

**Summary of the
Seaway Technical Project Planning (TPP) Meeting
Integration of 'Seaway South Side'**

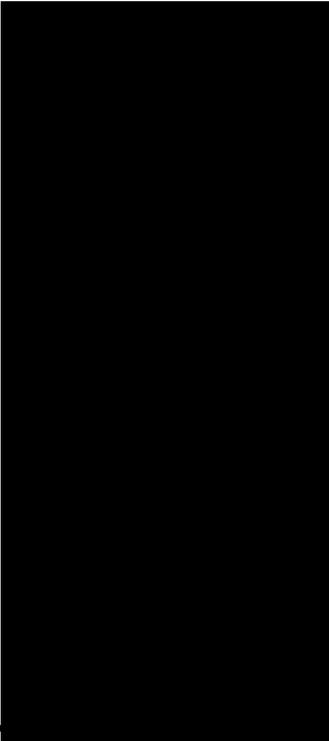
Dates: Thursday, November 14, 2002 12:00PM-4:00PM
Friday, November 15, 2002 8:00AM-12:00PM

Location: Naval Reserve Base
3 Porter Avenue
Buffalo, New York 14201

Meeting Goals:

1. Present data on Seaway South Side collected as part of the Ashland I remedial action and analysis of historical photos to TPP team members.
2. Gain consensus on how Seaway South Side is going to be integrated into the CERCLA documentation process already underway for Seaway Areas A, B and C.
3. Gain consensus on future activities needed relative to the findings on Seaway South Side.

Meeting Attendees (see attached list for phone and e-mail information):



ECDEP
MJW Corp.
NYSDEC
NYSDEC
NYSDEC
NYSDEC
NYSDOH
USACE
ANL
ANL
SHAW
SAIC

AGENDA

Thursday, November 14, 2002

- 12:00 pm Opening remarks
 Introductions/Expectations
 Briefing on Seaway South Side – Ashland I Data and Maps (Ashland Team/ANL)
 Briefing on Seaway South Side – Historical Photo Analysis (SAIC)
 Discussion on modeling Seaway South Side

Friday, November 15, 2002

- 8:00 am Discussion on leachability
 Discussion on impact to risk assessment
 Future activities
-

SUMMARY

1. Based on the data presented by the Ashland Team, there are at least two known areas of MED-related contamination identified on the Seaway property adjacent to Ashland 1.
2. Historical photographs were reviewed and estimates of where these two locations found by the Ashland Team were located relative to conditions shown on the photographs dating 1960's to mid-1970. Other potential areas were identified based on these historical photographs.
3. Since there may be other areas of contamination, all agreed to not call these identified areas Seaway Areas E and F. Instead, the area will be known as Seaway Southside and will address any contamination found (1) within the closed portion of the landfill south of Seaway Areas A, B and C; (2) between the closed portion of the landfill and the Seaway property line; or (3) the portion of Rattlesnake Creek that is underneath the landfill. A naming convention for specific areas will be determined at a later date.
4. The ROD covering Ashland 1 and Seaway Area D was meant to deal with the Ashland 1 and Seaway Area D properties only, not soils for which removal would impact the closed portion of the landfill. NYSDEC would like to know what is the definition of "accessible" that USACE is using so that they can evaluate it and see if they agree. Along those lines, NYSDEC would requested that USACE provide them with a clearer picture of where they are stopping and why.
 - a. Provide a Plan View and identify on it where exactly everything is located.
 - b. The Plan View material should be overlaid onto aerial photographs both now and historical, particularly the photograph taken during the Ashland 1 tank construction efforts.
 - c. The Plan View should, at a minimum, show:
 - i. Slurry Cut-off wall
 - ii. Seaway Property Line
 - iii. Limits of actual excavations
 - iv. Accessibility line
 - v. Test Pits completed in these areas
 - vi. Borings completed in these areas
 - vii. Depth of contaminated lens in border areas
 - d. Profiles showing similar information should also be provided, but at a latter date.
 - e. Once the Plan View materials are generated, schedule a meeting between NYSDEC and USACE to discuss before sending the material to NYSDEC.

5. Once the plan views discussed in item 5 are completed, they will provide a better tool for evaluating the historical photographs and understanding where contamination may be located and to what extent.
6. As indicated above, the third area of suspected MED-related contamination to be included in Seaway Southside is the Rattlesnake Creek bed beneath the landfill. Over the years prior to any remediation, contaminated sediments from the Ashland 1 area most likely were transported along Rattlesnake Creek and therefore, should be considered contaminated.
7. A liner was placed inside the old concrete pipe which was placed in the Rattlesnake Creek bed before landfill operation covered the area. This liner may be contaminated due to sediments coming from the Ashland 1 Site prior to USACE remediation. Whether the liner is contaminated or not is not known nor the extent of contamination, should it be contaminated. In April 2002, the Ashland 1 Team plugged the pipe on the Ashland 1 side of the landfill to prevent any surface water from the Ashland 1 area to flow through the pipe while Ashland 1 was remediated. However, plans are to open the pipe again after Ashland 1 is completed and allow surface water from Ashland 1 to flow through the pipe under Seaway and discharge from the Seaway outfall into Rattlesnake Creek near the Ashland 2 Site, which has already been remediated. This has the potential to re-introduce contaminants into Rattlesnake Creek near Ashland 2. All agreed that USACE (Ashland Team) would identify a plan for addressing this concern before the pipe is unplugged and the water allowed to flow through it again.
8. Discussions were held regarding the fact that the most likely land uses for Seaway and Ashland are different. NYSDEC would like to see the residential scenario evaluated to assess the impacts of loss of institutional controls and would like for USACE to consider the residential scenario for all of Seaway. The impacts for loss of controls were evaluated for Seaway, but did not include the residential scenario.
9. SAIC presented results regarding the leachability of the MED-related residues based on the TCLP and modified TCLP analytical results from the Summer 2001 investigation. A detailed discussion of the results as well as the charts and tables presented at the meeting are included in Attachment A. The main radionuclide that leached in both tests was U-238. The data also indicated that a larger percentage of the U-238 in the soil went into solution for material that was deep within the landfill and not near the surface exposed to the environmental elements. Using the TCLP data, RESRAD modeling estimated that the U-238 from the MED-related materials in Areas B and C would not reach the leachate collection system within a 1,000-year period. However, based on the historical photographs and the recent findings at Ashland 1, the varying U-238 concentrations in the leachate collection system sampling results may be due to the presence of MED-related materials just over or under the leachate collection system or in some cases, surrounding it.
10. SAIC presented details of the Seaway Landfill leachate collection system and the fact that there are three pumping stations for pumping leachate from low collection elevations up over into that portion of the leachate collection system that discharges through the leachate metering station. Two of these low points, Pump Stations 1 and 2 are located at both ends of the Rattlesnake Creek piping underneath the landfill, thus potentially impacted by the MED-related residues or possibly even fly ash placed in the area prior to the major landfill operations beginning. SAIC also presented the theory that U-238 may be leaching from the residues in and around the leachate collection system and that they are not always detected at a somewhat consistent level since the leachate from those areas may not have been pumped prior to the leachate sampling event. A path forward was proposed to see if there are any MED-related materials leaching into the leachate system in the Seaway Southside near Pumping Stations 1 and 2, and if so, at what concentrations. There is also another identified pumping station, #3, which is located in an area of the landfill that is not believed to be impacted by any MED-related materials. Sampling from this location might provide data that would be useful in better understanding what impacts, if any, the MED-related materials have on the leachate collection system. Elements of the sampling plan would involve:

- a. Sample all three pumping stations in Seaway Southside.
 - b. Plug pumping station upstream leachate collection lines, if possible and with permission from NYSDEC and the landfill owner and operator, pump down, wait for station to refill and then sample.
 - c. Do same for downstream lines.
 - d. Sample pumping stations with lines plugged, as discussed above, and with no line plugging.
 - e. The number of samples necessary will be determined as part of the sampling work plan development. The objective is to get as many samples as necessary that provides some confidence in the results without having to sample over a period of months or years.
11. A review of existing Seaway supporting documentation was made to assess what, if any, impacts or changes to these documents would be necessary for addressing Seaway Southside and integrating Seaway Southside into the current Seaway Site Areas A,B and C documentation.
- a. Volume estimates used for estimating costs associated with various alternatives.
 - i. One approach is to rely on the historical photographs to delineate extent such as was done for Seaway Areas B and C, and estimate the lens thickness (e.g., ~8 to 10 inches dropping to 3 to 6 inches) based on the results from Ashland 1. This methodology was used for estimating the new volumes in Areas B and C.
 - ii. Acceptability of this approach will be dependent on review of the more detailed information regarding results and locations being prepared by USACE (Ashland Team – see item 5 above).
 - b. “Modeling of Radiological Risks ... Technical Memorandum”, dated June 2000
 - i. May provide a bounding assessment that would address any risks associated with Seaway Southside, including materials that may be outside the closed portion of the landfill.
 - 1. For material outside of the landfill, the exposures scenarios without cover would be appropriate.
 - 2. Any materials located outside of the leachate collection system may present the potential for discharges to the surface waters and would therefore need to be compared to appropriate standards using data obtained from the leachate sampling.
 - ii. Final determination dependent on:
 - 1. Final data set for Seaway Southside to assess source terms and locations.
 - 2. Final set of exposure scenarios found to be acceptable (see item 9 above regarding residential scenario).
 - iii. If any additional analyses are necessary, the additional material could be integrated into the FSA as an appendix instead of totally revising the Technical Memorandum. This will be dependent of the final data set results.
 - c. “Application of 10 CFR 40 ... Technical Memorandum”, dated July 21, 2000.
 - i. No changes envisioned
 - d. “Estimates of Air Quality Impacts of Radon Technical Memorandum”, dated June 22, 2000.
 - i. The current document is considered to be bounding for the materials inside the closed portion of Seaway Southside since the material is beneath 40 to over 100 feet of material.
 - ii. RESRAD could be used to estimate the radon release rates at the surface for those Seaway Southside materials located outside the closed portion of the landfill. These results could then be referenced in and included with the FSA.
12. NYSDEC requested that USACE place in the ROD the “details”, as best they can, regarding the land use controls should a remedy be selected that involves the use of land

use controls. NYSDEC requested that USACE consider how the loss of institutional controls (performance assessment) in 30 years would effect land use controls. NYSDEC also asked USACE to consider the effects finding contamination in the leachate collection system may have on long-term monitoring.

13. Discussions were held regarding whether there was the need for additional field sampling in the Seaway Southside area, beyond the leachate sampling discussed above, and if so, what would be the objectives of the effort. One key objective is to minimize, if not preclude, any activity that may jeopardize the integrity of the closed cap. Whether there is a need and for what purpose could not be finalized at the meeting. The additional requested information discussed above needs to be assembled and all have the opportunity to assess it. After which, further discussions with the TPP members could be held regarding what, if any, sampling is needed and why.
14. USACE to check into whether there are any copyright issues with the use of PE stamped drawings obtained from NYSDEC regarding the details of the leachate collection system.