NOPCO CHEMICAL COMPANY

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# INTER-OFFICE CORRESPONDENCE

CONFIDENTIAL

*To* W. R. Taylor *At* Cleveland *Date* 10/18/68

*From* A. L. Gregoric *At* Harrison

*Subject* Newark Plant Liquid Discharge-
Corps of Engineers Citation

I met with Bob Chonoles and Gene Bak on October 3, 1968 to discuss the acidic effluent entering the Passaic river for which we were cited by the Corps of Engineers on August 23, 1968.

Since the original citation two additional inspections have been made by a Corps of Engineers representative. One occurred in mid-September and two discharges were claimed to be in violation. The originally cited stream was retested and again found acidic at a pH of about 1. pH paper was used for the test. Also on the second visit packing gland leakage from a pump on the dock about 30 feet away from the river was collecting into a puddle and draining into the river. This stream (sodium trichlorophenol) was judged to be alkaline. The representative told Gene Bak that hereafter inspections would continue at approximately monthly intervals.

On October 9, 1968 a third visit was made and there were no violations. The Coast Guardsman representing the Corps of Engineers indicated another visit would be made on October 23, 1968.

There are two sources of acid discharge to the Passaic river. One source is a used sulfuric acid which has stripped organics from hydrochloric acid gas. Twice each week about 1000 gallons of this spent acid must be replaced with fresh 98% sulfuric acid. The used acid is delivered to an acid pit from which it discharges into the Passaic river.

Elimination of this discharge was discussed. Both Bob Chonoles and Gene Bak believe that as much as 700 gallons per week of this acid might be consumed in one process provided organic contaminants do not interfere. Selling or giving away this spent acid will be explored.

The second and major source of acid discharge to the Passaic river has no easy, inexpensive solution apparent at this time. This is by-product hydrochloric acid from the chlorination of acetic acid and phenol in the monochloroacetic acid (MCA) and dichlorophenol (DCP) production processes. As much as 10,000 gallons per day of 31% (20° Be) HCL results from these two processes. Ultimately, all that hydrochloric acid which cannot be sold or stored is "neutralized" and discharged to the acid pit and then into the Passaic river. Efforts have constantly been made and are being

made by plant management to increase sales of this acid through our New York Sales Office. Unfortunately, sales usually do not equal or exceed production and only 100,000 gallons of storage is available.

Because of ever-increasing pressures in the form of adverse newspaper publicity, lawsuits, and increasing fines being applied against industry by a host of regulatory agencies in this area, it is my opinion that we must find other means of acid waste disposal.

Possible solutions to the problem are:

1. Divert acid sales to the Newark plant from another Diamond plant which does not have an acute water pollution problem, or which already is capable of neutralizing acid waste.

2. Contract to have the acid barged to sea.

3. Divert the acid to the industrial sewer. Before diversion, however, we should consider existing sewer contents above and below our plant; materials used for sewer construction; and sewer path from our plant through the city.

A. L. Gregoric

ALG/hh
cc: R. Chonoles, Newark
R. A. Guidi, Cleveland