John F

3/11/86

Alternate Plan (none cyanide)

1) Feed waste from Plating Room, treated cyanides, chromium and other metals to the 140,000 gallon section of the new equalization tank. This can be done with no additional work.

- 1A) Maintain valve and bypass piping to the equalization lagoon for emergency weekend storage of untreated waste. Coincidentally have waste pumps operational to provide capability of pumping untreated waste back to the 140,000 gallon tank for batch treatment. This may require work with the waste pumps.
 - 2) Core drill an 8" hole in concrete wall between the 70,000 gallon sections (T4-B & T4-A) of the equalization tanks, and one at the southwest corner of the outermost (T4-A) 70,000 gallon concrete section. The cores should be approximately 1.5 ft. below the top of the wall. The first core shall be slightly higher to maintain a flow-through system.
 - 3) Pump waste via newly installed raw waste pumps in the Solids Handling Building from 140,000 gallon section to the 70,000 gallon section, T4-B.
 - 4) T4-B will act as the first reaction tank where the pH will be brought down with acids. The existing acid pump system can be utilized. A new portable pH monitor/controller device will be required.
 - 5) The waste will flow from T4-B to T4-A through the 8" core. In this section, the pH will be brought up by the injection of a caustic solution.

A tanker with a 25% caustic solution must be brought in and an existing pump utilized to feed through a new portable pH controller monitor to supply the proper amount of treatment.

- 6) Existing submerged aerators will be utilized for mixing requirements in T4-A and T4-B.
- 7) A new 8" PVC line will be run overhead gravity from the new outlet core in T4-A to the top of the existing clarifier.
- 8) From the clarifier to the outfall, no changes are required.

This proposed batch treatment system will operate the same hours as our existing plant. This will enable Avco to maintain its Plating operations, as well as allow the Corps of Engineers contractor unlimited access to the existing treatment tank, T-5. The proposed batch treatment system is contingent on the startup and operation of the cyanide treatment system.