

ADMINISTRATIVE--INTERNAL USE ONLY

2 March 1988

MEMORANDUM FOR: Chief, Operations Division, FMD/OL

FROM:

[Redacted]

Chief, New Building Project Office, OL

SUBJECT: Draft IG Report Comments

1. As you requested, we have reviewed the draft memorandum to the Inspector General (IG) on New Headquarters Building (NHB) plumbing concerns. We believe that the memorandum is somewhat misleading and should be clarified. [Redacted] did talk to me and members of my staff recently, but since his concerns were not well defined, our responses were broad. We are available to discuss these and other NHB concerns at any time. The following comments are keyed to the draft memorandum prepared by

[Redacted] Subject: Renovations for OIT/Commo in the NHB.

Paragraph 1a: The NHB contractor used Autoflow valves versus Griswold. The Government could only provide a performance specification in the design. We have used Griswold valves in the Agency for many years because of familiarity, availability, etc., but the performance is the important part, not the brand. There were initial problems with the performance of the Autoflow valves after water was introduced into the system. As a result, General Services Administration (GSA) required the contractor to make modifications (or else replace the valves) at no cost to the Government. These corrections were made to GSA's satisfaction. If the valves were, in fact, not installed, then it is a latent omission by the construction contractor thus owed to the Government. This would not be a design problem.

However, after some discussion with you, it is apparent that there is confusion over which air handler or project Mr. Sandin is referring to in his memorandum. That makes it difficult for us to respond. The circumstances indicate that the air handlers may be the units that were relocated on the first floor between columns 13 and 15 and and columns A and F. If this is so, there are some important details that should be considered. Autoflow valves were removed by an FMD contractor as part of the requested relocation and were replaced with Griswold valves at FMD [Redacted] direction. Rumors were beginning to circulate around the site that there were problems with the Autoflow valves as originally installed. These rumors were later confirmed as noted above. By removing these valves, we essentially "bought" them as originally installed. This would have meant that the Agency would have to fund the repairs of these relocated valves.

STAT [Redacted] 2Mar88

Orig - Base
OL/NBPO-Subject
1 - OL/NBPO Chrono

ADMINISTRATIVE--INTERNAL USE ONLY

In hindsight, FMD probably saved time and money by replacing these valves at that time. It could not have been readily determined if these Autoflow valves worked because they were removed prior to testing of the AHU units. At that time, OIT had an urgent need to occupy the space which preceded the Fast Power Supply (FPS) and pressure and flow tests for the chilled water that served these units. At the appropriate time, all remaining units in the NHB installed by the NHB contractor were tested and certified by GSA.

Paragraph 1b: From the description, there was indeed poor workmanship in this instance, but it may not have had an operational impact. Full extension may not be required for operation of these air handlers at full capacity. The Autoflow or Griswold valves limit the flow through the coils therefore cancelling the full flow condition of the valve. In other words, since our initial chilled water system is overdesigned for expansion over the years, the pressure at the flow control valve will vary. Flow control valves maintain a constant flowrate across a cooling coil thus ensuring optimum operation over time. The flowrate required is generally much less than what would flow unrestricted through wide open valves. In any event, we believe the NHB contractor should have corrected his poor workmanship.

Paragraph 1c: This subject has been discussed at length with GSA, FMD and many parties involved. The specification was written to apply only to domestic water piping, an oversight on the designers part. At the rate we renovate computer areas, the problem would be rectified in due time. Our piping is grounded on both sides of the dissimilar metal connection thus mitigating the galvanic action causing corrosion. There are memoranda available on this subject if further discussion is required. As you know, contractors search for this type of omission in specifications in order to submit claims or to shortcut industry standards. GSA has adjudicated countless claims and attempts at shortcuts as does any construction manager. GSA with NBPO concurrence did not choose to pursue this issue since there was considerable potential for delay and price gouging.

Paragraph 2: The second half of the sentence overstates the problem of locating any similar situation. The majority of valves are readily accessible by lifting the plastic laminate computer tiles without any damage to walls. Further, we have a finite number of computer type air handlers in the NHB and they can be verified as to valve orientation or whether valves exist at all. We encourage any knowledge of missing valves to be brought to our attention for resolution. If there continues to be a claim of missing valves, then we are prepared to reinspect all AHUs to verify the presence of such.

STAT



ADMINISTRATIVE--INTERNAL USE ONLY

STAT

TRANSMITTAL SLIP		DATE
TO	[REDACTED]	C/FMD
ROOM NO.		
REMARKS: FYI: Draft for your inputs, esp. paragraph 2. Whose oxen would this gore? I need to talk to him, too.		
FROM:	[REDACTED]	019/SIG
ROOM NO.	BUILDING	
6E0701	HQ.	
FORM NO. 241 1 FEB 55	REPLACES FORM 36-8 WHICH MAY BE USED.	

STAT
STAT

29 February 1988

MEMORANDUM FOR: Inspector General

STAT

FROM:

[Redacted]

Inspector

SUBJECT: Renovations for OIT/Commo in the New Building

REFERENCE: IG 88-0192, 26 February 1988

STAT

1. According to [Redacted] Chief, ^{Operations,} Facilities ^{Management} ~~Maintenance~~ Division (FMD), Office of Logistics, FMD undertook renovations at OIT's request (because OIT had redesigned their layout, moving computers). The renovations comprised moving some wall partitions and three "air-handler units" (units producing cold air from chilled water running in pipes below the raised floor). When doing this work, FMD found:

- a. that the three air-handler units needed Griswald (brand name) valves installed. These valves control the water flow and are an Agency standard. FMD had the valves installed (new, not replacements). This was a design flaw.

ADMINISTRATIVE--INTERNAL USE ONLY

b. that open-close valves on the water pipes (at the point where cold water was being tapped off for the three air-handler units being moved) had been installed pointing down and could not be fully opened because the valve handles would hit the concrete floor as they were being turned and could not be turned further. FMD had these valves repositioned 180 degrees, and they now point up. This was faulty workmanship.

c. that couplings of pipes made of dissimilar metals (copper and steel) at these same points were not dialectic. FMD had dialectic couplings installed to prevent future corrosion. GSA, in examining the contract wording on the couplings, ^{determined} believed that the specifications were ambiguous, ^{and they} ~~so~~ that ~~we~~ could not force the original contractor to redo all the coupling work.

2. All three problems presumably exist elsewhere in the same OIT space and elsewhere in the new building where similar piping is found, but a lot of drywall and flooring would have to be torn up to find out.

STAT



All three conditions presumably
exist elsewhere in the computer equipment
space of the new building. FMD will
continue to make appropriate
modifications as time & budget permit.