The writer and Mr. Jack Wiseman of the Air and Hazardous Materials Division, Region 6, made a joint visit at Vertac, Inc. (formerly Transvaal Corporation) on Monday, February 5, 1979. This visit was part of Air and Hazardous Materials Division's initial site inventory survey and an investigation for RCRA Section 7003 case development. The EPA personnel were in the plant from 9:45 a.m. to 1:00 p.m. Personnel at the Little Rock office of the Department of Pollution Control & Ecology were interviewed and state files reviewed between 1:30 p.m. and 4:00 p.m. Present at the Vertac plant meeting were:

1. Ray Guidi  
   Vice President, Manufacturing  
   Vertac, Inc.  
   Suite 2414  
   5100 Poplar  
   Memphis, TN 38137  
   (901) 767-6851

2. Thurman Marshall  
   Plant Manager  
   Vertac, Inc.  
   P.O. Box 69  
   Jacksonville, ARK 72076  
   (501) 982-9481

3. Ken Howard  
   Director of Technology  
   Vertac, Inc.  
   Jacksonville, ARK 72076  
   (501) 982-9481

4. Tom T. Bridges  
   Corporate Process Engineer  
   Vertac, Inc.  
   P.O. Box 941  
   West Memphis, ARK 72301  
   (501) 735-8530
5. Jack Wiseman  
U.S. EPA - Region 6  
Air and Hazardous Materials Division

6. Ed McHam  
U.S. EPA - Region 6  
Enforcement Division

Interviewed at the ARK Department of Pollution Control & Ecology,  
8001 National Drive, Little Rock, ARK 72209, (501) 371-2130 were:

1. James R. Shell - Asst. Chief  
   Water Division

2. A. L. Sparks - District Inspector  
   Solid Waste Control Division

3. Richard Duffee - District Inspector  
   Solid Waste Control Division

4. John Giese - Chief Ecologist  
   Water Division

A. L. Sparks arranged for our visit with Vertac; however, no state personnel were present at the plant meeting and plant tour.

COMPANY ORGANIZATION

Vertac is a privately held corporation with six (6) million in annual sales. The name "Vertac" is a new name effective January 1979. There are four plants in Vertac, Inc. These companies are listed below with their former names:

- Vicksburg Chemical, Vicksburg, MISS
- Eagle River Chemical, West Memphis, TN
- Chem-Form Chemical, West Helena, ARK
- Transvaal Corporation, Jacksonville, ARK
This group of companies operated under separate names but the same ownership until the name change in January 1979. The companies were in bankruptcy during April - November 1978. The name change is a result of corporate reorganization. The company is incorporated in Delaware with headquarters at 5100 Poplar, Suite 2414, Memphis, TN 38137, phone (901) 767-6851. The corporate officers are as follows:

- Bob Kirk, President
- Ed Munoz, Executive Vice President
- Gary Gammal, Executive Vice President
- Jack Mitchell, Vice President, Finance
- John C. Bumpers, Vice President, Administrative
- Ray Guidi, Vice President, Manufacturing

According to the plant personnel the ownership did not change with bankruptcy and reorganization.

PLANT LOCATION AND BACKGROUND

The plant site is located 13 miles northeast of Little Rock, ARK, within the city limits of Jacksonville, ARK, on Marshall Road approximately 0.8 miles north of the intersection of West Main Street and U.S. Highway 67. See Attachment 1. Plant personnel gave the following legal description:

"PARCEL 1 beginning on the SE corner of the NE one-quarter of section 24, T3N, R11W, running westerly on a bearing 88°23' west along the east-west centerline of said section to 2,661.45 feet to center of section 24; then running northerly on bearing N1°35'E-1,516.25 feet to point; then easterly on bearing 88°23' east 2,662.4 feet to point on east line of said section 24;"
thence southerly along east line of section 24 on bearing S1°37'W-1,516.25 feet to point of beginning. Total area - 92.7 acres."

Vertac manufactures the herbicides 2,4-D and 2,4,5-T. The plant is located on the site of a former World War II ordnance plant. The plant has had several owners:

3. Transvaal Corporation: October 1971 - January 1979
4. Vertac, Inc. - name changed from Transvaal in January 1979 with no change in ownership

Reasor-Hill originally only formulated 2,4-D. Manufacturing facilities for 2,4-D and 2,4,5-T were added later during the Reasor-Hill period. Vertac plant personnel stated that the chemical processes and type of waste generated have remained unchanged since the Reasor-Hill period.

POLLUTION AND LEGAL HISTORY

See Attachment 4 which is a chronological summary from the state files. Prior to 1963-1964, untreated process liquid waste streams were discharged into the Jacksonville STP which discharged into Bayou Meto, a tributary of the Arkansas River. Fish kills traceable to plant discharge occurred prior to 1963-1964. In 1964 Hercules installed a liquid waste stream pretreatment plant prior to discharge into Jacksonville STP sewer collection system. This was the result of State action in 1963. See Page 2, Attachment 4. Rocky Branch was moved west of its original path due to the proximity to the Reasor-Hill waste burial site. See Attachment 2. According to State personnel no fish kills traceable to toxic discharge from this plant have occurred since startup of the pre-
treatment unit. A suit by a private citizen engaged in commercial fishing was settled out of court in 1975. The suit claimed fish kills due to toxic plant discharge. There has been no State action against this company since the installation of the pretreatment unit in 1964. The plant pretreatment unit is described in Attachment 3.

CURRENT LANDFILL SITE STATUS

The waste disposal landfill cells are located on the Vertac plant site. See Attachment 2. The plant is actively manufacturing herbicides. The landfill sites are labeled with the names of the companies which used the sites. According to plant personnel, none of the landfill cells have been used since 1974. This was an internal decision rather than a result of any State action. Filter sludges are currently sent to a Browning-Ferris toxic landfill site in Louisiana. TOLUENE still bottoms are being stock-piled on site in 55-gallon steel drums for possible future reclamation.

WASTE SITE DESCRIPTION

The waste landfill cells are located in the SW and NW corners of the plant property. The plant is within the city limits of Jacksonville, ARK. The area south of the plant is a low density population residential area. The closest residence is estimated to be 150 yards south of the plant fence line. See Attachment 6, Photo A, item (1). Little Rock Air Force Base is adjacent to the northern plant property line. See Attachment 1. The base is estimated to be 500 yards north of the NW corner waste sites. The area west of Vertac is wooded with various industrial plants about 0.8 miles from Vertac. See Attachment 6, photo A. The waste sites are on the plant site which is totally enclosed by a chain link fence. Entrance to the plant is via a guard gate manned 24 hours.
WASTE IDENTIFICATION

Plant personnel stated the type of waste buried in the landfill cells has essentially remained the same since the Reasor-Hill days. The processes have not changed, although quantities and ratios of the waste may have varied from year to year. The wastes buried in the landfills are contaminated drums, toluene still bottoms, and filter sludges. See Attachment 5. It was stated that the toluene still bottoms contain small amounts of anisole (methoxybenezene), toluene, dimethoxydichlorobenzene, methoxydichlorobenzene, trichlorophenol, dichlorophenol, and 2,4,5-T. The two filter sludges contain small amounts of all their respective reactants prior to the filtering operation. Quantities of wastes in the landfill cells were unknown. Plant personnel stated that the toluene still bottoms were the subject of EPA dioxin analyses in May 1978. During the active use of the waste sites, a portion of the solid waste was placed in the landfill cell in uncovered steel drums. Other portions were simply dumped directly into the landfill cell. Sediment from the equalization pond formerly was placed in the Hercules sites.

SITES OPERATIONS AND CONDITIONS

The waste burial sites have not been used since 1974. The Reasor-Hill site is covered with grassy vegetation. See photo A, Attachment 6, and Attachment 2. The other waste burial sites were not covered with vegetation. The only waste site observed with a crown soil cover was the Transvaal 16,900 S.F. landfill cell. See photo C, Attachment 6. All landfill cells appeared to be adequately drained except the Hercules 27,000 S.F. site. Standing stormwater was observed at this site. See photo D, Attachment 6. Stormwater drainage appeared to flow westerly toward Rocky Branch from the Reasor-Hill site. Rocky Branch is about
50-60 feet west of the plant site. Stormwater from the Hercules and Transvaal sites flows southwesterly toward the non-contact cooling water pond. See photo B, Attachment 6. Housekeeping appeared to be generally good. Steel drums containing toluene still bottoms for future reclamation were stacked 2-high at the Hercules 82,000 S.F. site. The quantity of drums was estimated at 200-300. A small amount of scrap metal and piping was observed being stored on top of the same site. Plant personnel reported the bottom of the landfill cells to be 10-15 feet deep. However, this is only an estimate.

Company personnel stated that the cooling water pond overflow to Rocky Branch and the equalization pond overflow to the Jacksonville sewer system is sampled and analyzed weekly for BOD, pH, chlorides, phenol, and the phenoxy groups. There are currently no leachate monitoring wells in place. Engineering feasibility studies are being made by Vertac to decide if monitoring wells are needed. The study is also considering the need for clay domes over the waste burial sites to prevent stormwater collection. Should the decision be made to install these items, company personnel estimate 100% completion during the 3rd quarter of 1980.

WATER AND GROUND DATA

Company personnel stated that they believe the Vertac waste site poses no problem to potable groundwater supplies. To back this up, they pointed out that the City of Jacksonville does not obtain their drinking water in this area. The city apparently obtains drinking water from wells 30 miles east in Lonoke County. Plant personnel, however, did not know the exact depth of the groundwater. They stated that there are no shallow water wells in the adjacent areas. Pretreatment plant effluent is directed to the Jacksonville sewer collection system. The
Jacksonville STP charges into Bayou Meto. Bayou Meto enters the Arkansas River about 75 miles SE of Jacksonville at the junction of Arkansas, Jefferson, and Lincoln counties. The area along Bayou Meto to the Arkansas River is used for agriculture crop production. The nearest surface water is Bayou Meto, 1-2 miles south of the plant. Rocky Branch, taking the surface runoff, flows into Bayou Meto.

Company personnel stated that there should be no leachate movement problem. The soil is considered to be high in clay. However, no soil boring data were available to substantiate their claim. Plant personnel stated that there is a hard rock layer below the plant. The actual depth of rock layer was unknown to plant personnel. State personnel indicated there might be leachate problem at Vertac. A recent job applicant to the Department of Pollution Control & Ecology stated that leachate movement was still a problem. The job applicant worked at Vertac as a waste water laboratory technician between 7/74 - 7/77. State personnel also indicated that two leachate monitoring wells at the Reasor-Hill site were installed between 1963-1965 during the legal action against Hercules. See Attachment 2. One Leachate sump collected about 6-8 gallons per day, while the other sump was dry. The collection sumps are no longer in place. State personnel do not remember why leachate collection was discontinued. The leachate collected was pumped to the equalization pond.