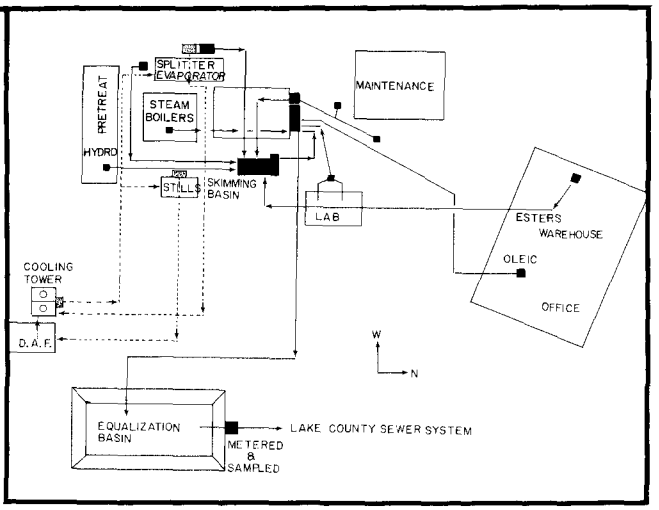
Glyco opens waste treatment system



Dotted line indicates recirculating water system; solid line indicates route of waste products discharged into sewerage system after treatment in equalization basin.

A new $1.5 million waste treatment system was put into operation during June at Glyco Chemicals' production facility in Painesville, Ohio. The system consists of two separate systems. The first recirculates water used for direct contact condensing of the vapors from the fatty acid stills and the glycerine evaporators. The second system handles process wastewater and floor drainings, boiler blowdown, and sanitary wastes.

"This specially designed system not only helps us meet EPA requirements five years ahead of time with a 'zero discharge' system, it also provides us with a capacity to handle wastes for substantially increased production in the forthcoming years," Glyco president William W. Huisking said at dedication ceremonies held June 16. "The system also makes one of the first joint industry/community efforts in the country to set up and utilize a combined waste treatment system."

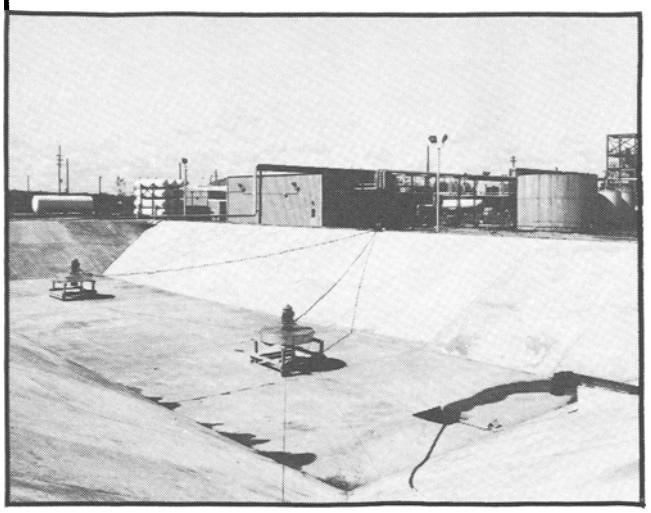
In the recirculating system (see diagram), water coming from the vacuum system of the glycerine evaporators is pumped directly to the cooling towers, then recirculated to the stills and evaporators. Water from the still's vacuum system is pumped to the dissolved air flotation (DAF) unit where it is aerated to float the fat for recovery. The water is then pumped through cooling towers and is recirculated to the stills and evaporators.

In the second system, process wastewater and floor drainings flow through sumps for fat flotation, then the water is pumped to a skimming basin for fat recovery. Wastewater is combined with the boiler blowdown and sanitary wastes in the final collection sump. From the collection sump, the water is pumped to an equilization basin where it is aerated, metered, sampled, and directed into the Greater Mentor Regional Sewer System.

Glyco began working several years ago with other companies in the area to develop a single waste treatment system, now named "Project Intercept." The Glyco system is the first of the group to go on stream.

The Painesville production unit, built in 1967, produces food grade fatty acids, glycerides and their derivatives, which are used as additives for food, plastics, textiles, cosmetics, and a variety of other industries.

The cooperative effort by industry has permitted the Greater Mentor Regional Sewer System to expand its capacity. Previously, the system had been unable to accommodate either expanded industrial or expanded residential service. Glyco, before spearheading Project Intercept, had not been part of the Greater Mentor system. ●



Part of the two part waste treatment system at the Painesville, Ohio facility of Glyco Chemicals, Inc. Shown in the skimming basin used for fat recovery where wastes are aerated (two aerators are shown in bottom of basin.) Wastewater is combined with boiler blowdown and sanitary wastes in final collection sump, then pumped to equalization basin and subsequently to a regional treatment system.