

MEMORANDUM TO FILE

TO: KMCC File

FROM: Brian Rakvica

DATE: December 2, 2003

CC: Todd Croft, Jeff Johnson, Jon Palm, Tamara Pelham

RE: Call with KMCC

1. Call held on December 2, 2003 at 1:00 PM.
2. In attendance:
 - a. KMCC – Keith Bailey, Susan Crowley
 - b. NDEP BWPC – Jon Palm, Tamara Pelham, Darrell Rasner
 - c. NDEP BCA- Todd Croft, Brian Rakvica
3. Discussed letter expected from NDEP to KMCC
 - a. Jon is in the final stages of finishing this letter.
 - b. Letter will state that the NDEP only wants to review changes to the process of the new FBR system.
 - c. Letter will note that the microbial monitoring restrictions will not change.
 - d. Letter will request the genus of the microbial strains used in the new process. This will be to determine if any of these strains is more resilient than fecal coliform.
 - e. Noted that KMCC will be conducting daily sampling during the start up periods.
 - f. NDEP requested that KMCC provide start-up plans and criteria and testing to add to our files.
4. Discussed the KMCC plans for start up of the FBR.
 - a. Construction is nearing completion.
 - b. By December 19, 2003 it is expected that the vessels will be loaded and the inoculation of these vessels will begin. This process will take approximately 2 weeks and will not have any discharge.
 - c. In late December or early January the eleven phase start up sequence will be initiated.
 - d. The tanks will be filled with 375,000 gallons of water (most likely with stabilized lake water).
 - e. The stabilized lake water will be discharge under the NPDES permit if it is found that no nitrate, etc is present.
 - f. Next, a batch operation will be initiated to increase the biomass. This will be run until the perchlorate is destroyed. The water will then be discharged through the UV system.
 - g. Next, the system will be moved to low flow continuous operation. Once this operation is stabilized, the flow will be gradually increased.

- h. It was noted that the secondary reactors contain GAC and do not require a conditioning. These reactors will be in operation by the time batch operation is started.
 - i. Currently, it is planned to use 60 gpm of GW-11 pond water and 940 gpm from the IX operations. This mixture will be combined in the on-site equalization chamber.
- 5. Discussed the hexavalent chrome system.
 - a. Noted that approximately 13-14 mL/min of ferrous sulfate are added to the Athens Road well field to result in ND(0.005 mg/L) at Lift Station 2. The highest concentrations are seen at well ART-8 and the ferrous sulfate is injected at this point. It was also noted that ART-8 is the well with the highest flow rate (~70 gpm).
 - b. KMCC currently has a proposal to increase the redundancy of this system.
 - c. NDEP noted that these modifications should be reflected in the O&M manual.
 - d. Noted that the Athens Road well field is monitored daily (unofficial/uncertified) and weekly (certified).
- 6. Discussed NPDES permit modification.
 - a. NDEP noted that it has not been determined if this will be a major or minor modification. NDEP is trying to do this as a minor modification.
 - b. This is currently under NDEP BWPC internal review.
 - c. If necessary, Tamara believes that a major modification can be completed by 3/9/04 (depending on public comment).
- 7. Discussed the letter from Todd and Brian.
 - a. KMCC noted that they will be ready to discuss this issue at our meeting on 12/10/03.
- 8. Discussed the 12/10/03 meeting.
 - a. Meet at KMCC at 9:00 AM (location TBD).
 - b. This meeting will include a tour of the FBR system.
 - c. Tamara and USEPA will be looking at the off-site systems after the meeting with KMCC.
 - d. Todd and Brian will be meeting with regulatory representatives from Arizona at KMCC at approximately 3:30 PM. An off-site tour will be conducted the following day.
- 9. Other.
 - a. Susan noted that KMCC staff will be returning from furlough over the next several weeks and KMCC will be back up and running at 100% of capacity.