Dr. F. C. Allen page 2 October 14, 1942 (3) Feed alum into the recirculated water after each backwashing of the filter. This is done so that the alum will react with the natural alkalinity of the water to form a floc of aluminum hydroxide over the top of the filter. The floc aids in taking the colloidal material and finely divided particles from the water. A pH between 7.2 and 7.6 should be maintained in order that the floc can form. One-half pound of alum should be added to the solution pot when the filter is backwashed. Both the valve on the influent line and the valve on the effluent line should be opened after the alum has been placed in the pot. (4) Operate the recirculation pump and chlorinator continuously. The rate of feed on the chlorinator will probably have to be adjusted, as little more chlorine will be required and the feeding period will be lengthened. The water in the pool should be filtered at least three times each day. The present capacity of the pump and the filter will not allow this, so it may be necessary to get larger units or drain the pool more frequently. (5) Every person entering the pool should take a shower with soap in order to carry as small amount of organic matter into the pool as possible. The addition of liquid chlorine and a small amount of alum to the water will cause the pH to drop. This may be prevented by the addition of lime or soda ash. It is my suggestion that you obtain several hundred pounds of soda ash to control the pH. This could be mixed in solution and fed at the solution pot each day. After the pool has been filled for two or three days with the city water, there will be a decided tendency for the pH to drop rapidly. This can be prevented only by careful pH control and the feeding of soda ash. If you will let me know when this stage is reached, I will try to help you get the feed adjusted. When the water has been brought back to the proper alkalinity, a feed of 1-1/2 pounds of soda ash per pound of chlorine is usually sufficient to hold the pH up. Residual chlorine tests should be made at least three times during the day and a record kept of the results. The residual should build up during the night and will drop again during the day. The chlorine residual should not be less than 0.3 p.p.m. or exceed 0.6 p.p.m. Very truly yours, DIVISION OF SANITATION Dwight F. Metzler DFM: dmb Assistant Engineer cc: E. L. Treece