MEMORANDUM

To: J. Harry Kerns, P.E.

From: Gary A. Maier Jan a Maier

Date: October 1, 1991

Subject: IMC's Installation of the

Monsanto Monarch Process

Issue

Whether to treat IMC's installation of the Monsanto Monarch sulfuric acid process as a "Modification".

Rule

A "Modification" occurs if (a) any physical change results in (b) an increase in the actual emissions of any regulated air pollutant. Both triggers, (a) and (b), must be pulled.

Analysis

- (1) Courts considering the "modification" question have assumed that "any physical change" means precisely that. The term "modification" is nowhere limited to physical changes exceeding a certain magnitude. Based on the attached information, it is clear that IMC's installation of the Monsanto Monarch sulfuric acid process constitutes a physical change. The first trigger is pulled.
- (2) The Department does not have sufficient information to determine whether the physical change from the old process to the Monsanto Monarch process, coupled with the concurrent increase in process rate, will result in an increase in the actual emissions of any regulated air pollutant. It is not known whether the second trigger is pulled.

Conclusion and Recommendation

The Department has no evidence to support a conclusion that the actual emissions of any regulated air pollutant will not increase. Therefore, I recommend that the Department presume that there will be an increase in the actual emission rate of a regulated air pollutant, and consequently presume that IMC's installation of the Monsanto Monarch process is a "Modification". The presumptions can be rebuttable. The burden to rebut the presumptions should be placed upon IMC.

THE MONARCH PROCESS

A Sulfuric Acid Plant for the 90's

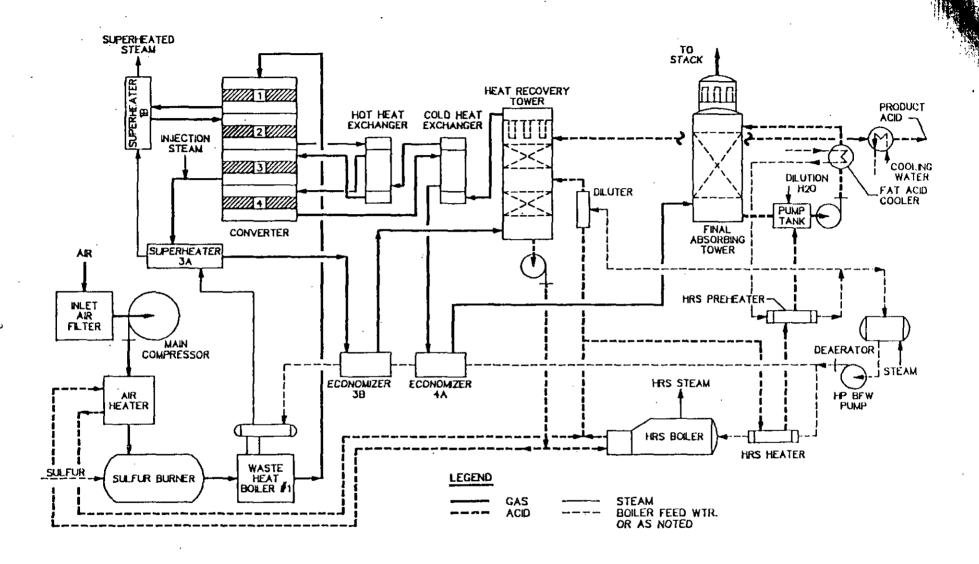


FIG.1: PROCESS FLOW DIAGRAM

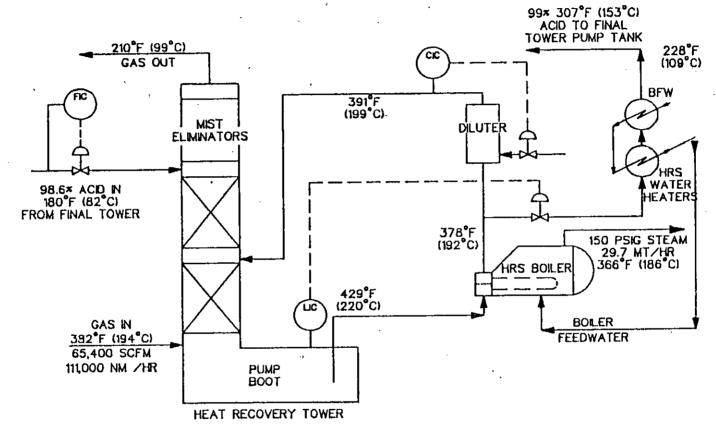
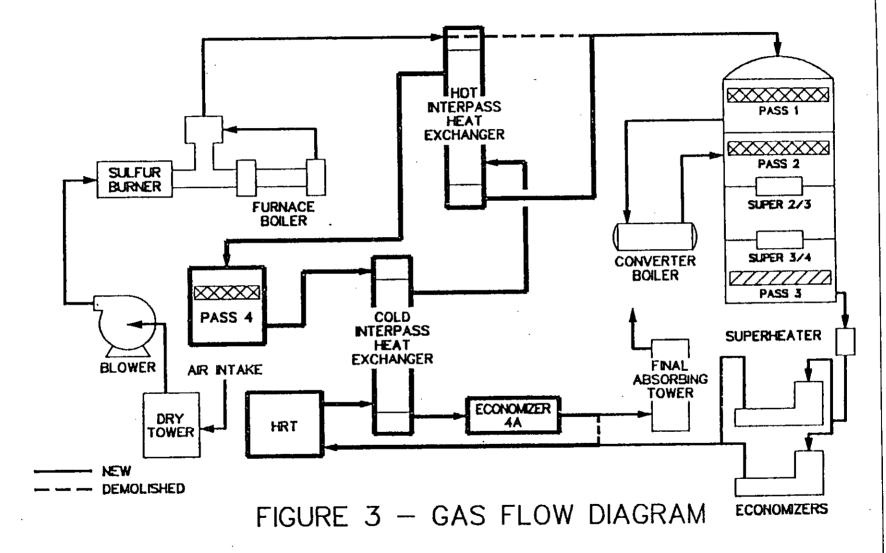


FIGURE 4 - HEAT RECOVERY SYSTEM



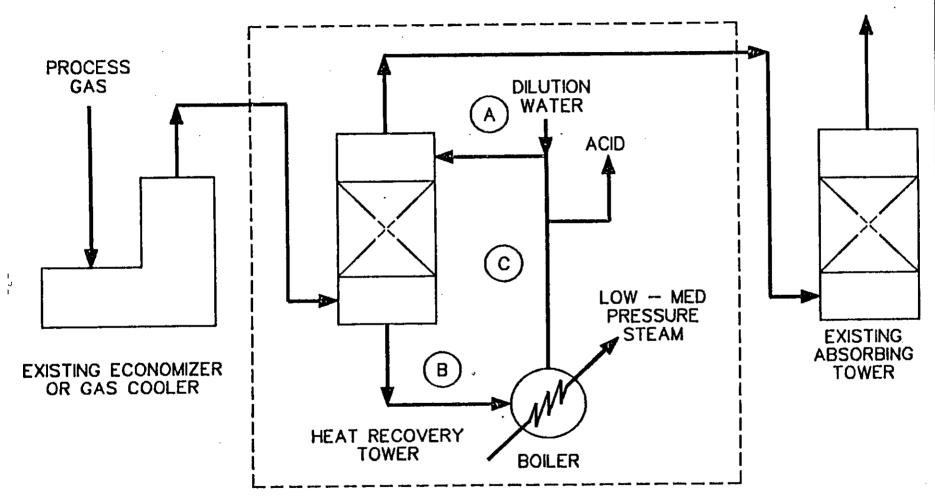


FIGURE 1 - HEAT RECOVERY SYSTEM