The Quaker State Oil Company has advised FUSRAP that it plans to vacate its Latty Avenue vicinity property. To comply with regulatory requirements, the company wants to clean up oil spilled on the property; however, cleanup is complicated by the presence of radioactive contamination in those soils. During a meeting with senior company representatives, FUSRAP staff advised them that no new contaminated soils can be accepted at HISS until issues with local government organizations are resolved. Quaker State is continuing to evaluate its cleanup options.
- The Graham Packaging Company on Latty Avenue has advised FUSRAP that it plans to expand its facilities. It appears their construction activity will cause only minimal disturbance of contaminated soils on their property.
- On February 8, FUSRAP sponsored a workshop for the mayors and city council members of Hazelwood and Berkeley at the DOE Information Center on Latty Avenue. Discussions included a review of the site wide alternatives being evaluated in the FS-EIS. While the topic was expected to be somewhat contentious, the meeting was cordial and proved to be very productive in soliciting opinions from these local government leaders.
- On March 18 and 19, field staff members from the offices of Missouri Senators Bond and Danforth and U.S. Representatives Talent and Gephardt attended information sessions hosted by DOE at the Information Center.

Mr. Dan Wall

4

April 29, 1993

Several members of the Missouri state senate and state house, and the chairman of the St. Louis County Council, also attended the meetings. Once the attendees understood that all the alternatives being considered were within an acceptable range of risk, the discussions quickly turned to the issue of cost and there was great sensitivity to importance of minimizing the burden to taxpayers.

- In an editorial published on January 16, the St. Louis Post Dispatch took issue with DOE's prior commitment to not accept waste from other DOE locations at the Weldon Spring site. The editorial, entitled "Consolidate the Nuclear Waste," questioned the commitments that DOE has made to the Missouri Department of Natural Resources; and it went so far as to promote relocation of FUSRAP wastes currently in St. Louis to Weldon Spring.
- In early March, FUSRAP participated in a day-long North County Business Fair at the Florissant Valley Community College in Missouri. A FUSRAP representative was stationed at the booth to provide information about the St. Louis Site, answer questions, and make printed information available. Several attendees at the business fair enrolled their organizations in future workshop sessions.
- Also in early March, a FUSRAP representative made a presentation to approximately 40 people at a City of Berkeley ward meeting hosted by the Berkeley city mayor. FUSRAP information fact sheets were made available to the meeting attendees.
- Other community relations activities during the quarter included presentations to Clayton High School ecology classes and numerous elementary school classes; as well as a presentation to industrial hygienists and staff of the St. Louis County Department of Community Health.

During this quarterly period, environmental sampling/analysis activities consisted of routine surveillance, some limited radiological surveys and analysis of characterization samples from the archive inventory. A summary of these activities and the analytical results available to date is enclosed. As always, all raw data and analyses are available for your review and inspection to the extent that you request.

During the second quarter of 1993 (April-June), DOE submittals to EPA are expected to include:

- The draft final FS-EIS and proposed plan. Completion of the draft final documents on this schedule is predicated on receiving EPA comments on the first drafts of these documents within the normal 60-day review schedule.
- A report discussing the results of the data gap sampling effort will be forwarded to EPA in early May. This is approximately four months earlier than the schedule agreed to with EPA last summer.

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Mr. Dan Wall

5

April 29, 1993

Please advise if you have questions or comments regarding this quarterly report.

Sincerely,

A handwritten signature in dark ink, appearing to read "David G. Adler", written over a horizontal line.

David G. Adler, Site Manager
Former Sites restoration Division

Enclosure

cc w/enclosure:
D. Bedan (MDNR)
H. Hickman (M&E)

Enclosure

Summary of First Quarter 1993
Sampling and Analysis at the St. Louis Site

The following is a summary of environmental data collected for FUSRAP sites in St. Louis. Data was collected in support of routine environmental surveillance, regulatory permit requirements, and characterization. A total of 176 sample analyses were performed during the first quarter of 1993.

Radon/External Gamma

At HISS, 24 tissue equivalent thermoluminescent dosimeters (TETLD) and 12 radon detectors were collected and analyzed in support of routine environmental surveillance. At SLAPS, 28 TETLDs and 14 radon detectors were collected and analyzed in support of routine environmental surveillance.

The average external gamma radiation exposure at HISS was 96.6 mR/yr. At SLAPS, the gamma exposure averaged 52 mR/yr along 75% of the site fenceline. Along the remaining section of the fenceline, exposures rates averaged 1690 mR/yr. These values include background levels.

The radon monitoring indicated the maximum radon concentration at HISS was less than 10% of the DOE guideline of 3.0 pCi/l. At SLAPS, the maximum value was less than 20% of the guideline value.

Radiological Characterization

A total of 57 samples from the archive inventory were analyzed to support characterization activities. They consisted of 23 soil and/or sediment samples from Coldwater Creek (a SLAPS vicinity property), 28 soil samples from SLDS, and six soil samples from SLAPS.

The 23 Coldwater Creek samples were analyzed for uranium-238, radium-226, thorium-230, and thorium-232 to further refine the of sediment contamination. The six samples from SLAPS and five of the samples from SLDS were analyzed for uranium-238, protactinium-231, actinium-227, thorium-231, and thorium-227 to determine whether protactinium and actinium are preferentially migrating from the onsite radioactively contaminated soils. The remaining 23 samples from SLDS were analyzed for uranium-238, radium-226, thorium-230, and thorium-232. These samples were taken from archive to delineate the depth of contamination at each of those sample locations.

Analytical results for these radiological analyses have been compiled and validated. Preliminary evaluation of the data indicate results consistent with the past characterization findings at the sites. There are no anomalies or significant changes from the previously determined boundaries of contamination.

Stormwater (NPDES)

Stormwater samples were collected at HISS during the first quarter of 1993 in accordance with the NPDES permit and analyzed for settleable solids, pH, specific conductance, total organic carbon, total organic halogen, total uranium, radium-228, radium-226, thorium-230, thorium-232, lead-210, gross alpha, and gross beta. Results from analyses indicate stormwater runoff was in compliance with NPDES permit MO-0111252. Additionally, results of radiological analyses were compared to DOE Derived Concentration Guides (DCG) and concentrations in the runoff were at least an order of magnitude below the applicable DCGs.

Miscellaneous Samples

At SLAPS, a sample was taken from two cubic feet of investigation derived soils that had been contaminated with an oil. The sample was analyzed for both radioactive and chemical contamination. It was found to be slightly contaminated with radioactivity; however using the Toxicity Characteristic Leachate Procedure (TCLP) for metals to determine if the material was a mixed waste, the analysis indicated no RCRA characteristic waste present in the material. Therefore, the material is being treated as radwaste only.

A sample was collected from a drum stored at SLAPS site that contained borehole spoils from an area that had elevated selenium levels. The drum was analyzed for leachable selenium by TCLP and was found to be below TCLP guidelines for selenium.

Nine TYVEK samples were collected from contaminated PPE at SLAPS to characterize the waste for possible future treatment by incineration. The results indicated low levels of radioactive contamination were present on the TYVEK material.

Three soil samples were analyzed in support of a post-removal action survey in the area of the new Mallinckrodt RCRA pad at SLDS. Post-remedial action surveys and sampling indicated that the contamination levels in the excavation area was below applicable DOE cleanup guidelines.

Three samples were collected during discharge of decontamination water that had been previously sampled for radiological parameters and cleared for discharge by the Metropolitan St. Louis Sewer District (MSD). These samples were taken during the discharge of water and analyzed for total suspended solids in accordance with the discharge agreement with MSD.

00-1253

Formerly Utilized Sites Remedial Action Program (FUSRAP)

ADMINISTRATIVE RECORD

for the St. Louis Site, Missouri



U.S. Department of Energy

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