

## MEMORANDUM TO FILE

**TO:** Kerr McGee (KM) File (a.k.a. Tronox)

**FROM:** Brian Rakvica

**DATE:** November 15, 2005

**CC:** Todd Croft, Jeff Johnson, Jim Najima

**RE:** KM Meeting Site Visit

1. Attendance:
  - a. NDEP: Brian Rakvica
  - b. KM: Keith Bailey, Susan Crowley
2. Discussed site history and current operations.
  - a. FBR – noted that solids are non-hazardous and sent to Apex.
  - b. Units 1 and 2
    - i. Basements are intact and filled with soil.
    - ii. The “cell floor” area steel structure has been removed. nb: the “cell floor” area is the central portion of the building that includes the basement. There is also a northern portion of the building without a basement and a southern portion of the building which is poured concrete (above and below grade).
    - iii. Northern portions of the buildings will be removed once the steam line and chlorine line are relocated (by Pioneer and Timet).
    - iv. These removals will not affect KM’s SQG status.
    - v. The southern portions of the building are used for electrical distribution and storage.
  - c. Unit 3
    - i. Currently used for warehousing operations.
    - ii. The east half of the building contained the “new sodium chlorate plant” which is for sale in “as is” condition. This sale will remove the equipment and ship it off-site.
    - iii. This unit building is also slated for removal.
  - d. Unit 4
    - i. The basement of this building will be filled with soil to facilitate steel removal.
  - e. Unit 5
    - i. This building is currently active for the manganese dioxide process (MnO<sub>2</sub>) and historically contained the boron-related processes (boron, boron trichloride, and boron tribromide).
  - f. Unit 6
    - i. This building is currently active for the MnO<sub>2</sub> process.
    - ii. TDS plume from this building is related to manganese sulfate solution and sulfuric acid.

- g. Leach Plant Area
    - i. The raw ore is delivered to this area and is generally stored on pavement. Ore is from a variety of sources but historically has been from South Africa. Global increases in steel production has made ore harder to acquire.
    - ii. Wastes derived from this process are as follows:
      - 1. heavy metal sulfides and insolubles – these two components comprise the “tails” which are sent to US Ecology or Apex. The materials are non-hazardous.
      - 2. Approximately 30-35 tons per day of waste is generated. This waste may accumulate on site for several days at a time.
      - 3. Wastewater from the MnO<sub>2</sub> process goes to pond Mn-1.
      - 4. Debris off the MnO<sub>2</sub> cells are sent out with the tails.
    - iii. The historic tails pile is located in this area and is approximately 185,000 cy in size. KM plans on shipping this material off-site to US Ecology or Apex. KM hopes to begin this process next year.
  - h. Boron processes.
    - i. Wastewater from this process is sent to pond WC-2.
  - i. Site ponds. Noted that all ponds are closed except as follows:
    - i. AP-5 – slated for remediation and to feed into the FBR system.
    - ii. AP-6 – empty and not used.
  - j. Historic Hazardous Waste Landfill. This landfill primarily consists of chlorate mud which was hazardous due to hexavalent chromium content. This landfill will soon be approaching the end of post-closure monitoring. Brian suggested that KM discuss this matter with the NDEP BWM.
  - k. KM noted that smaller buildings on-site that are not in used are being removed. For example, Building C, Dryer Building, Building D-2, and old Building D-1.
  - l. On-site slurry wall. KM noted that the location of the rail loading dock precluded the placement of the wall further to the west. KM also noted that there is very little groundwater as one progresses to the west. It is KM’s belief that very little mass passes by the intercept system to the west. NDEP noted that this issue require quantification.
3. General discussion.
- a. KM inquired as to point of compliance issue for the site. Specifically, could the “mixing zone” between the site and the Wash be used as justification for limiting remediation. Brian noted that this issue needs to be discussed with management.
  - b. Discussed scenarios that would drive cleanup.