CONFIDENTIAL

A1049 0539

Finfish Samples of Study Species From Lavaca Bay

Classified by mg/kg Hg

Total Samples Collected Since 1-1-'77	42	
Samples from 0 - .5 mg/kg Hg	9	21.43%
Samples from .5 - 1 mg/kg Hg	12	28.57%
Samples from 1 - 2 mg/kg Hg	9	21.43%
Samples from 2 - 3 mg/kg Hg	4	9.53%
Samples from 3 - 4 mg/kg Hg	2	4.76%
Samples from 4 - 5 mg/kg Hg	3	7.14%
Samples from 5 - 6 mg/kg Hg	2	4.76%
Samples over 6 mg/kg Hg	1	2.38%
Samples exceeding .5 mg/kg Hg	33	78.57%

(Received from
Health Dept., Austin
1978-01-20
C Stem)

CP 034849

FROM: F. D. CARTER
POINT COMFORT OPERATIONS

TO: MR. K. W. PERRY
PITTSBURGH OFFICE

1977 October 31

RE: CHLOR-ALKALI MERCURY CONSUMPTION

Summary

From discussions with Monsanto, PPG, Stauffer, and Olin, a desirable target for mercury loss from our plant is 100 grams/tonne. From original plant startup in 1966 until the first major modification to our mercury handling system (brine on inlet endbox) in September 1972, our average loss was 200 grams/tonne. With installation of brine on the inlet endboxes and pump tanks in 1972 until March, 1977, our average loss increased to 400 grams/tonne. In March 1977, the brine circulating from the pump tanks was removed because of severe corrosion and this increased our mercury loss to 500 grams/tonne. Because our mercury losses have been impounded in our waste water evaporation lake and our other plant processes which directly affected production needed major engineering attention, the problem of controlling mercury consumption was not given major attention until January 1977. Since January, the major sources of mercury loss have been isolated and to date several tests to determine how to best control these sources have begun. Once equipment to control all these sources has been installed, $200,000/year in mercury will be saved and we will no longer be vulnerable to government controls on the amount of mercury we can purchase. Our intentions in engineering the controls of these mercury losses are to leave all the mercury possible in the cell to which it was added and to recycle all the mercury which leaves the cell to the mercury system. Also, it is intended to approach as closely as possible a system which is common within the Chlor-Alkali industry.

Details

Shown in Figure 1 is the mercury/mercury fume handling system in the plant as originally installed. As you can see, soft water flowing at 2-4 gpm was circulated from the inlet endbox to the mercury pump tank and finally to the waste water trench. The parts of this system which were environmentally unacceptable were the low soft water flow which caused steaming and excessive fumes in the cellroom and the soft water dump to the waste water trenches which contributed to a water balance problem as well as hot mercury fumes to the cellroom. At that time, waste water discharged from an outfall to the bay.

Shown in Figure 2 is the solution to the water balance and mercury fume problems described above. In this system, dechlorinated brine was added in the inlet endbox at a rate of 15-20 gpm and this brine was overflowed to the mercury pump tank. Brine overflow from the pump tank was remixed with the circulating cell brine stream in the treatment area for removal of any impurities picked up in the endbox or pump tank.

A1034 00777

EXHIBIT P-37 Carter 1/6/95

Defendants' Exhibit
25061