Duquesne Light Company

Beaver Valley Power Station
P.O. Box 4
Shippingport, PA 15077-0004
(412) 393-5255

JOHN D. SIEBER
Vice President - Nuclear Group

September 21, 1992

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Subject: Beaver Valley Power Station, Unit No. 1 and No. 2
BV-1 Docket No. 50-334, License No. DPR-66
BV-2 Docket No. 50-412, License No. NPF-73
Chemox Facepiece Use

This letter is a request for Nuclear Regulatory Commission (NRC) authorization to use various sizes of Mine Safety Appliances Company (MSA) Ultravue facepieces with the MSA Chemox oxygen-generating self-contained breathing apparatus. This request is made in accordance with the instructions provided in 10 CFR 20.103(e).

The Chemox respirator was originally approved by the Bureau of Mines (Approval Number 1307). To date, the National Institute for Occupational Safety and Health/Mine Safety and Health Administration (NIOSH/MSHA) has extended the Bureau of Mines approval for use of the Chemox until further notice. When the Chemox was originally approved, only two facepieces could be used with this respirator, and both were basically medium size facepieces. Due to the fact that: 1) small and large size facepieces were not available when the Bureau of Mines approved the Chemox, 2) the Chemox respirator never received a NIOSH/MSHA approval, and 3) 10 CFR 20.103(c) requires that the licensee shall use equipment that is certified or had certification extended by NIOSH/MSHA, we request authorization to use the following MSA Chemox facepieces:

1. Ultravue small Hycar rubber (part number 476850)
2. Ultravue small silicone rubber (no part number)
3. Ultravue large Hycar rubber (part number 476851)

Both Ultravue Hycar rubber facepieces have been available as accessories to the Chemox respirator in recent years. The Ultravue silicone rubber facepiece, however, had not been tested for use with the Chemox respirator by MSA until requested to do so by Beaver Valley. The results of this testing, which are attached for your review, verified that the silicone rubber had no detrimental effect on the operation of the respirator. Based upon the information presented we hereby request NRC authorization to use the different size Ultravue facepieces specified.

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If there are any questions concerning the letter, please contact Mr. Doug Canan at (412) 393-7679.

Sincerely,

J. D. Sieber

Attachment

cc: Mr. L. W. Rossbach, Sr. Resident Inspector
Mr. T. T. Martin, NRC Region I Administrator
Mr. A. W. De Agazio, Project Manager
Mr. M. L. Bowling (VEPCO)
Mr. L. J. Cunningham, NRR Radiation Protection Branch
Dr. R. R. Bellamy, NRC Region I
Mr. J. E. Wigginton, NRR Radiation Protection Branch
Mr. J. H. Joyner, NRC Region I

MSA

Mine Safety Appliances Company • P.O. Box 426 • Pittsburgh, PA 15230

Telepho : (412) 967-3000

Writers Direct Dial No.

(412) 967-3194

November 27, 1991

Mr. Doug Canan
Duquesne Light Company
RAD-CON SOSB-7
Beaver Valley I clear Plant
P.O. Box 4
Shippingport, PA 15077

Dear Doug:

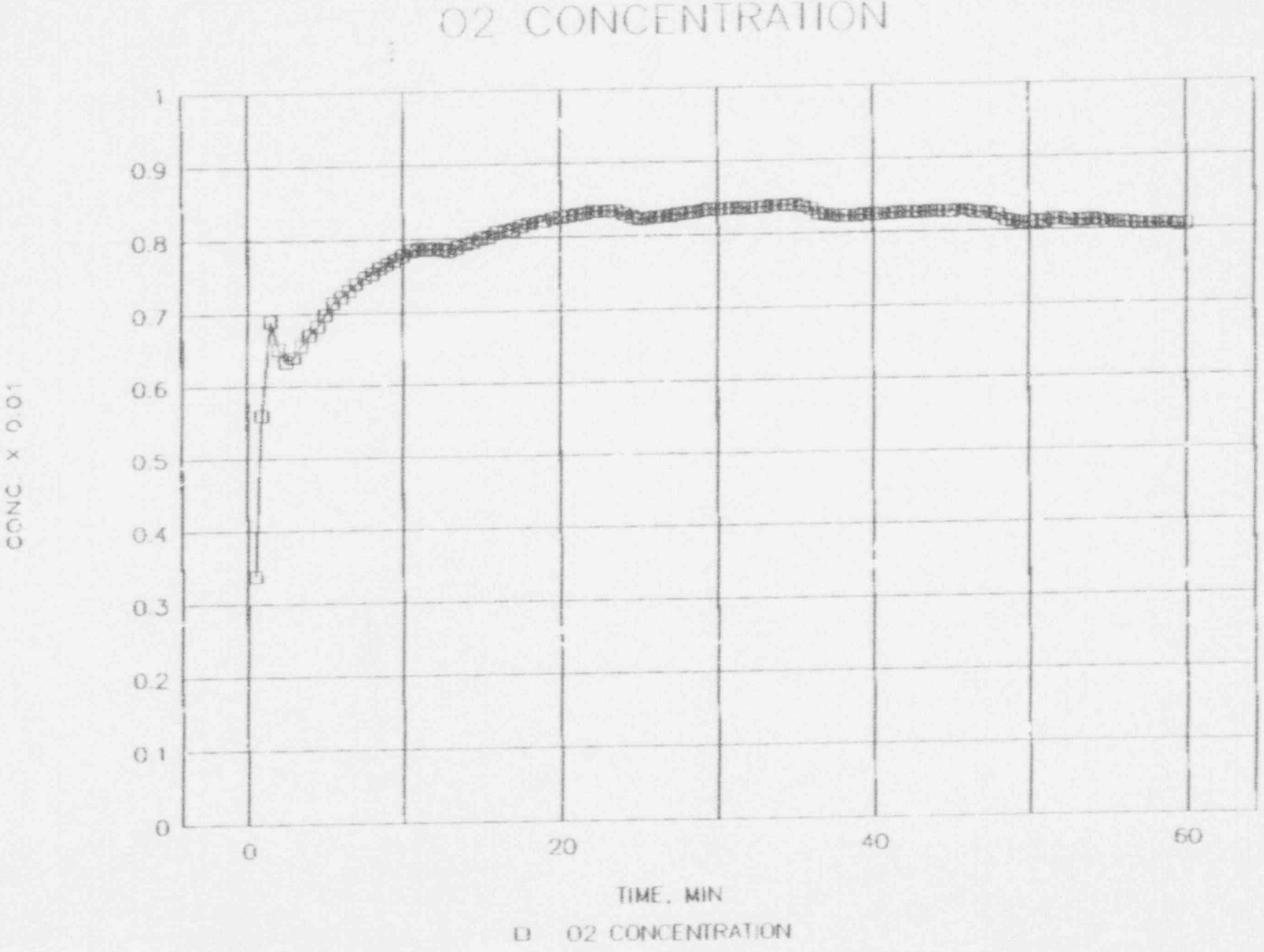
Per our discussion, the following information addresses the testing MSA has conducted on the small size silicone facepiece for use with the Chemox respirator system.

Metabolic simulator testing was performed using an A4 closed-circuit breathing apparatus with a small silicone Ultravue facepiece. The test protocol followed was the current test plan performed on Chemox canisters for QC acceptance. The purpose of the test was to determine if there would be any adverse performance effects due to the change in the material and size of the facepiece.

The results of the testing showed no adverse effect from the change in facepiece size and material. Attached for your information and record are the graphs of the data collected during the test. All parameters meet the requirements for the Chemox canister and are within the expected values.

Sincerely,

William M. Lambert
Product Line Manager


O2 CONCENTRATION
CONC. x 0.01
1
0.9
0.8
0.7
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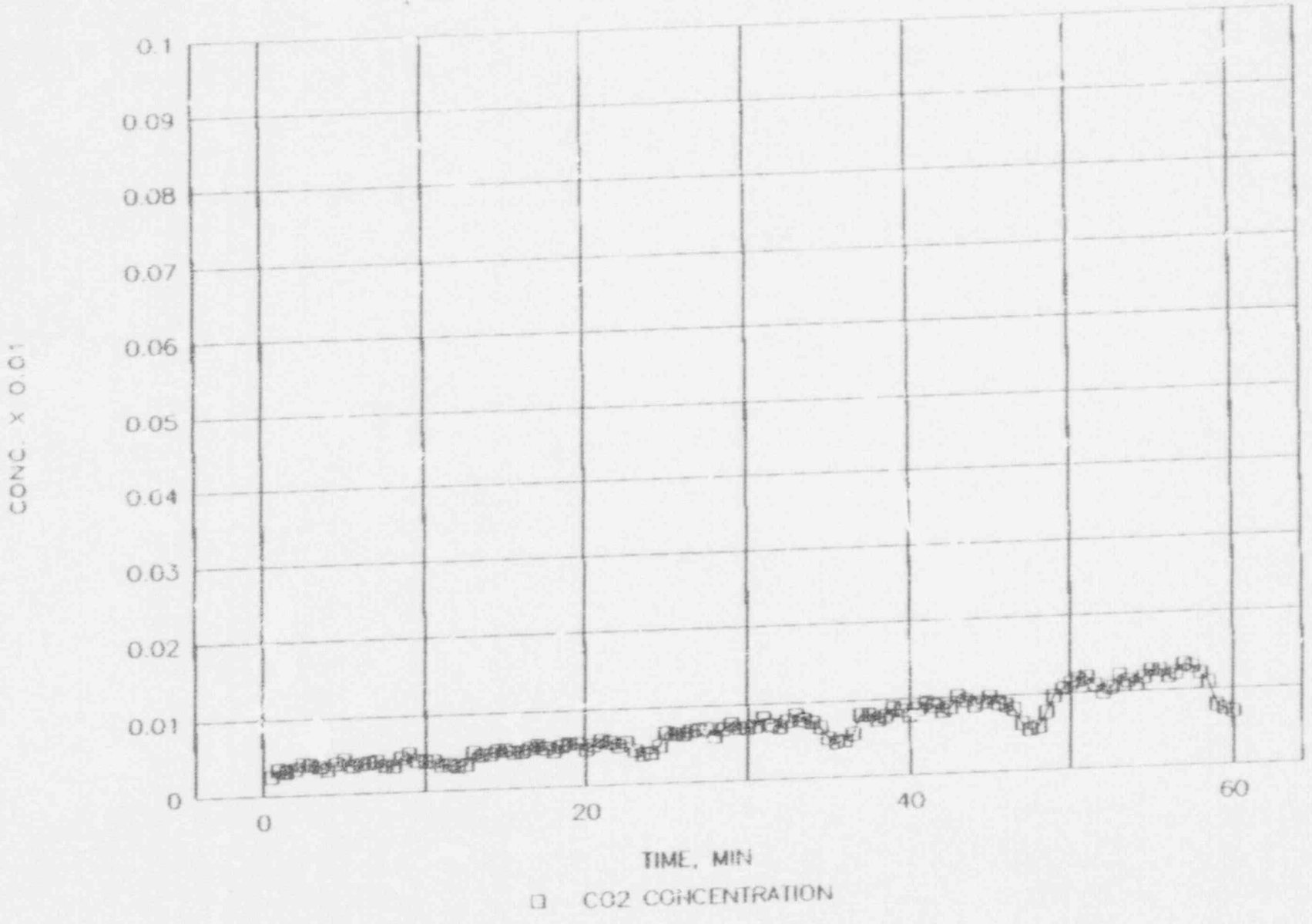
TIME, MIN
D O2 CONCENTRATION


CO2 CONCENTRATION
CONC. X 0.01
0.1
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0.07
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0.02
0.01
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0
20
40
60
TIME, MIN
CO2 CONCENTRATION

BREATHING RESISTANCE