



Xomox Corporation 4444 Cooper Rd. Cincinnati, Ohio 45242 Phone 513 745-6000 Telex 21-4133 Fax 513-745-6972

October 13, 1992

Director  
Office of Nuclear Reactor Regulation  
U.S. NUCLEAR REGULATORY COMMISSION  
Washington, D.C. 20555

SUBJECT: NOTIFICATION CONCERNING XOMOX TUFLINE SLEEVED PLUG  
VALVES HIGH PERFORMANCE BUTTERFLY VALVES

Xomox Corporation is a manufacturer and supplier of valves to a large number of industrial customers. Xomox has supplied valves for use in nuclear applications for approximately 20 years. The vast majority of these valves are used in Radwaste service. Many such valves were supplied with Ultra High Molecular Weight Polyethylene (UHMWPE) seals due to the good resistance of this material to radiation degradation. Our published limit for a valve with UHMWPE seals has been  $1 \times 10^6$  Rads up to 225°F. This limit was based on material supplier data, engineering specifications and Xomox sponsored tests. New data from the material supplier prompted a study which included a literature search and new Xomox sponsored test program. Based upon these efforts, we now feel that a limit of  $1 \times 10^6$  Rads up to 180°F is more appropriate and, effective immediately, this is our new published limit.

Because this new limit differs from the limit found in the original specification, Xomox is reporting this change. Xomox is in the process of identifying and notifying all customers who have purchased such valves so that they may review the foregoing in view of their specific application. Xomox itself is not in a position to evaluate the specific application conditions and circumstances of each of these valves and is, therefore, unable to determine whether or not any of these particular valves could create a "substantial safety hazard" or failure to comply under 10 CFR 21. A copy of our notification letter is attached.

Should you have any questions, please contact me or Thomas F. Spock, Jr., Production Safety Officer/Director R&D, at 513-745-6000.

Sincerely,

XOMOX CORPORATION

David J. Hunter  
President

160026

Attach:

9210190001 921013  
PDR PT21 EMVXOMOX  
42 PDR

Tufline  
Plug Valves

Pliaxseal  
Butterfly Valves

Tufseal  
Lined Ball Valves

Gulde  
Control Valves

FIVE  
Ball Valves

Matryx  
Actuators

Tufswitch  
Limit Switches

JE19 1/0



Xomox Corporation 4444 Cooper Rd. Cincinnati, Ohio 45242 Phone 513 745-6000 Telex 21-4133 Fax 513-745-6972

Customer  
Address

Re: Purchase Order No. \_\_\_\_\_, Serial No. \_\_\_\_\_,  
Tag No. \_\_\_\_\_

Dear Customer:

Our records show that your company purchased certain valves with Ultra High Molecular Weight Polyethylene (UHMWPE) seals. Our published specification at the time of your purchase indicated that the radiation exposure limit for valves with UHMWPE seals was  $1 \times 10^8$  Rads up to 225°F. This limit was based on material supplier data, engineering specifications and Xomox sponsored tests. New data from the material supplier prompted a study which included a literature search and a new Xomox sponsored test program. Based upon these efforts, we now feel that a limit of  $1 \times 10^7$  Rads up to 180°F is a more appropriate standard and, effective immediately, this constitutes our new published limit.

Because this limit differs from the original specification, Xomox must report these changes to you. Since we are unable to assess the impact this may have on your particular application of this product, we are notifying you of the deviation in order that you may evaluate, in accordance with the terms of 10 CFR 21, how this effects your application.

We are providing the following information to assist you with your evaluation:

1. Name and address of the individual providing information:

Thomas F. Spock  
Product Safety Officer/Director R&D  
Xomox Corporation  
4444 Cooper Road  
Cincinnati, Ohio 45242

2. Identification of the items supplied:

Xomox Tufline Sleeved Plug Valve Models 067, 066, 0366,  
0666, 166, 136, 1366, 1666, 096, 0396, 0696, 0367,  
0667, 037, 0337, 0637, 9037

Xomox High Performance Butterfly Valve Models 811, 801,  
821, 810, 800, 813, 803, 823, 816, 806

Tufline  
Plug Valves

Pliaxseal  
Butterfly Valves

Tufseal  
Lined Ball Valves

Guide  
Control Valves

FIVE  
Ball Valves

Matryx  
Actuators

Tufswitch  
Limit Switches

XOMOX

3. Identification of the firm supplying the item:

Xomox Corporation  
4444 Cooper Road  
Cincinnati, Ohio 45242  
(513) 745-6000

4. Nature of the potential safety hazard:

Reduction in the Rad exposure limit to a maximum  $1 \times 10^7$  Rads with maximum temperature limit of 180°F.

The potential safety hazard is that the valve seals may lose ductility or prematurely wear out and leak if subjected to conditions exceeding the new limit.

5. Date on which the information for evaluation was obtained:

October 9, 1992

6. The number and locations of potentially affected components.

All models sleeved plug valves and high performance butterfly valves with UHMWPE seals

7. Further Action:

All applicable specifications will be changed to incorporate the reduced Rad exposure limit.

8. Any advice related to the potential problem in the item:

Xomox recommends that customers thoroughly review the identified products delivered to their plant sites as they relate to this information. The customer must then make a determination of the safety considerations for their specific application.

Xomox has a strong commitment to the nuclear industry and wants to assure you that we are dedicated to supplying quality products and services to our customers. Please contact Tom Spock, (513) 745-6038 or Jamie Davidson, (513) 745-6017, should you have questions on this issue.

Sincerely,

XOMOX CORPORATION



David J. Hunter  
President