



DATE 29 September 1980

TO
A Dr. G. Herzberg
Dr. J.L. Locke

Re: Water Control on the Third Floor, Sussex Drive

We are now in a position to report on the causes of the inundation some four weeks ago and on the steps we have taken to assure that it will not be repeated.

The flood was caused by a unique combination of failures in the pumping system for moving cooling water to the holding tanks. An intermittent fault in the original facility wiring between the float switch and pumping system, plus a restriction in the inlet line from dosing tank to pump, seriously affected the GPM output of the pumps. Finally, neither of the two people who are on call for emergencies in this facility were readily available, although one was on hand and could have been contacted with more persistent effort.

So much for the cause, now to corrective measures. The defective wiring has been replaced and we have installed a 1 1/2 inch PVC overflow pipe at the top of the mixing tank (the one that overflowed) and this pipe leads directly to drain by gravity feed. Failure of the switch that activates the back-up pump or failure of the pump itself (both of which will sound an alarm at the Commissionaire's desk) will result in the water entering the new overflow pipe where it will be heavily dosed with hypochlorite on its way to the drain. For the longer term we are exploring the possibility of moving the holding tanks to the basement so there would be gravity-feed of all effluents and no further dependence upon electro-mechanical switches.

To assure ready availability of qualified personnel for emergencies we are acquiring bell-boy pager devices by which means one or the other of the two people can be contacted wherever they may be in the city. They will coordinate their activities so that one is always available.

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I hope that you will consider these measures as an indication that we have taken this matter very seriously indeed. Again, my personal apologies for this unfortunate incident; we have done everything possible to assure against such a thing happening again.

C. T. Bishop

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Director

CTB/em