Department of Energy
Oak Ridge Operations
Weldon Spring Site
Remedial Action Project Office
7295 Highway 94 South
St. Charles, Missouri 63304

January 31, 1992

Mr. Dan Wall
Remedial Project Manager
U. S. Environmental Protection Agency
Region VII
726 Minnesota Avenue
Kansas City, Kansas 66101

Dear Mr. Wall:

**MANAGEMENT OF SUMP WATERS/SEDIMENT CONTAINED IN PROCESS AND NON-PROCESS BUILDINGS AT THE CHEMICAL PLANT AREA**

Activities have begun that are necessary to support the demolition of process and non-process buildings at the chemical plant area. Included in these activities is the management of waters and sediments contained in sumps that are located in various buildings. Although the undisturbed sump waters are not RCRA the sediments do contain metals in sufficient concentrations to warrant management under RCRA. The WSSRAP has designed a mobile treatment system (MTS) to manage the sump waters and sediments. Basically, the system is a filtration process by which the sediments will be separated from the waters, containerized, and stored in Building 434 (RCRA storage building) pending final disposal decisions for the site. The waters, after filtration, will be pumped to 3,000 gallon tank and will be tested for the metals of concern to ensure it is below RCRA limits. Then it will be discharged to the raffinate pits for subsequent treatment by the Site Water Treatment Plant (Train 1). The design incorporates the substantive requirements of RCRA. I have enclosed a flow diagram for the MTS.

The design and construction of the MTS was not specifically described in the Engineering Evaluation/Cost Analysis for the Management of Contaminated Structures (EE/CA). However, the management of the sumps and their contents was addressed. Additionally, this activity is consistent with the Remedial Action Decision Document.

The system is scheduled to begin operating by April 1, 1992 and should remain operational for at least two years. It will not be in continuous operation for the two years, as each sump will be emptied only prior to the dismantlement of its associated building. In addition, the system will likely be used to treat other sources of water associated with the building demolition, such as decontamination water and rinse water.

The planned management of the sump waters/sediments is protective of human health and the environment. Additionally, it is within the scope of existing documentation.

If you have any questions, please contact Alan D. Gibson.

Sincerely,

Stephen H. McCracken
Project Manager
Weldon Spring Site
Remedial Action Project

cc: Dave Bedan, MDNR
Bill Adams, EW-90
Bob Boettner, EM-421
Jim Powers, PMC

# MOBILE TREATMENT SYSTEM
# FACT SHEET

PURPOSE:

To separate RCRA characteristic sediments from non-RCRA waters that are contained in various sumps throughout process and non-process buildings.

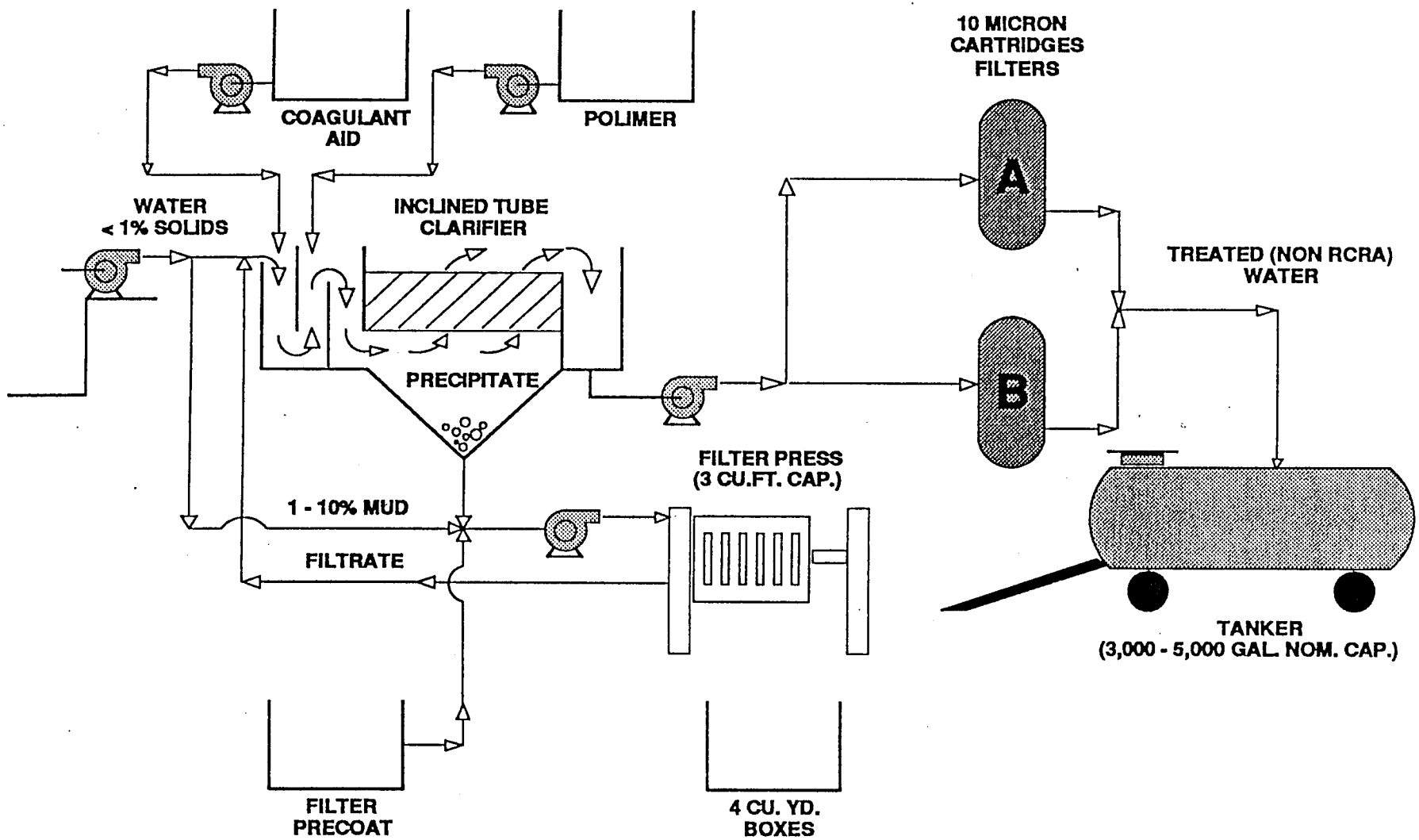
The trailer mounted mobile system consists of:

- coagulant and polymer makeup and feed equipment
- inclined tube clarifier
- two (2) 10 micron cartridge filters for the clarifier overflow
- 3 $ft^3$ manual filter press to dewater clarifier underflow (concentrate sediments)
- two (2) portable pump skids (nominal capacity 10 gpm; maximum capacity 25 gpm)
- 150 ft of flexible hose

General Information:

- The filter cake from the filter press will be containerized and placed in Building 434 (RCRA Storage building)
- The clarifier overflow will be filtered through a 10 micron fiber cartridge filter analyzed and discharged to the raffinate pits for subsequent treatment at the Site Water Treatment Plant
- Used filters will be containerized and stored in Building 434
- The pump skids will be located near the sumps to transfer the sump waters to the treatment system located outside the building

# MOBILE SUMP
# WATER TREATMENT SYSTEM

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