ST. LOUIS FUSRAP OVERSIGHT COMMITTEE
c/o 111 So. Meramec
Clayton, MO 63105
314-615-1635

September 30, 1999

MEMORANDUM

TO: St. Louis FUSRAP Oversight Committee
Other Interested Parties

FROM: Richard R. Cavanagh
Chairperson

RE: Next Meeting

The next meeting of the St. Louis FUSRAP Oversight Committee will be held Friday, October 8. 1999, 11:30 am – 1:00 pm, at the trailers on Latty Ave. Members who cannot attend should call the chairperson to be excused.

Please note that St. Louis County phone numbers have changed. Ric Cavanagh's new phone number is 314-615-1635. His fax number is 314-615-6435. His e-mail address is Ric_Cavanagh @Stlouisco.com.

ST. LOUIS FUSRAP OVERSIGHT COMMITTEE
c/o 111 So. Meramec
Clayton, MO 63105
314-615-1635

Summary of Meeting
September 10, 1999

Committee Members Present: Tom Binz, Bill Brandes, Jan Titus, Ric Cavanagh, Jack Frauenhoeffer, Anna Ginsberg, Sally Price.

Committee Members Excused: Tom Manning

Other Interested Parties in Attendance: Col. Michael Morrow, Jim Barnes, Tom Horgan, Eric Gilstrap

The following comments are in addition to the handouts provided by USACE at the meeting (see attached).

Page 4 – Shipping being done in October due to lower cost, larger rail cars. Work on the Radium Pits has workers in full gear. Materials weren't as hot as expected. Area now back filled again.

Page 5 – Should get 7-10 days shipping done yet this month (approximately 1000 cyd).

Page 6 – No remediation planned. Putting money into SLDS and SLAPS. Received $500,000 extra from HQ, waiting for possibly $250,000 more. Doing final characterization of land for lab to be 100% sure that it is clean.

Page 7 – Civil War era cannon balls found in stockpiles. Therefore they already have been moved once. Archivists have confirmed that this has not been the site of a munitions factory previously. Likewise, no battles were fought at the site. Previously was the site of Buck Stove and Range Co. that had a foundry that melted pig iron scrap. On Saturday, 9/11, piles will be dug by hand to identify any other such material. There are only 14 days of work left (120 cyds), but the project is two weeks behind schedule.

Page 8 – USEPA Remedy Review – must meet the deadline since they don't meet very often. ASA is the Assistant Secretary of Army Civil Works.

Discussion of Funding Issues Followed:

Tom Horgan of Congressman Talent's office reported that the Energy and Water Committee did not recommend approval of the additional $10 million for FUSRAP nationally. However, they did keep the recommendation at the President's recommended level. $45 million likely to be available next year for St. Louis which is sufficient to keep St. Louis on schedule.

Jack Frauenhoeffer commented that the original Task Force recommendation was to have clean up completed by 2004. At the current level of funding (approximately $150 million annually for all FUSRAP sites combined), it could take ten year to complete all remediation in St. Louis area. St. Louis needs $120 million per year to achieve the 2004 deadline. Ric Cavanagh and Anna Ginsberg agreed to contact the County Executive and the Mayor to initiate necessary actions to attempt to influence future funding in Washington.

From: Michael Zlatic
To: Janet Williams, Ric Cavanagh
Date: Monday, September 27, 1999 4:35 PM
Subject: FUSRAP Waste Depository

"Salt Lake City, Utah [Across the USA]." USA Today, 20 September 99, 14A.

Envirocare, a radioactive-waste disposal company, faces $81,000 in government fines for violations ranging from clerical errors to polluting groundwater at its Tooele County depot. The Utah Division of Radiation Control says the company exceeded state water-quality contamination standards 60 times last year.

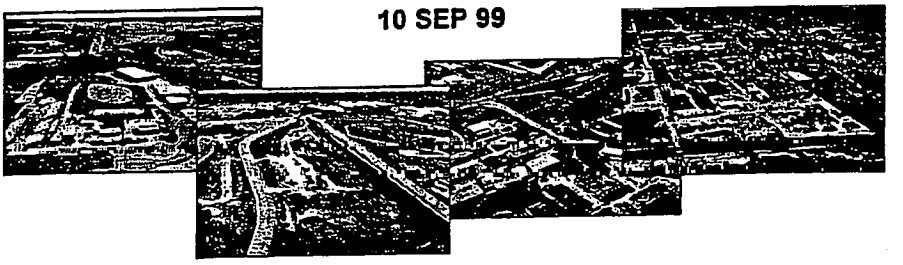
U. S. Army Corps of Engineers

St. Louis District

Oversight Committee Meeting

FUSRAP St. Louis Sites Photo Album

10 SEP 99

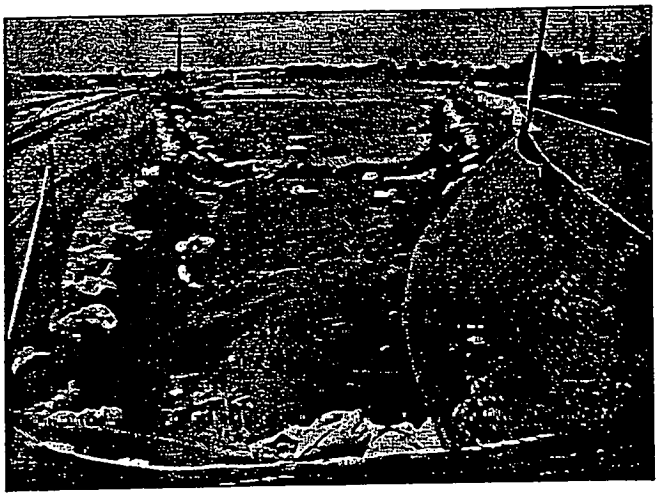


September 1999

U. S. Army Corps of Engineers

St. Louis Airport Site (SLAPS)

St. Louis District



A berm has been placed against the far eastern tip of SLAPS to prevent recontaminating cleaned areas. The black liner prevents contamination from sloughing and highlights the area where crews cannot continue to maintain a safe slope ratio against the existing roads (Banshee Road & McDonnell Boulevard).

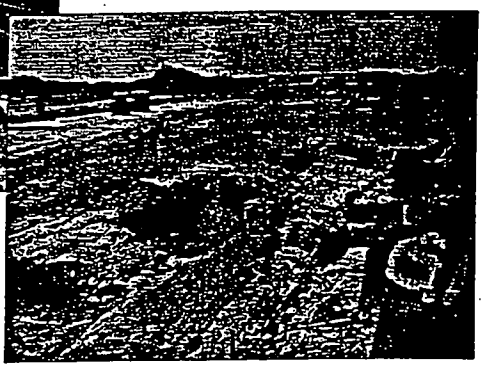
September 1999

U. S. Army Corps of Engineers

St. Louis Airport Site (SLAPS)

St. Louis District

Left: View of the East End excavation looking east toward the confluence of Banshee Road and McDonnell Boulevard (in the distance).



Right: Deep pockets appear in the excavation. Currently, these pockets are dry but in a heavy rainfall, they will hold contaminated water until it can be treated and released.

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U. S. Army Corps of Engineers

St. Louis Airport Site (SLAPS)

St. Louis District

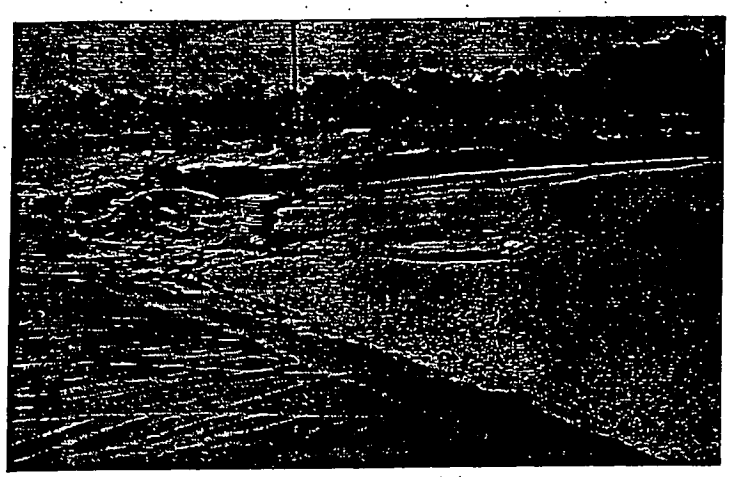
Radian (PRAC) excavated 9,500 cubic yards on the first half of the East End and performed partial backfill (shown here). Stone and Webster (TENC) will backfill this area next fiscal year. The generator to run the air monitor (just out of view) is also shown on the right.

September 1999

U. S. Army Corps of Engineers

St. Louis Airport Site (SLAPS)

St. Louis District



The Sedimentation Basin is complete and operable now that the liner and gravel have been laid. Outfall 001A's filter, which looks like a metal chimney to the casual observer, is located in the south end of the Sedimentation Basin. Straw bales serve as secondary filters to prevent clean sediments from clogging the filter.

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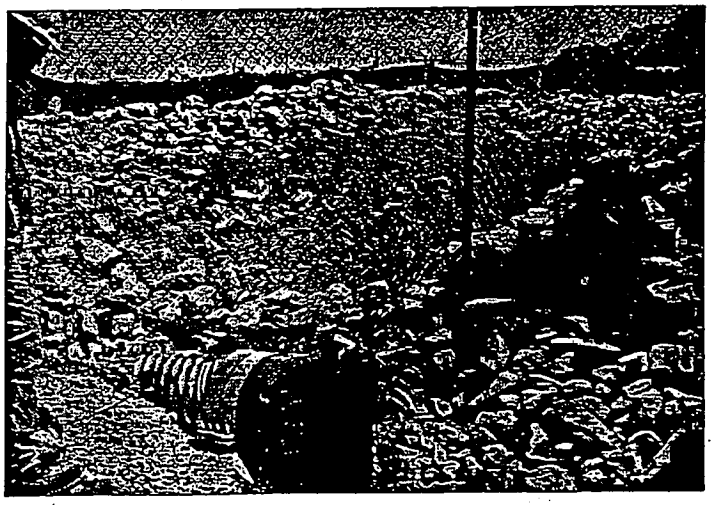
U. S. Army Corps of Engineers

St. Louis Airport Site (SLAPS)

St. Louis District



Water samples are collected from the outfalls monthly after a rain event. The outfall shown here is Outfall 001A on the South End of the site.

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U. S. Army Corps of Engineers

St. Louis Airport Site (SLAPS)

St. Louis District

Outfall 001B at the north end of the Sedimentation Basin is shown here.

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U. S. Army Corps of Engineers

St. Louis Airport Site (SLAPS)

St. Louis District

View of the Sedimentation Basin overflow (rip rap) from Coldwater Creek.

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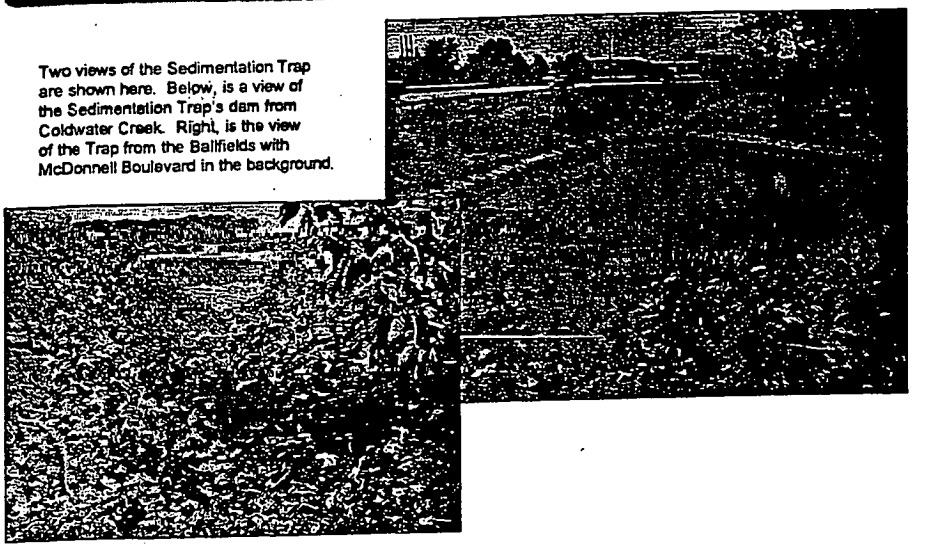
U. S. Army Corps of Engineers

St. Louis Airport Site (SLAPS)

St. Louis District

Two views of the Sedimentation Trap are shown here. Below, is a view of the Sedimentation Trap's dam from Coldwater Creek. Right, is the view of the Trap from the Ballfields with McDonnell Boulevard in the background.



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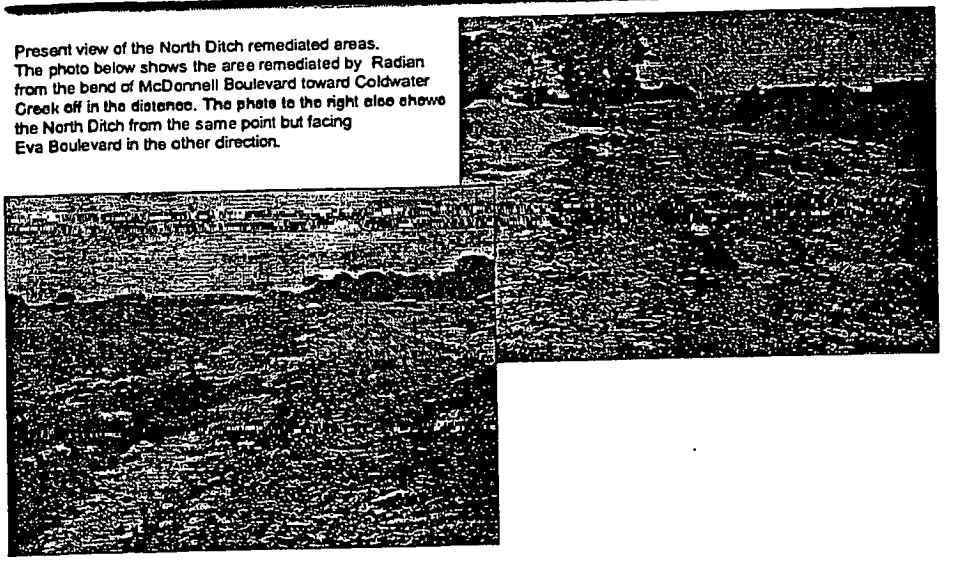
U. S. Army Corps of Engineers

St. Louis Airport Site (SLAPS)

St. Louis District

Present view of the North Ditch remediated areas. The photo below shows the aree remediated by Radian from the bend of McDonnell Boulevard toward Coldwater Creek off in the distance. The photo to the right also shows the North Ditch from the same point but facing Eva Boulevard in the other direction.



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U. S. Army Corps of Engineers

St. Louis Airport Site (SLAPS)

St. Louis District

Radium Pit sampling was performed Sept. 8, 1999 using a teletector, the instrument shown below. Sampling data will be available next month.

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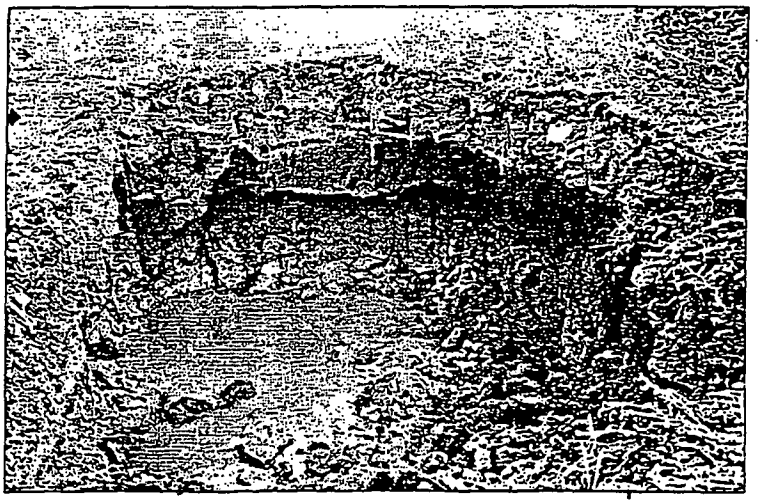
U. S. Army Corps of Engineers

St. Louis Airport Site (SLAPS)

St. Louis District



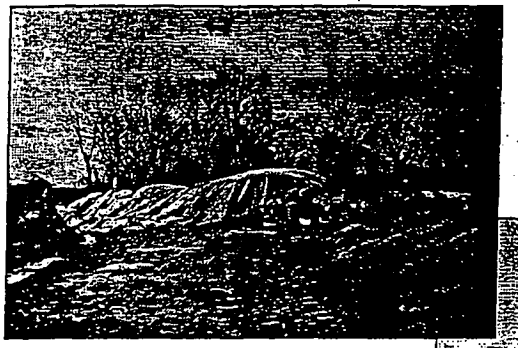
View of the Radium Pits excavation. Water entering the hole at 12 foot is retained in a layer of loess above a layer of clay.

September 1999

U. S. Army Corps of Engineers

Hazelwood Interim Storage Site (HISS)

St. Louis District



The spoils piles from the construction of the HISS railspur were covered with tarps until they could be removed later this year. However, spring storms made the slopes geologically unstable and created a potential health and safety risk. The back spoil pile is shown above (facing south toward the existing railline.) Shown at right is the front spoil pile, located between supplementary and main storage piles. is shown (facing southwest).

September 1999

U. S. Army Corps of Engineers

Hazelwood Interim Storage Site (HISS)

St. Louis District

To eliminate potential health and safety concerns, the spoils piles were covered with ConCover®. The gray coating is expected to last until the piles can be removed this fall by the small business contractor. Below is a photo of the front spoil pile (facing west). To the right is a photo of the back spoil pile (facing *north*).

September 1999

U. S. Army Corps of Engineers

Hazelwood Interim Storage Site (HISS)

St. Louis District

Photos of the completed railspur facing southward. Once the 8(a) contractor is mobilized, the spoils piles will be removed first then the East Pile. The back spoil pile can be seen in the the distance in the photo below while the East Pile can be seen in the photo to the left.

September 1999

U. S. Army Corps of Engineers

St. Louis Downtown Site (SLDS)

St. Louis District

The Plant 2 excavation (currently on hold) is shown here. Workers in these photos were mapping possible contaminant pathways at the bottom of the excavation surface.

September 1999

U. S. Army Corps of Engineers

St. Louis Downtown Site (SLDS)

St. Louis District

IT Corp. has removed 6,640 cubic yards so far. Work was placed on hold when an ordinance was discovered in a stockpile of excavated soil. Excavation will resume once Ordinance Construction Support Plans are in place.

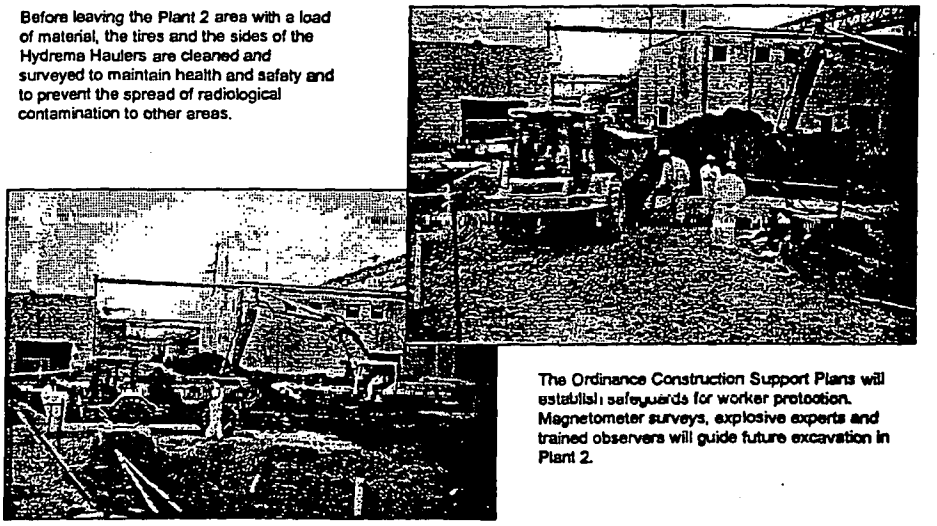
September 1999

U. S. Army Corps of Engineers

St. Louis Downtown Site (SLDS)

St. Louis District

Before leaving the Plant 2 area with a load of material, the tires and the sides of the Hydrema Haulers are cleaned and surveyed to maintain health and safety and to prevent the spread of radiological contamination to other areas.



The Ordinance Construction Support Plans will establish safeguards for worker protection. Magnetometer surveys, explosive experts and trained observers will guide future excavation in Plant 2.

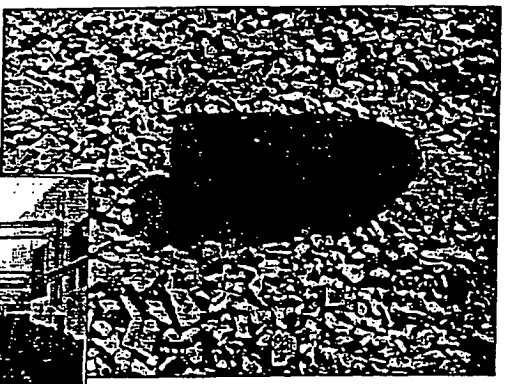
September 1999

U. S. Army Corps of Engineers

St. Louis Downtown Site (SLDS)

St. Louis District

The ordinance (shown right) found in the Plant 2 excavation was discovered in the excavation stockpile shown below at right. The ordinance was turned over to the St. Louis Bomb Squad for disposal without further incident.



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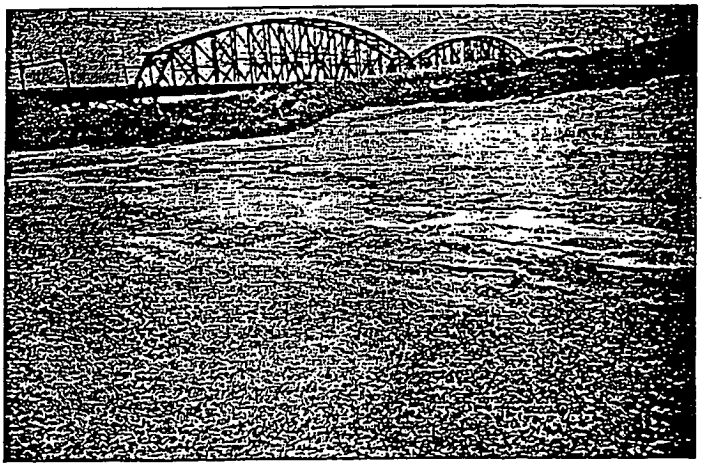
U. S. Army Corps of Engineers

St. Louis Downtown Site (SLDS)

St. Louis District



The City Properties were remediated last fall and seeded this spring after clay was backfilled into the excavated areas. Reseeding was necessary this spring due to heavy rains.

September 1999

Missouri Department of Natural Resources
Hazardous Waste Program

Federal Facilities Section
FUSRAP/SLAPS Field Report

From: Eric Gilstrap

Date of Field Visit: Wednesday September 8, 1999 (7:45 to 15:00 hours)

Contacts: Jim Moos (USACE); Keith Endres (EDI); John Skarin (HazMed)
Weather: Overcast, High 70s. Breezy with wind generally in an easterly direction (direction shifts from NE to SE).

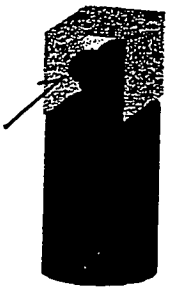
Radium Pits Test Excavations
Test Pit 2

Preparatory Meeting:

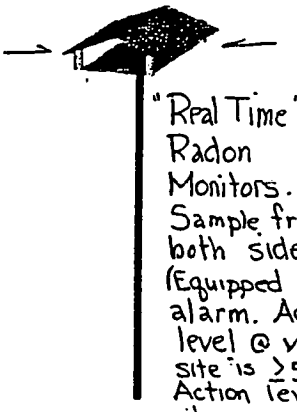
- Steve Saunders of S&W provided a thorough review of the test excavation workplan, including a description of potential hazards and related safety precautions.

Getting Prepared:

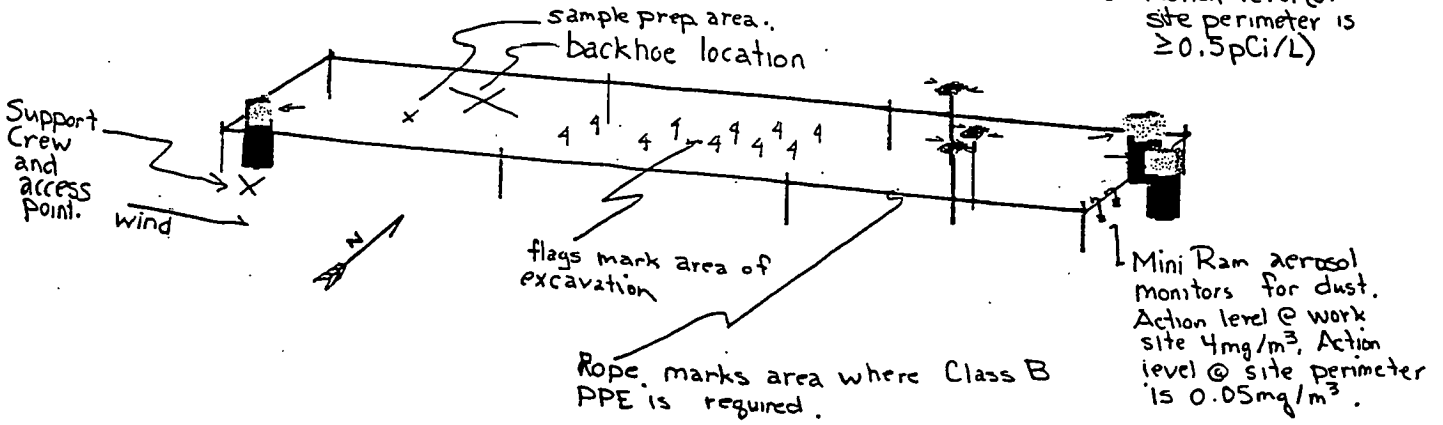
- Personnel set up work areas (sampling tables, entry points, support equipment) and perimeter air monitors/samplers.



Air sampler.



"Real Time" Radon Monitors. Sample from both sides. (Equipped w/ an alarm. Action level @ work site is ≥5mR/hr. Action level @ site perimeter is ≥0.5pCi/L)



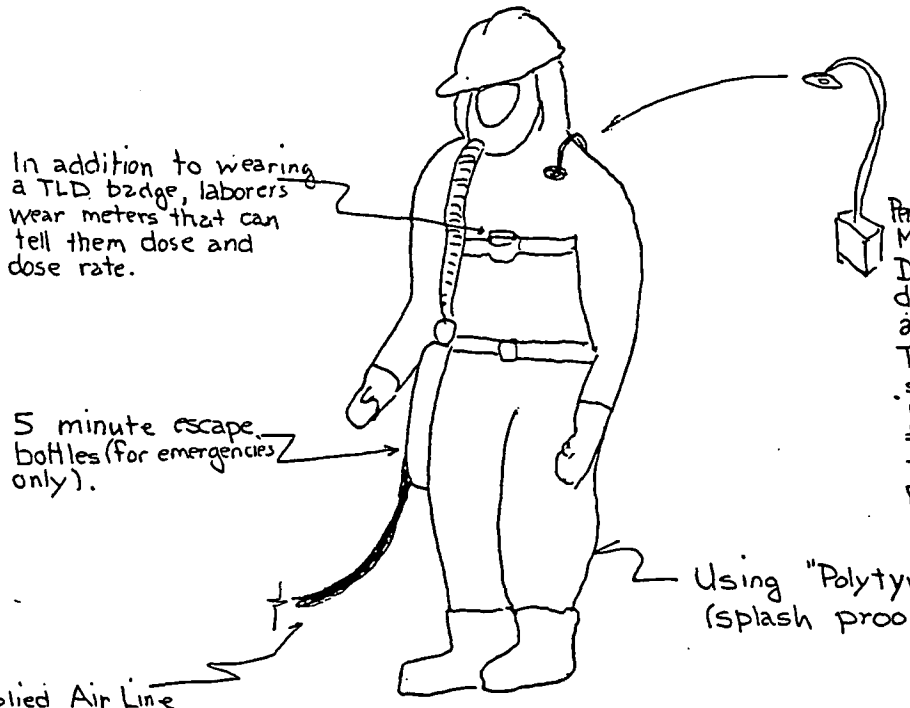
- Donning PPE and individual monitoring/sampling equipment.

"Teletector" Model 61-12

Telescoping dose meter for measuring dose rates from a distance (up to 14').

Level "B" P.P.E.

(P. P. E. ≡ Personnel Protection Equipment)



In addition to wearing a TLD badge, laborers wear meters that can tell them dose and dose rate.

Personal Breathing Zone Monitor
Different laborers wore different monitors or none at all. Depended on task. These are worn to study potential inhalation if ~~air was not supplied~~ personnel was allowed to breath freely with no protection. Will be used to define future PPE rqmts.

5 minute escape bottles (for emergencies only).

Using "Polytyvek" w/ taped seams. (splash proof.)

Supplied Air Line
Air supplied by tanks located @ NW corner (outside) of Level B PPE req'd work zone.

Note: Support personnel wears modified Level D PPE.
Tyvek (normal, paper, no hood), Hardhat, Goggles, gloves, booties.

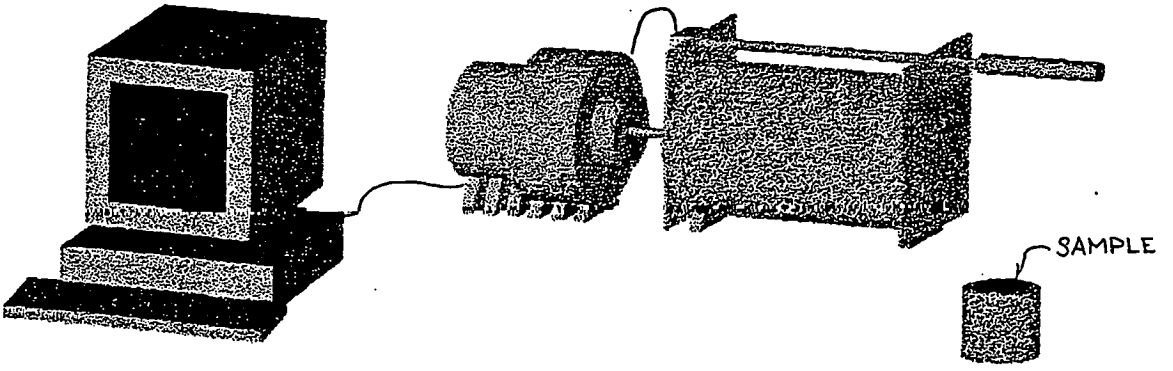
- Final preparation included orienting monitors/samplers, positioning the backhoe and water truck, flagging excavation boundaries, and watering the site. Watering was performed prior to and during soil removal.

Heavy Equipment:

- Dozer (for backfilling the excavation).
- Water Truck: kept on site within a controlled area but outside the work zone (area required only Level D Modified Personnel Protection Equipment: Tyvek, gloves, hard hat, safety glasses, steel toe boots, boot covers.)
- Backhoe (CAT 330BL) with a 3 cubic yard bucket.

Activity Log:

- 0830: Finished workplan and safety briefing.
- 1037: Site preparations completed. The first cut of soil is performed.
- 1045: Soil from 3 to 6' depth is sampled and field tests are performed (using gamma & alpha scintillation probes and Photoionization Detector).
- 1050. Soil from 6 to 9' depth is excavated. Sampling and field tests are performed. Stockpile is deposited from east to west, parallel with the excavation. It has started to encroach upon the rope marking off the Level B work zone. (Support staff wearing Level D protection are still over 15 feet away and upwind from the stockpile.) Dose rate from laborers is reported as 1mR/hr. (Note: S&W reports dose rate background for the site as 0.030 – 0.040 mR/hr. ALARA goal for this project is 50mR per individual.)
- 1103. A laborer requests a personnel breathing zone monitor. S&W complied with the request. (Remember laborers have full face masks with supplied air. Breathing zone monitors are worn to study potential intake if a laborer didn't wear the face mask. This was done to determine future PPE levels and not all laborers were to wear one.)
- 1120. Excavation reaches 12' and groundwater.
- 1130. Wind has shifted briefly to a south/southeast direction. Mentioned concern to USACE and S&W because air monitoring is strictly to the north and east (except one sampler at the nw corner) and support staff is directly south of the excavation. USACE and S&W stated the wind was still in an easterly direction and shouldn't impact people at the entry point.
- 1135. Project shuts down for lunch/break. Laborer in full PPE sent into work zone to get a video of water entering the excavation. Personnel reports dose rates still in the 1.2 to 1.4 mR/hr range.
- 1210. Work at the excavation resumes. Lab is finishing calibration of gamma spectrophotometer and is preparing to analyze soil samples. Soil samples have been placed within a petri dish for analysis.



- 1230. Stockpile of soil is now deposited east to west in row between the first soil placed and the excavation. The intention is for the soil excavated from the deepest part of the excavation will end up back at the bottom during backfilling (will use a dozer).
- 1240. A sample of groundwater is obtained for analysis. Video camera used by work crews has to remain in the controlled area because some radiologic material is detected on it. Laboratory reports first results to field crews. Soil sample taken between the 3 and 5' depth has activities of approx. 38,000 pCi/g for Thorium 232 and 1,500 pCi/g for Radium 226. Other isotopes are checked for but only the higher numbers were currently reported to field staff. Due to the high levels of Thorium, the support staff switches to alpha scintillators for frisking equipment and workers leaving the controlled areas.
- 1300. Excavation has reached approximately 20 feet (reported by field crews). Wet soil from 12 to 20' is collapsing into the hole. Excavator begins removing soil from 0 to 12' on side walls while deliberations are made in regards to digging deeper. 20' was the planned depth, but breaking through the brown silty clay prior to 20' was expected. It didn't happen.
- 1345. The decision is made to stop excavating. The hole will be left open till 1430 to observe water levels and stability of sidewalls and then it will be backfilled. Low dose rates measured prompted the decision to allow downgrading the PPE requirements to modified level D around the excavation once the heavy equipment has been removed. This is done to give opportunity for personnel to inspect and photograph the hole. MDNR personnel was allowed to accompany staff of S&W into the exclusion zone.

Conclusion:

- Majority of the soil encountered was a brown silty clay with little to no rock. At an approximate depth of 5 to 8' was a dark brown (appeared organic) layer with a thin white line at the top. Speculation is a layer of topsoil was at this depth and then topped over with more soil. Please note that is only speculation. Depths and description are based on visual observation from MDNR personnel. Please refer to logs prepared by staff from S&W once available for a better description.
- None of the radon and dose rate monitors' alarms were triggered. Verbal reports regarding dose rates measured by the SDR and field equipment stated rates tended to be below 1.2 mR/hr and peaked once at 1.4 mR/hr. Doses should be well below the individual ALARA goal of 50mR per individual.
- Soil and excavation was kept wet to prevent airborne releases. Excavation was kept open for a minimal amount of time and was quickly backfilled.
- Crews traded off frequently and a significant amount of support staff was provided to help with donning/doffing and frisking of equipment and personnel before leaving the workzone. Personnel were debriefed regarding how they felt and if they had slipped, fallen, or picked up any of the soil while in the work zone.
- Photographs taken by MDNR staff are available for viewing. Copies were provided to the USACE per their request.
- Test Pit 1 will be excavated on Thursday September 9, 1999.

Cataloging Form

{Technical/Project Managers fill in C through G, K through Q. RM completes other fields}

A. Document ID Number: Assigned by database 626 B. *Further Information Required?*: ☐

C. *Operable Unit (Choose One):*

USACE	☐
St. Louis Sites	☐
Downtown	☐
North County	☐
Madison Sites	☐
Inaccessible Areas	☐
PRP	☐
Oversight Committee	☒

D. *Site (Optional):*

SLDS VPs	☐
Mallinckrodt	☐
SLAPS	☐
SLAPS VPs	☐
CWC	☐
HISS	☐
Madison	☐

E. *Area (Optional):* _____

F. *Primary Document Type (Choose One):*

~~Site Management Records~~	☒	Remedial Action	☐
Removal Response	☐	Public Affairs/Community Relations	☒
Remedial Investigation	☐	Congressional Relations	☐
Feasibility Study	☐	Freedom of Information Act	☐
Record of Decision	☐	Real Estate	☐
Remedial Design	☐	Project Management	☐

G. *Secondary Document Type (see back of form):* Correspondence

H. *Bechtel Number:* _____ I. *SAIC Number:* _____

J. *MARKS Number(Choose One):* FN: 1110-1-8100e ☐ FN: 1110-1-8100f ☐ FN: 1110-1-8100g ☐

K. *Subject:/Title:* St. Louis Oversight Committee Meeting Minutes from 9/10/99

L. *Author:* Richard Caranagh M. *Author's Company:* Oversight Committee

N. *Recipient(s):* Distribution O. *Recipient(s) Company:* _____

P. *Version (Choose One):* Draft ☐ Final ☒ Q. Date: 9/30/99

R. *Include in the ARF?* ☒ S. *Include in the AR?* ☐ T. *Filed as Confidential/Privileged?* ☐

U. *Document Format (Choose one):*

Paper	☒	Photographic	☐	Cartographic/Oversize	☐
Electronic	☐	Audio-visual	☐	Microform	☐

V. *Filed in AR Volume Number:* _____

W. *Physical Location (Choose One):*

Central Files	☒	Microfilm Vendor	☐	In ARF	☐
Records Holding Area	☐	Department of Energy	☐	In AR	☐

X. *Associated with Document(s):* _____

Secondary Document Types

- ☐ Amendments to Record of Decision (ROD)
- ☐ Anomaly Review Board Documents (Management Plan, Correspondence, Standard Operating Procedures, Findings)
- ☐ Applicable or Relevant and Appropriate Requirements (ARAR) Determinations
- ☐ Archives Search Reports (ASR)
- ☐ Briefing Papers
- ☐ Chain of Custody Forms
- ☐ Community Relations Plan
- ☐ Correspondence
- ☐ Daily Operations Summary/Situation Reports
- ☐ Engineering Evaluation and Cost Analysis (EE/CA) Action Memo
- ☐ Engineering Evaluation and Cost Analysis (EE/CA) Approval Memorandum
- ☐ Engineering Evaluation and Cost Analysis (EE/CA)
- ☐ Explanation of Significant Differences
- ☐ Fact Sheets/Newsletters
- ☐ Feasibility Study (FS) Reports
- ☐ Federal, State, Local Tech. Records
- ☐ Final Approved Findings and Determinations
- ☐ Final Remedial Design Documents
- ☐ Freedom of Information (FOIA) Requests
- ☐ Freedom of Information (FOIA Responses)
- ☐ Health and Endangerment Assessments
- ☐ Interagency Agreements/Memoranda
- ☐ Interim Deliverables
- ☐ Inventory Project Report (INPR) Risk Assessment Code (RAC)
- ☐ Invoices/Contractor Payments/Cost Reports
- ☐ Land Grants/Deeds
- ☐ Mailing Lists
- ☐ News Clippings and Press Releases
- ☐ No Further Action Docs (NOFA)
- ☐ On-Scene Coordinator Reports
- ☐ Proposed Plans for Remedial Action
- ☐ Public Meeting Minutes/Transcripts
- ☐ Public Notices
- ☐ Public notices, Comments Received, Responses to the Comments
- ☐ Published Hearings
- ☐ Record of Decision (ROD)
- ☐ Reference Documents
- ☐ Remedial Action Documents
- ☐ Remedial Investigation (RI) Reports
- ☐ Removal Response Reports (Emergency Evacuation Orders)
- ☐ Rights of Entry Documents
- ☐ Sampling/Analysis Data and Plans
- ☐ Scopes of Work/Contractual Documents
- ☐ Site Descriptions and Chronologies
- ☐ Site Inspection Documents
- ☐ Site Photographs and Maps
- ☐ Testimonies
- ☐ Title Search Documents
- ☐ Work Logs
- ☐ Work Plans and Progress Reports
- ☐ Work Plans/Site Safety and Health Plans and Progress Reports
- ☐ Work Register and Logs